

**REGISTRATION REPORT**  
**Part B**  
**Section 3**  
**Efficacy Data and Information**  
Concise summary

Product code: ADM.00150.I.2.A

Product name(s): LEAXO

Chemical active substance:

Acetamiprid, 200 g/L

(SL formulation, soluble concentrate)

Central EU Zone

Zonal Rapporteur Member State: Poland

**CORE ASSESSMENT**

Sponsor: ADAMA Makhteshim Ltd.

Applicant: Country organisation / representative of ADAMA,  
as given in Part A

Submission date: August 2023, update: April 2024

MS Finalisation date: June 2024 (initial Core Assessment)

October 2024 (final Core Assessment), update May 2025

### Version history

When	What
August 2023	Applicant version
April 2024	Revision 1, based on a request by the zRMS Poland. This revision is a consequence of the GAP changes done in section B8. All changes had been highlighted in yellow by the Applicant. These updates were subsequently highlighted in grey by zRMS, while not agreed or not relevant information were <del>struck through</del> and shaded for transparency.
June 2024	Initial zRMS assessment  The report in the dRR format has been prepared by the Applicant, therefore all comments, additional evaluations and conclusions of the zRMS are presented in grey commenting boxes. Minor changes are introduced directly in the text and highlighted in grey. Not agreed or not relevant information are <del>are struck through</del> and shaded for transparency.
October 2024	Final report (Core Assessment updated following the commenting period)  Additional information/assessments included by the zRMS in the report in response to comments received from the cMS and the Applicant are highlighted in yellow. Not agreed or not relevant information are <del>struck through</del> and shaded for transparency.
May 2025	Final report (Core Assessment updated following the comments received from Polish Ministry of Agriculture)  Additional information/assessments included by the zRMS in the report in response to comments received from Polish Ministry of Agriculture are highlighted in yellow in the GAP table for USE No. 12 and 39 (no. of applications and application rate), for the USE 70 (use in spring OSR), for uses 49-51 and 69-70 (no. of applications) and in the zRMS commenting box page 130 (MED trial count in OSR). Not agreed or not relevant information are <del>struck through</del> and shaded for transparency.

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### 3 Efficacy Data and Information (including Value Data) on the Plant Protection Product (KCP 6)

#### Comments of zRMS:

Conclusions from the assessment were prepared using grey commenting boxes placed at the end of each chapter. Textual changes were done using grey highlights in the text. The parts of the text amended or added by the zRMS evaluator are highlighted in grey, whereas the parts struck off are visibly marked with the grey font.

#### 3.1 Summary and conclusions of zRMS on Section 3: Efficacy (KCP 6)

##### Abstract

##### Introduction

This document summarises efficacy data relevant for the EU Central zone for the registration of the plant protection product MCW-2222. Data submitted with this dossier include information from a total of 532 studies conducted across the Maritime, Northeast and Southeast EPPO zones. The BAD and the Part B 3 were revised in 2024 since some GAP uses needed have been modification-modified upon by the Applicant as a consequence of GAP changes done in part B8. evaluation-of-the-zRMS. Thus, the evaluation and presentation of the respective data were adapted. All changes compared to the former version had been highlighted in yellow by the Applicant. The updates were subsequently highlighted in grey by zRMS, while not agreed or not relevant information are struck-through and shaded for transparency.

MCW-2222 is an SL formulation containing 200 g/L acetamiprid. It is intended for use as a foliar applied insecticide to control a range of sucking pests such as aphids, weevils and beetles on arable, fruit and ornamental crops. GAP uses of the formulation MCW-2222 are envisaged in Poland, Czech Republic, Germany, Netherlands, Hungary, Slovenia, and Slovakia as countries of the Central EU Zone.

**Preliminary tests (KCP 6.1)** are not provided and not considered necessary, as products based on the active ingredient acetamiprid are well known insecticides and have been on the market for a number of years in the use for which approval is sought.

**Minimum effective dose (KCP 6.2):** A sufficient number of field trials were carried out according to EPPO PP 1/225 'Minimum effective dose' to determine the **minimum effective dose (KCP 6.2)** of MCW-2222 for control of aphids, beetles, weevils and other pests on apple, potatoes, cereals, sugar beet, flowers, maize, and oilseed rape including the proposed label rate and 33-89% of the full recommended rate of the product. Data demonstrated that the proposed target rates of MCW-2222 are the minimum effective dose for each respective use.

**Efficacy (KCP 6.2):** The data demonstrated that the **efficacy (KCP 6.2)** of MCW-2222 applied at the proposed rates was equivalent or superior compared to different standard reference products. All evaluated efficacy trials support the GAP use applied in apple, potatoes, cereals, sugar beet, flowers, maize, oilseed rape and ornamentals as presented in Part B, Section 0.

The overall assessment was performed according to the uniform principles. All trials were evenly distributed in typical growing areas for the different crops. The crops were grown according to usual practice and the study plan was corresponding to the growing parameters as stated in the GAP table. All trials were conducted to GEP and followed the appropriate EPPO standards by officially recognised testing organisations.

### Information on the occurrence or possible occurrence of the development of resistance

The risk for the development of resistances associated with the GAP use of MCW-2222 was analysed following EPPO standard PP 1/213 (4) '*Resistance risk analysis*'. The **resistance risk (KCP 6.3)** of the product was evaluated by combining the inherent factors posed by the insecticide and the inherent factors of the target pests under consideration of the agronomic risk of the intended use.

Considering the inherent factors of the insecticide MCW-2222 (SL, 200 g/L acetamiprid) and the inherent factors of the target organisms together with the agronomic risk, a medium or low resistance risk (KCP 6.3) is concluded for the different GAP uses of MCW-2222 applied for. This conclusion is not only based on the documentation of reported acetamiprid resistance cases – which shows only a limited number of cases worldwide and no cases at all within the Central EU Zone – but as well on the low potential for future development of resistant insect populations. Despite the fact that for some target species a medium or high inherent resistance risk was assessed, the risk of resistance development is assessed as medium or low for the different GAP uses of MCW-2222 applied for, as a result of the conditions of use of MCW-2222 and under consideration of the medium inherent risk of the active substance. For the uses in agricultural crops, ornamentals and orchards for which approval is sought, cultural and mechanical control measures as well as alternative substances belonging to different mode of action groups are available. Furthermore, in the majority of crops full or limited rotational cropping systems are implemented. Thus, when the product is applied according to the proposed uses, the development of resistances in insects is unlikely to occur.

In conclusion, the resistance risk of the plant protection product MCW-2222 (200 g/L acetamiprid) for insecticidal outdoor use in agricultural crops, ornamentals and orchards against sucking and biting insects, when used according to the envisaged GAP uses, is considered to be acceptable. Thus, the unrestricted use is not to be restricted further and hence is identical to the use applied for. The implementation of special risk modifying measures or resistance management strategies is not required for this product.

### Adverse effects on treated crops

The plant safety was evaluated in all efficacy trials with the target dose rates of MCW-2222. Results from trials with a wide range of commercially grown varieties of the different target crops did not show any **phytotoxicity** effects for MCW-2222 when applied at the requested dose rates. In addition, no negative effects were observed concerning **yield level** and **product quality**. Specific studies regarding **transformation** were conducted in potatoes (8 taint/processing tests) and apples (8 taint/processing tests) without any unintentional effects of MCW-2222 on sensory attributes and culinary **aptitude value** of treated and untreated apples and potatoes. Submission of data concerning **propagation** is not required for insecticides according to EPPO PP 1/135(4) '*Phytotoxicity assessment*'. Thus, any unacceptable **adverse effects on the target crops (KCP 6.4)** can be excluded after application of MCW-2222 according to the GAP use.

### Observations on other undesirable or unintended side-effects

During the course of the effectiveness trials observations indicating any effects whatsoever on succeeding crops, adjacent crops, beneficial or other non-target organisms were not reported. The lack of observations of negative impacts on non-target organisms is in accordance with the results of toxicity tests in ecotoxicologically relevant indicator species (Part B, Section 9). Thus, any **negative impact on non-target organisms (KCP 6.5.)**, i.e., succeeding crops, other plants, adjacent crops, beneficials, bees, non-target arthropods, earthworms and non-target soil organisms can be excluded after application of MCW-2222 according to the GAP use.

### Abstract by zRMS:

This application has been submitted for authorization of insecticide **MCW-2222** (ADM.00150.I.2.A, or Leaxo), containing 200 g/L acetamiprid ( nicotinic acetylcholine receptor (NAChR) competitive modulators, neonicotinoids, IRAC group 4 ). MCW-2222 is intended for the control of piercing-sucking pests in cereals, potato, and sugar beet, in apple orchards, in tree nursery crops, in floricultures and bulb and tuber ornamental cutures, in control of aphids as virus vectors in cereals and the oilseed rape (OSR), in control of beetles and their larvae in corn, potato and the OSR, as well as weevils and the brassica pod midge in the OSR, and in control of lepidopteran larvae in apple orchards and corn. All intended uses are claimed on the grounds of article 33 of Regulation (EC) No 1107/2009.

**MCW-2222** is the code name alternative to ADM.00150.I.2.A, that has been used, with no exception, in all the trial reports submitted by the applicant and consequently – in all the summaries in the entire dossier. Contrastingly, the title pages as well as the page header across the dossier, are using the ADM.00150.I.2.A code.

For the omnipresence of MCW-2222 code, and following the applicant's decision (see the Efficacy, Introduction part, following GAP Table), the zRMS has decided to use it in their comments too. It should be therefore understood that wherever the MCW-2222 code is used, it refers with no exception to the ADM.00150.I.2.A.

*For the reader's convenience, when any reference link directs the reader from this abstract to specific commenting boxes in different parts of the document, each one of these boxes contains, by its end, the link directing back to the abstract.*

### Minimum effective dose

1. The dose rate of 0.125 L/ha (0.078 L/ha LWA) can be considered as the minimum effective dose for the control of *Aphis* spp (APHISP) in apple.
2. The dose rate of 0.3 L/ha (0.1875 L/ha LWA) can be considered as the minimum effective dose for the control of *Cydia pomonella* (CARPPO), *Quadraspidiotus perniciosus* (QUADPE) and *Eriosoma lanigerum* (ERISLA) in apple.
3. Minimum effective dose rate of 0.18 L/ha has been justified for the control of *Leptinotarsa decemlineata* (LPTNDE), *Myzus persicae* (MYZUPE) and *Macrosiphum euphorbia* (MACSEU) in potato
4. Minimum effective dose rate of 0.18 L/ha has been justified for the control of aphids (1APHIF) in winter wheat and winter triticale.
5. Minimum effective dose rate of 0.15 L/ha has been justified for the control of aphids as virus vectors (1APHIF, e.g. RHOPPA, MACSAV (BYDV, WYLV)) in winter wheat and winter barley.
6. Minimum effective dose rate of 0.25 L/ha has been justified for the control of *Aphis fabae* (APHIFA) and *Myzus persicae* (MYZUPE) in sugar beet.
7. Minimum effective dose rate of 0.17 L/ha (2 applications per growth season) and 0.23 L/ha (once per growth season) has been justified for the control of aphids (1APHIF) on ornamentals.
8. Minimum effective dose rate of 0.2 L/ha has been justified for the control of *Diabrotica virgifera* (DIABVI) and *Ostrinia nubilalis* (PYRUNU) in maize.
9. **The Oilseed Rape.** It had been originally assessed by zRMS that: "*The dose rate of 0.3 L/ha, as claimed in the GAP table, can be considered justified as the MED in **spring application** in winter OSR in control of *Ceutorhynchus napi* (CEUTNA), *C. palidactylus* (CEUTQU), *Meligethes aeneus* (MELIAE), *C. obstrictus* (syn.: *assimilis*) (CEUTAS) and *Dasineura brassicae* (DASYBR), and in **autumn application** against *Psylliodes chrysocephala* (PSYICH), *Phyllotreta* spp. (PHYESP) and *Ceutorhynchus picipitarsis* (CEUTPI), in the concerned Member States within the Central EU zone.*"  
As the result of the update triggered by Section 8, the target dose rate for the autumn application against PSYICH, PHYESP and CEUTPI, has been reduced to **0.24 L/ha**. The zRMS has decided to **accept the 0.24 L/ha** as the new minimum effective dose in the autumn use against *C. picipitarsis*, *Phyllotreta* spp. and *P. chrysocephala*, provided that the efficacy level would be described as **moderate**, in the product label. For details of justification of the 0.24 L/ha dose rate as new MED in this autumn application see the [specific zRMS comments](#) in the MED commenting box.
10. The dose rate of **0.2 L/ha** can be considered justified as the MED in **autumn application** in control of aphids (*Myzus persicae*; MYZUPE) – vectors of Turnip Yellow Virus (TUYV00).

For more details on the MED assessment see the zRMS [commenting box](#) following the MED chapter.

### **Efficacy**

A total of 494 valid efficacy trials carried out between 2011 and 2022 have been submitted for the evaluation of the insecticide MCW-2222. The trials were conducted in 3 EPPO zones: Maritime (229), North-East (129) and South-East (136). Based on the efficacy trial results it can be concluded that the insecticide MCW-2222, when applied at the recommended dose rates, is effective in control of the target insect pests for which the supporting data has been submitted. Some of the claimed uses have not been accepted by the zRMS, due to no or too limited efficacy data, and for some of the others the zRMS kindly advises the respective cMSs to make a decision on acceptance on the national level, according to these Member States' national requirements. See also the zRMS [commenting box](#) following the GAP table.

**Summarizing the evaluation, the following uses have been accepted by the zRMS:**

#### **Maritime EPPO zone**

SOLTU: LPTNDE, MYZUPE, MACSEU (CZ, DE, NL)

BEAVA: APHIFA, MYZUPE, MACSEU (CZ, DE, ~~NL~~)

**BEAVA: APHIFA, MYZUPE (NL)**

MABSD: CARPPO, QUADPE, APHISP (CZ, DE)

MABSD: APHISP (NL)

TRZAW: ~~1APHIF~~ **1APHIG** (CZ, ~~NL, DE~~)

**TRZAW, HORVW, TTLWI, SECCW, TRZSP: 1APHIG (DE)**

**TRZAW, TTLWI, TRZSP, HORVW: 1APHIG (NL)**

TRZAW, HORVW: ~~1APHIF~~ **1APHIG**, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, ~~NL, DE~~)

**TRZAW, HORVW, TTLWI, SECCW, TRZSP: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (DE)**

**TRZAW, HORVW, AVESW, TTLWI, SECCW, TRZSP: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (NL)**

**TRZAS, HORVS: 1APHIG (NL)**

**Flower bulbs and flower tubers: 1APHIG (NL)**

**Floriculture, tree nursery & perennial nursery crops: ~~1APHIF~~ 1APHIG (NL)**

BRSNW: autumn application against PSYICH, PHYESP and CEUTPI, autumn application against MYZUPE as vector of Turnip Yellows Virus.

BRSNW and BRSNS: spring application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

#### **North-East EPPO zone (PL)**

SOLTU: LPTNDE, MYZUPE, MACSEU (PL)

BEAVA: APHIFA, MYZUPE, ~~MACSEU~~ (PL)

MABSD: CARPPO, APHISP (PL)

TRZAW, HORVW: ~~1APHIF~~ **1APHIG**, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

TRZAW, TTLWI: ~~1APHIF~~ **1APHIG** (PL)

BRSNW: **autumn application** against PSYICH

BRSNW: **spring** application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

BRSNS: **spring** application in control of MELIAE, ~~CEUTAS and DASYBR~~.

#### **South-East EPPO zone**

SOLTU: LPTNDE (SI, SK)

MABSD: CARPPO, QUADPE, ERISLA, APHISP (HU, SK, SI)

ZEAMX: DIABVI, PYRUNU (HU, SK, SI)

BRSNW and BRSNS: **spring** application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

**The following uses are have not been accepted by the zRMS:**

#### **Maritime EPPO zone:**

**HORVS, AVESP, TRZAS, TTLSO: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (NL, DE)**

**HORVS, AVESP, TRZAS, TTLSO: 1APHIG (DE)**

### **North-East EPPO zone**

#### **BEAVA: MACSEU (PL)**

HORVS, AVES, TRZAS, TTLSO: 1APHIF (PL)

HORVS, AVES, TRZAS, TTLSO: 1APHIF e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

SECCW, TTLWI: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

HORVW, SECCW: 1APHIF 1APHIG (PL)

BRSNW: control of *Phyllotreta* sp. (PHYESP)

**BRSNS: spring application in control of CEUTAS and DASYBR**

### **South-East EPPO zone**

The autumn application in the BRSNW was not tested and is not supported in the South-Eastern EPPO zone.

The following uses **should be confirmed** by cMSs:

### **Maritime EPPO zone**

TRZAS, HORVS, AVES, TRZDS, TTLSO: 1APHIF 1APHIG (CZ, NL, DE)

**AVES, TTLSO: 1APHIG (NL)**

TRZAS, HORVS, AVES, TRZDS, TTLSO: 1APHIF 1APHIG, e.g. RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, NL, DE)

HORVW, TTLWI, SECCW, TRZSP: 1APHIF 1APHIG (CZ, NL, DE)

**TRZDU, AVESW: 1APHIG (DE)**

**AVESW, SECCW: 1APHIG (NL)**

SECCW, TTLWI, TRZSP: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, NL, DE)

**TRZDU, AVESW: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (DE)**

Flower bulbs and flower tubers: 1APHIF (NL)

Tree nursery & Perennial nursery crops: 1APHIF (NL)

### **South-East EPPO zone**

SOLTU: MYZUPE (SI)

BEAVA: APHIFA, MYZUPE, MACSEU (SI)

HORVS, AVES, TRZAS, TRZDS, TTLSO: 1APHIF 1APHIG (SI)

TRZAW, HORVW, TTLWI, SECCW: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (SI)

BRSNW and BRSNS: the **dose range** in spring application.

Flower bulbs and flower tubers: 1APHIF 1APHIG (SI)

Floriculture, tree nursery & Perennial nursery crops: 1APHIF 1APHIG (SI)

For more details and justification on the Efficacy evaluation see the zRMS [commenting box](#) following the Efficacy chapter.

### **Phytotoxicity, yield, propagation material, transformation processes, succeeding crops and adjacent crops**

Phytotoxicity and adverse effects on the yield, propagation material, transformation processes, succeeding nor adjacent crops are not expected after application of MCW-2222. Nevertheless, in order to avoid the risk of adverse effects on adjacent crops, in accordance with the rules of good agricultural practice it is recommended to include, in the product label, the following remark: “When using MCW-2222 do not allow spray drift to the neighbouring crop plantations”.

### **Resistance management strategy**

The emerging and development of neonicotinoid resistance in arthropods is rather complex an issue, and still subject to both basic and applicable research. Nonetheless, the facts established so far allow for a definite practical conclusion: The monitoring data, provided by the applicant with the present submission, along with the APRD and EPPO dBase data, do substantiate the opinion that resistance to the neonicotinoid insecticide acetamiprid is already in place in pest populations, but while the risk of its further development is real, it may be indeed estimated as medium to low, depending on the target species in question.

At the same time, it is the zRMS opinion that all possible measures related to the agricultural context of application and capable of reducing the risk to acceptable level are still at hand of the end user and can be effective, provided that they are used. Majority of these measures are the standard components of the good agricultural

practice such as crop rotation and cultural techniques. Furthermore, a maximum of 2 applications are proposed per growth season or per crop, which should not follow one another; if the third application is needed, another MoA should be used in between. In species producing more than one generation in the growth season care should be taken to avoid spraying two consecutive generations with acetamiprid. The above recommendations should be found in the national labels.

[zRMS Resistance commenting box](#)

**Table 3.1-1: Acceptability of intended uses (and respective fall-back GAPs, if applicable)**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
Zonal uses (field or outdoor uses, certain types of protected crops)														
I	Central	Corn	F	See below <i>Diabrotica virgifera virgifera</i> <i>Ostrinia nubilalis</i>	foliar spraying, overall	Jun-Aug/ BBCH 51- 75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	Umbrella GAP	A
1	Hungary	Corn	F	<i>Diabrotica virgifera virgifera</i> (DIABVI) <i>Ostrinia nubilalis</i> (PYRUNU)	foliar spray- ing, overall	Jun-Aug/ BBCH 51- 75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
2	Slovakia	Corn	F	<i>Diabrotica virgifera virgifera</i> (DIABVI) <i>Ostrinia nubilalis</i> (PYRUNU)	foliar spray- ing, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
3	Slovenia	Corn	F	<i>Diabrotica virgifera virgifera</i> (DIABVI) <i>Ostrinia nubilalis</i> (PYRUNU)	foliar spray- ing, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
IIa	Central	Apple	F	<i>Cydia pomonella</i> and other pests	foliar spraying, overall	June-Aug/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500- 1000	14	Umbrella GAP	A
IIb	Central	Apple	F	Aphids species and others pests	foliar spraying, overall	May-Oct/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	Umbrella GAP; To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee	A



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
													flight during late evening hours!	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
4	Czech Re- public	Apple	F	<i>Cydia pomonella</i> (CARPPO), <i>Quadraspidiotus per- niciosus</i> (QUADPE)	foliar spray- ing, overall	June-Aug/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500- 1000	14	0.25 L/10000 m² LWA 0.1875 L/10000 m² LWA	A
5	Czech Re- public	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	Jun-Sep/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	0.078 L/10000 m² LWA To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
6	Germany	Apple	F	<i>Cydia pomonella</i> (CARPPO), <i>Quadraspidiotus per- niciosus</i> (QUADPE)	foliar spray- ing, overall	June-Aug/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500- 1000	14	0.25 L/10000 m² LWA 0.1875 L/10000 m² LWA	A
7	Germany	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	Jun-Sep/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	0.078 L/10000 m² LWA To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
8	Netherlands	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	Jun-Aug/ BBCH 71-	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	0.078 L/10000 m² LWA	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
						PHI								
9	Hungary	Apple	F	<i>Cydia pomonella</i> (CARPPO), <i>Quadraspidiotus per- niciosus</i> (QUADPE), <i>Eriosoma lanigerum</i> (ERISLA)	foliar spray- ing, overall	June-Oct/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	600- 1000	14	in-label: 0.2-0.4 L/ha in-label: 0.125- 0.25 L/10000 m <sup>2</sup> LWA in label 0.2-0.3 L/ha in label 0.125- 0.1875 L/10000m <sup>2</sup> LWA	A
10	Hungary	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	May-Oct/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	600- 1000	14	in label: 0.09- 0.125 L/ha 0.056 – 0.078 L/10000 m <sup>2</sup> LWA; To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
11	Poland	Apple	F	<i>Cydia pomonella</i> (CARPPO)	foliar spray- ing, overall	June-Aug/ BBCH 71-79 PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500-900	14	0.25 L/10000 m <sup>2</sup> LWA 0.1875 L/10000 m <sup>2</sup> LWA	A
12	Poland	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	May-Oct/ BBCH 62-79 PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.125	a) 25 b) 250	500-900	14	0.078 L/10000 m <sup>2</sup> LWA To protect bees	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
													and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	
13	Slovakia	Apple	F	<i>Cydia pomonella</i> (CARPPO), <i>Quadraspidiotus per- niciosus</i> (QUADPE), <i>Eriosoma lanigerum</i> (ERISLA)	foliar spray- ing, overall	June-Aug/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500- 1000	14	in-label: 0.2-0.4 L/ha in-label: 0.125- 0.25 L/10000 m² LWA in label 0.2-0.3 L/ha in label 0.125- 0.1875 L/10000m² LWA	A
14	Slovakia	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	May-Sep/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	in label: 0.09- 0.125 L/ha 0.056 – 0.078 L/10000 m² LWA To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
15	Slovenia	Apple	F	<i>Cydia pomonella</i> (CARPPO), <i>Quadraspidiotus perniciosus</i> (QUADPE), <i>Eriosoma lanigerum</i> (ERISLA)	foliar spray- ing, overall	June-Aug/ BBCH 71- PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500- 1000	14	<del>in-label: 0.2-0.4</del> <del>L/ha</del> <del>in-label: 0.125-</del> <del>0.25 L/10000 m<sup>2</sup></del> <del>LWA</del> <del>in label 0.2-0.3</del> <del>L/ha</del> <del>in label 0.125-</del> <del>0.1875</del> <del>L/10000m<sup>2</sup></del> <del>LWA</del>	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
16	Slovenia	Apple	F	<i>Aphis</i> spp. (APHISP)	foliar spray- ing, overall	May-Oct/ BBCH 62- PHI	a) 1-2 b) 1-2	8	a) 0.125 b) 0.25	a) 25 b) 50	500- 1000	14	in label: 0.09- 0.125 L/ha To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours! 0.056 – 0.078 L/10000 m <sup>2</sup> LWA	A
III	Central	Potato	F	See below	foliar spray- ing, overall	May-Sep/ BBCH 12- 79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	100-500	7	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
														C MYZUPE (SI)
17	Czech Re- public	Potato	F	<i>Leptinotarsa decem- lineata</i> (LPTNDE) <i>Myzus persicae</i> (MYZUPE), <i>Macrosiphum euphor- bia</i> (MACSEU)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-500	7	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
													evening hours!	
18	Netherlands	Potato	F	<i>Leptinotarsa decem- lineata</i> (LPTNDE) <i>Myzus persicae</i> (MYZUPE), <i>Macrosiphum euphor- bia</i> (MACSEU)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
19	Poland	Potato	F	<i>Leptinotarsa decem- lineata</i> (LPTNDE) <i>Myzus persicae</i> (MYZUPE), <i>Macrosiphum euphor- bia</i> (MACSEU)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
20	Slovenia	Potato	F	<i>Leptinotarsa decem- lineata</i> (LPTNDE) <i>Myzus persicae</i> (MYZUPE)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	in label: 0.12- 0.18 L/ha To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A LPTNDE  C MYZUPE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
21	Slovakia	Potato	F	<i>Leptinotarsa decem- lineata</i> (LPTNDE)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	in label: 0.12- 0.18 L/ha To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
22	Germany	Potato	F	<i>Leptinotarsa decem- lineata</i> ; <i>Myzus persicae</i> ; <i>Macrosiphum euphor- biae</i> ; Aphids (1APHIG)	foliar spray- ing, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-500	7	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
IVa	Central	Spring wheat Spring barley Spring oats Spring Durum wheat Spring triticale	F	See below Aphids (1APHIG)	foliar spraying, overall	Mar-Jul/ BBCH 40- 69 (spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	100-200- 400	follow crop BBCH	Umbrella GAP Only 1 applica- tion if at BBCH 20-29 an appli- cation is done for virus control (next line)	A TRZAS HORVS (NL) N (DE,PL) C (CZ,SI) NL (AVESP,



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
														TTL SO)
IVb	Central	Spring wheat Spring barley Spring oats Spring Durum wheat Spring triticale	F	See below Aphids, Virus Vec- tor Control	foliar spray- ing, overall	Mar-Jul/ -BBCH 12- 69 (spring) Mar-Jun- BBCH 20- 29	a) 1 b) 1-2 b) 1	30 -	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	100 200- 400	follow crop BBCH	Umbrella GAP 1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	N (NL, DE, PL)  C (CZ)
23	Czech Re- public	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids (IAPHIF IAPHIG)	foliar spray- ing, overall	May-Jun/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	Only 1 applica- tion if at BBCH 20-29 one appli- cation is done for virus control (next line)	C
24	Czech Re- public	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control Aphids, Virus Vector Control	foliar spray- ing, overall	May-Jun/ Mar-Jun BBCH 12- 29 BBCH 20 - 29 (Spring)	a) 1 b) 1-2 b) 1	30 -	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	C
25	Netherlands	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids (IAPHIF IAPHIG)	foliar spray- ing, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	Only 1 applica- tion if at BBCH 20-29 one appli- cation is done for virus control (next line)	A TRZAS HORVS  C AVESP TTL SO
26	Netherlands	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control Aphids, Virus Vector Control	foliar spray- ing, overall	Mar-Apr/ BBCH 12 - 29 (Spring)	a) 1 (-) b) 1-2 (30)	30	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1	N

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
													application-at BBCH 40-69.	
27	Germany	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids (IAPHIF IAPHIG)	foliar spray- ing, overall	Mar-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	Only 1 applica- tion if at BBCH 20-29 one appli- cation is done for virus control (next line)	N
28	Germany	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control Aphids, Virus Vector Control	foliar spray- ing, overall	Mar-Apr/ Mar-Jun BBCH 12- 29 BBH 20-29 (Spring)	a) 1 (-) b) 1-2 (30) b) 1	30	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application-at BBCH 12-29 followed by 1 application-at BBCH 40-69.	N

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
29	Slovenia	Spring barley Spring oat Spring wheat Spring Durum wheat Spring triticale	F	Aphids (IAPHIF IAPHIG)	foliar spray- ing, overall	May-Jun/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		C
30	Poland	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids (IAPHIF IAPHIG)	foliar spray- ing, overall	Mar-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	Only 1 applica- tion if at BBCH 20-29 one appli- cation is done for virus control (next line)	N
31	Poland	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control Aphids, Virus Vector Control	foliar spray- ing, overall	Mar-Apr/ Mar-Jun BBCH 12- 29 BBCH 20-29 (Spring)	a) 1 (-) b) 1-2 (30) b) 1	30	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	N
Va	Central	Winter wheat, Winter barley, Winter rye, Winter triticale, Spelt	F	Aphids (IAPHIG)	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.18 b) 0.36	a) 36 b) 72	100 200- 400	follow crop BBCH	Umbrella GAP	A TRZAW (CZ, DE, NL, PL) TTLWI (PL NL,DE) TRZSP (DE, NL) HORVW (DE, NL) SECCW (DE))  N (PL) HORVW SECCW

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
Vb	Central	Winter wheat, Winter barley, Winter rye, Winter triticale, Spelt	F	<del>Aphids-Virus-Con- trol</del> Aphids, Virus Vec- tor Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Au- tumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	100-200- 400	follow crop BBCH	Umbrella GAP	<div>C HORVW (CZ, DE, NL) TTLWI (CZ, DE, NL) SECCW (CZ, DE, NL) TRZSP TRZDU (DE) AVESW (DE)</div> <div>A TRZAW HORVW SECCW (NL,DE) TTLWI (DE, NL) AVESW (NL) TRZSP (NL,DE)</div> <div>N (PL) TTLWI SECCW</div> <div>C SECCW (CZ, DE, NL, SL) TTLWI</div>

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
														(CZ, DE, NL, SL) TRZAW (SL) TRZSP TRZDU (DE) AVESW (DE)
32	Czech Re- public	Winter wheat Winter barley Winter triticale Winter rye Spelt	F	Aphids (LAPHISG)	foliar spray- ing, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A TRZAW
														C HORVW TTLWI SECCW TRZSP

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
33	Czech Re- public	Winter wheat Winter barley Winter triticale	F	<del>Aphids Virus Control</del> Aphids, Virus Vector Control	foliar spray- ing, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		A TRZAW HORVW

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
		Winter rye Spelt												C SECCW TTLWI TRZSP
34	Netherlands	Winter wheat Winter oat Winter barley Winter triticale Winter rye Spelt	F	Aphids (IAPHIF IAPHISG)	foliar spray- ing, overall	May-Jul/ BBCH 40 – 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A TRZAW TTLWI TRZSP HORVW
														C AVESW HORVW TTLWI SECCW TRZSP
35	Netherlands	Winter wheat Winter oat Winter barley Winter triticale Winter rye Spelt	F	<del>Aphids Virus Control</del> Aphids, Virus Vector Control	foliar spray- ing, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH	Mainly barley yellow dwarf vi- rus (BYDV00)	A TRZAW HORVW AVESW TTLWI SECCW TRZSP
														C AVESW TTLWI SECCW TRZSP
36	Germany	Winter wheat Winter barley Winter triticale Winter rye Spelt Durum wheat	F	Aphids (IAPHIF IAPHISG)	foliar spray- ing, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A TRZAW HORVW TTLWI SECCW TRZSP

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
		Winter oat												C HORVW TTLWI SECCW TRZSP TRZDU AVESW
37	Germany	Winter wheat Winter barley Winter tritcale Winter rye Spelt Durum wheat Winter oat	F	<del>Aphids Virus Control</del> Aphids, Virus Vector Control	foliar spray- ing, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		A TRZAW HORVW TTLWI SECCW TRZSP  C TTLWI SECCW TRZSP TRZDU AVESW
38	Poland	Winter wheat Winter barley Winter tritcale Winter rye	F	<del>Aphids Virus Control</del> Aphids, Virus Vector Control	foliar spray- ing, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		A TRZAW HORVW  N TTLWI SECCW



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
39	Poland	Winter wheat Winter barley Winter triticale	F	Aphids (LAPHISG)	foliar spray- ing, overall	May-Jul/ BBCH 40-61 - 69 (Spring)	a) 1-2 b) 1-2	10	a) 0.18 b) 0.36 0.18	a) 36 b) 72 36	200-400	follow crop BBCH		A TRZAW TTLWI

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
		Winter rye												N HORVW SECCW
40	Slovenia	Winter wheat Winter barley Winter triticale Winter rye	F	<del>Aphids Virus Control</del> Aphids, Virus Vector Control	foliar spray- ing, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) <del>0.15</del> 0.145 b) <del>0.15</del> 0.145	a) <del>30</del> 29 b) <del>30</del> 29	200-400	follow crop BBCH		C
VIa	Central	Winter OSR	F	See below	foliar spraying, overall	Mar-Jun/ BBCH 31- 71 (spring)	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	100-400	28	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A except for:  C dose range in the SE zone  N autumn application SE zone (PSYICH)
VIb	Central	Winter OSR	F	See below	foliar spraying, overall	Aug-Nov/ BBCH 11- 19 (autumn)	a) 1 b) 1	-	a) <del>0.3</del> 0.24 b) <del>0.6</del> 0.24	a) <del>60</del> 48 b) <del>120</del> 48	100-200	28	Umbrella GAP  The label must include the fol- lowing phrase: “Flea Beetles and Winter Stem Weevil: Moderate con- trol level”	A except for  C Dose range in the SE zone
41	Czech Re- public	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spray- ing, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
42	Czech Re- public	Winter OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
43	Czech Re- public	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus obstrictus</i> ( <i>syn assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
44	Czech Re- public	Winter OSR	F	<i>Psylliodes chryso- cephala</i> <i>Phyllotreta</i> Spp. (Flea beetle)	foliar spray- ing, overall	Sep-Oct/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.24 b) 0.6 0.24	a) 60 48 b) 120 48	200-400	28	The label must include the fol- lowing phrase: “Flea Beetles: Moderate con- trol level”	A
45	Czech Re- public	Winter OSR	F	Aphid vectors of Tur- nip Yellows Virus - <i>Myzus persicae</i>	foliar spray- ing, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.2 b) 0.2	a) 40 b) 40	200-400	28		A
46	Hungary	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadriens</i> <i>C. quadridens</i>	foliar spray- ing, overall	Mar-May/ BBCH 31-69 BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: 0.15- 0.3 L/ha To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours! Trial data SE zone do not cover BBCH >	A: 0.3L/ha ad MED  C: dose range

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)  59 for this pest assemblage	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
47	Hungary	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn <i>assimilis</i> )	foliar spray- ing, overall	Mar-May/ <del>BBCH 31-71</del> BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha	A: 0.3L/ha as MED

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
														C: dose range
48	Hungary	Winter OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Mar-May/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: 0.18- 0.3 L/ha	A: 0.3L/ha ad MED
														C: dose range
49	Poland	Winter OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	May-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7 -	a) 0.3 b) 0.3 0.6	a) 60 b) 60 +20	200-400	28		A
50	Poland	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7 -	a) 0.3 b) 0.3 0.6	a) 60 b) 60 +20	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A

[illegible]



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
55	Slovakia	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn. <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61- 71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A: 0.3L/ha as MED
														C dose range
56	Germany	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spray- ing, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
57	Germany	Winter OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
58	Germany	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
59	Germany	Winter OSR	F	<i>Psylliodes chryso- cephala</i> <i>Phyllotreta</i> Spp: (Flea beetle)	foliar spray- ing, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.24 b) 0.6 0.24	a) 60 48 b) 120 48	200-400	28	The label must include the fol- lowing phrase: "Flea Beetles:	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
													Moderate control level"	
60	Germany	Winter OSR	F	Aphid vectors of Turnip Yellow Virus - <i>Myzus persicae</i>	foliar spraying, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.2 b) 0.2	a) 40 b) 40	200-400	28		N
61	Germany	Winter OSR	F	<i>Ceutorhynchus picipitarsis</i> (Rape winter stem weevil)	foliar spraying, overall	Oct-Nov/ BBCH 13-17	a) 1 b) 1	-	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	The label must include the following phrase: "Winter Stem Weevil: Moderate control level"	N
62	Slovenia	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
63	Slovenia	Winter OSR	F	<i>Meligethes aeneus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
64	Slovenia	Winter OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label:  <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha	A: 0.3L/ha as MED

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
65	Slovenia	Winter OSR	F	<i>Psylliodes chryso- cephala</i>	foliar spray- ing, overall	Sep-Oct/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.24 b) 0.6 0.24	a) 60 48 b) 120 48	200-400	28	The label must include the fol- lowing phrase: “Flea Beetles: Moderate con- trol level”	N: no trials support au- tumn appli- cation in the SE zone
VIIa	Central	Spring OSR	F	See below	foliar spraying, overall	Mar-Jun BBCH 31- 71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	100-400	28	Umbrella GAP. To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A except for:  C dose range in the SE zone
66	Germany	Spring OSR	F	<i>Ceutorhynchus napi</i> ; <i>C. quadridens</i>	foliar spray- ing, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
67	Germany	Spring OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
68	Germany	Spring OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
69	Poland	Spring OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7 -	a) 0.3 b) 0.3 0-6	a) 60 b) 60 120	200-400	28		A
70	Poland	Spring OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7 -	a) 0.3 b) 0.3 0-6	a) 60 b) 60 120	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A: N Art. 51
71	Slovakia	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spray- ing, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: 0.15- 0.3 L/ha	A: 0.3L/ha as MED  C: dose range
72	Slovakia	Spring OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: 0.18- 0.3 L/ha	A: 0.3L/ha as MED  C: dose range

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
73	Slovakia	Spring OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label:  <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha	A: 0.3L/ha as MED

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
76	Hungary	Spring OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> (syn	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	in label: 0.15- 0.3 L/ha	A: 0.3L/ha as MED



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)  <i>assimilis</i> )	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
77	Czech Re- public	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spray- ing, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
78	Czech Re- public	Spring OSR	F	<i>Meligethes aeneus</i>	foliar spray- ing, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
79	Czech Re- public	Spring OSR	F	<i>Dasineura brassicae</i> , <i>Ceutorhynchus</i> <i>obstrictus</i> ( <i>syn</i> <i>assimilis</i> )	foliar spray- ing, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
VIIIa	Central	Sugar beet	F	See below	foliar spraying,	Apr-Aug/ BBCH 12-	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35	Umbrella GAP	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
					overall	39								C (SI)
80	Poland	Sugar beet	F	<i>Myzus persicae</i> (MYZUPE) <i>Aphis fabae</i> (APHIFA) <i>Macrosiphum euphor- biae</i>	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35		A
81a	Germany	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum euphor- biae</i> Aphids (1APHIG)	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35		A
81b	Germany	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum euphor- biae</i> Aphids (1APHIG)	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1 - b) 1 -	-	a) 0.25 b) 0.25	a) 50 b) 50	200-400	35	Biennial appli- cation	A
82	Netherlands	Sugar beet	F	<i>Myzus persicae</i> (MYZUPE) <i>Aphis fabae</i> (APHIFA) <i>Macrosiphum euphor- biae</i> (MACSEU)	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
83	Czech Re- public	Sugar beet	F	<i>Myzus persicae</i> (MYZUPE) <i>Aphis fabae</i> (APHIFA) <i>Macrosiphum euphor- biae</i> (MACSEU)	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35		A
84	Slovenia	Sugar beet	F	<i>Myzus persicae</i> (MYZUPE) <i>Aphis fabae</i> (APHIFA) <i>Macrosiphum euphor- biae</i> (MACSEU)	foliar spray- ing, overall	Apr-Aug/ BBCH 12-39	a) 1-2 b) 1-2	7	a) 0.25 b) 0.5 0.25	a) 50 b) 100 50	200-400	35		C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
IXa	Central	Flower bulbs and flower tu- bers	F	Aphids (IAPHIG)	foliar spraying, overall	Mar-Jul/ BBCH 12- 91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-400	n.a.	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A
IXb	Central	Flower bulbs and flower tu- bers	F	Aphids (IAPHIG)	foliar spraying, overall	Mar-Jul/ BBCH 20- 91	a) 1-2 b) 1-2	7	a) 0.17 b) 0.34	a) 34 b) 68	200-400	n.a.	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A NL
														C SI
85	Netherlands	Flower bulbs and flower tubers	F	Aphids (IAPHIG)	foliar spray- ing, overall	Mar-Jul/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-400	n.a.	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
													All aphids ex- cept <i>Phyllaphis</i> <i>fagi</i> (PHYAFA)	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
86	Netherlands	Flower bulbs and flower tubers	F	Aphids (APHISF IAPHIG)	foliar spray- ing, overall	Mar-Jul/ BBCH 20-91	a) 1-2 b) 1-2	7	a) 0.17 b) 0.34	a) 34 b) 68	200-400	n.a.	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!  All aphids ex- cept <i>Phyllaphis fagi</i> (PHYAFA)	A
87	Slovenia	Flower bulbs and flower tubers	F	Aphids (APHISF IAPHIG)	foliar spray- ing, overall	Mar-Jul/ BBCH 12-91	a) 1-2 b) 1-2	7	a) 0.17 b) 0.34 0.17	a) 34 b) 68 34	200-400	n.a.	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
Xa	Central	Floriculture, Tree nursery & Perennial nursery crops	F	Aphids (IAPHIG)	foliar spraying, overall	Mar-Aug/ BBCH 12- 91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200- 1000	n.a.	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is	A Floriculture Tree nursery & Perennial nursery crop (NL)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
Xb	Central	Floriculture, Tree nursery & Perennial nursery crops	F	Aphids (IAPHIG)	foliar spraying, overall	Mar-Aug/ BBCH 12- 91	a) 1-2 b) 1-2	7	a) 0.17 b) 0.34	a) 34 b) 68	200- 1000	n.a.	Umbrella GAP To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	C Tree nursery & Perennial nursery crops (SI)
														C Floriculture (SI) Tree nursery & Perennial nursery crops (SI)
88	Netherlands	Floriculture crops Tree nursery crops Perennial nursery crops	F	Aphids (IAPHIG)	foliar spray- ing, overall	Mar-Aug/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200- 1000	n.a.	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only out of honey bee flight during late evening hours!	A Floriculture Tree nursery & Perennial nursery crops
														C Tree nursery & Perennial nursery crops  All aphids ex- cept <i>Phyllaphis</i>

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)  <i>fagi</i> (PHYAFA)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
89	Netherlands	Floriculture crops Tree nursery crops Perennial nursery crops	F	Aphids (APHI) LAPHIG)	foliar spray- ing, overall	Mar-Aug/ BBCH 12-91	a) 1-2 b) 1-2	7	a) 0.17 b) 0.34	a) 34 b) 68	200- 1000	n.a.	To protect bees and pollinating insects, applica- tion during flowering against pests is possible only	A Floriculture Tree nursery & Perennial nursery crops

<b>Interzonal uses (use as seed treatment, in greenhouses (or other closed places of plant production), as post-harvest treatment or for treatment of empty storage rooms)</b>
n/a
<b>Minor uses according to Article 51 (field uses)</b>
n/a

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/ or situation  (crop destination / purpose of crop)	F, Fn, Fnp G, Gn, Gnp or I **	Pests or Group of pests controlled  (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks:  e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product / ha a) max. rate per appl. b) max. total rate per crop/season	g as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha  min / max			
Minor uses according to Article 51 (interzonal uses)														
n/a														

\* Use number(s) in accordance with the list of all intended GAPs in Part B, Section 0 should be given in column 1.

\*\* F: professional field use, Fn: non-professional field use, Fnp: professional and non-professional field use, G: professional greenhouse use, Gn: non-professional greenhouse use, Gnp: professional and non-professional greenhouse use, I: indoor application

Column 15: zRMS conclusion.

A	Acceptable
R	Acceptable with further restriction
C	To be confirmed by cMS
N	Not acceptable / evaluation not possible
n.r.	Not relevant for section 3

#### Comments of zRMS to the GAP table:

Please note, that where a particular use is marked blue in the GAP table, it means that taking individual decision on that use by the respective cMS is welcome. It should not be meant as an off-loading, of the decision-taking, by the zRMS onto the cMS. Instead, it aims at allowing the cMSs to take decisions different from that taken by zRMS for their own country, in recognition of the cMSs' different national requirements or preferences. Bearing that in mind, zRMS has discussed, in the commenting boxes, any doubtful issues, highlighting positive efficacy results where relevant, while also sharing with cMSs the reasons for which taking different decisions may be justified in different EPPO zones.

In case of the **draft** Registration Report there is still time for any of the cMS to express their view, and argue in favour or against the authorization in their country. That is why the zRMS is kindly asking the cMSs to not only take their decisions, but also to **share** the underlying information with the zRMS PL, within the commenting period framework. Only then will the zRMS be able to complete the GAP table unambiguously, in the **final Registration Report**, for all the EPPO zones and for all the concerned Member States, for which the present dossier has been submitted.

[Back to Efficacy summary in zRMS abstract](#)

## 3.2 Efficacy data (KCP 6)

### Introduction

This document summarises efficacy data relevant for the Central EU zone for registration of the plant protection product MCW-2222. Information and data is submitted for a new registration of the product according to article 29 of Regulation (EC) No 1107/2009. Data submitted with this dossier include information from a total of 532 studies conducted across the Maritime, Northeast and Southeast EPPO zones.

Any national addenda of Part B section 3 are not submitted.

MCW-2222 is an SL formulation containing 200 g/L acetamiprid. It is intended for use as a foliar applied insecticide to control a range of sucking pests such as aphids, weevils and beetles on arable, fruit and ornamental crops. GAP uses of the formulation MCW-2222 are envisaged in Poland, Czech Republic, Germany, Netherlands, Hungary, Slovenia, and Slovakia as countries of the Central EU Zone.

An overview of the countries is provided in the table below. For the respective commercial name in each country please refer to dRR Part A. For ease of use the test product is always stated as MCW-2222 in all efficacy documents. The proposed Master Label (Central Zone) is presented in Appendix 9 of the BAD.

**Table 3.2-1: Zonal rapporteur member state (zRMS) and concerned member states (cMS)**

<b>zRMS:</b>	Poland	PL		<b>cMS:</b>	Czech Republic	CZ
					Germany	DE
					Netherlands	NL
					Hungary	HU
					Slovenia	SI
					Slovakia	SK

### Description of active substance

#### Identity of the active ingredient<sup>1</sup>:

Common Name,	Acetamiprid
Identification Numbers	CAS No 135410-20-7 CIPAC No 649
IUPAC Name	(E)-N1-[(6-Chloro-3-pyridyl)methyl]-N2-cyano- N1-methylacetamidine
Purity	≥ 990 g/kg
Date of approval	1 March 2018
Expiration of approval	28 February 2033

Acetamiprid was included into Annex I of Directive 91/414 (Commission Directive 2004/99/EC of 1 October 2004, date of inclusion 1 January 2005). The documentation on the EU renewal of acetamiprid (SANTE/10502/2017 Rev 4; 13 December 2017) in accordance with Regulation (EC) No 1107/2009 and Commission Implementing Regulation (EU) No 844/2012 are considered to provide the relevant review information and a reference to where such information can be found.

The renewal report for acetamiprid provides specific provisions which need to be considered by the applicant in preparation of their submission and by the Member State prior to granting an authorisation:

Member States should pay particular attention to

- the risk to aquatic organisms, bees and other non-target arthropods;
- the risk to birds and mammals;

<sup>1</sup> Commission Implementing Regulation (EU) 2018/113 of 24 January 2018

- the risk to consumers;
- the risk to operators.

Conditions of use shall include risk mitigation measures, where appropriate.

### Mode of action

Acetamiprid belongs to the group of neonicotinoid compounds which are used as insecticides. Acetamiprid is a systemic active substance with translaminar activity and with contact and stomach action belonging to the group of neonicotinoids. It is used to control *Hemiptera*, *Lepidoptera*, *Thysanoptera* and *Coleoptera*. It is an agonist of the nicotinic acetylcholine receptor, affecting the synapses in the insect central nervous system.<sup>2</sup>

**Table 3.2-2: Details of the active substance**

Active substance	Acetamiprid
Concentration (Unit: g/kg or g/L...)	200 g/L
Chemical group	neonicotinoids
Mode of action	systemic active substance with translaminar activity and with contact and stomach action
Biological action	insecticide

### Description of the plant protection product

MCW-2222 (acetamiprid 200 SL) contains the active ingredient acetamiprid in a concentration of 200 g a.s./L in a soluble concentrate (SL) formulation.

**Table 3.2-3: Simplified table of requested uses for the product MCW-2222**

Pest group	Crop(s)	Target(s)	EPPO zone			Requested rate(s)			
			Mar	N-E	S-E	No. (inter-val)	L/ha	L/ha LWA	Timing
(1) Aphids and scales (sucking)									
	Apple	APHISP	CZ, DE, NL	PL	-	1-2 (8)	0.125	0.078	May-Oct
			-	-	HU, SI, SK	1-2 (8)	0.09-0.125	0.056-0.078	
		ERISLA	-	-	HU, SI, SK	1	0.20-0.40 0.30	0.125-0.25 0.1875	Jun-Aug
		QUADPE	CZ, DE	-	-	1	0.40 0.30	0.25 0.1875	Jun-Oct
			-	-	HU, SI, SK	1	0.20-0.40 0.30	0.125-0.25 0.1875	
	Potato	MACSEU, MYZUPE	CZ, DE, NL	PL	-	1	0.18	-	May-Sep
		MYZUPE	-	-	SI	1	0.12-0.18	-	
	Winter cereals	1APHIF	CZ, DE, NL	PL	-	1-2 (10)	0.18	-	May-Jul
	Spring cereals	1APHIF	CZ, DE, NL	PL	SI	1-2 (10)	0.175	-	Mar-Jul
	Sugar beet	MYZUPE, APHIFA, MACSEU	CZ, DE, NL	PL	SI	2 (7)	0.25	-	Apr-Aug
	Flower bulbs	Aphids	NL	-	-	1	0.23	-	Mar-Jul

<sup>2</sup> EFSA Journal 2011;9(7):2328

Pest group	Crop(s)	Target(s)	EPPO zone			Requested rate(s)			
			Mar	N-E	S-E	No. (interval)	L/ha	L/ha LWA	Timing
	and flower tubers		NL	-	SI	2 (7)	0.17		
	Floriculture, nursery	Aphids	NL	-	-	1	0.23	-	Mar-Aug
			NL	-	SI	2 (7)	0.17		
<b>(2) Beetles and weevils (biting)</b>									
	Maize	DIABVI	-	-	HU, SK, SI	1	0.20-0.30	-	Jun-Aug
	Potato	LPTNDE	CZ, DE, NL	PL	-	1	0.18	-	May-Sep
			-	-	SI, SK	1	0.12-0.18		
	Winter oilseed rape	CEUTAS, CEUTNA, CEUTQU	CZ, DE	PL	-	1-2 (7)	0.30	-	Mar-Jun
			-	-	HU, SI, SK	1-2 (7)	0.15-0.30		
		MELIAE	CZ, DE	PL	-	1-2 (7)	0.30	-	Mar-Jun
			-	-	HU, SI, SK	1-2 (7)	0.18-0.30		
		CEUTPI	DE	-	-	1	<del>0.30</del> 0.24	-	Oct-Nov
		PHYESP	CZ, DE	-	-	1	<del>0.30</del> 0.24	-	Aug-Nov
		PSYICH	CZ, DE	PL	SI	1	<del>0.30</del> 0.24	-	Aug-Nov
	Spring oilseed rape	CEUTAS, CEUTNA, CEUTQU	CZ, DE	-	-	1-2 (7)	0.30	-	Mar-Jun
			-	-	HU, SK	1-2 (7)	0.15-0.30		
		MELIAE	CZ, DE	PL	-	1-2 (7)	0.30	-	Apr-Jun
			-	-	HU, SK	1-2 (7)	0.18-0.30		
<b>(3) Codling moth (biting)</b>									
	Apple	CARPPPO	CZ, DE	PL	-	1	<del>0.40</del> 0.30	<del>0.25</del> 0.1875	Jun-Aug
			-	-	HU, SI, SK	1	0.20- <del>0.40</del> 0.30	0.125- <del>0.25</del> 0.1875	
<b>(4) European corn borer</b>									
	Maize	PYRUNU	-	-	HU, SI, SK	1	0.20-0.30	-	Jun-Aug
<b>(5) Virus vectors (aphids in cereals)</b>									
	Winter cereals	1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	CZ, DE, NL	PL	SI	1	0.15	-	Aug-Nov
	Spring cereals		CZ, DE, NL	PL	-	1	0.175	-	Mar-Jul
	Winter oilseed rape	Aphid vectors of Turnip Yellow Virus - MYZUPE	CZ, DE	-	-	1	0.20	-	Aug-Nov
<b>(6) Brassica pod midge</b>									
	Winter oilseed rape	DASYBR	CZ, DE	PL	-	1-2 (7)	0.30	-	Mar-Jun
			-	-	HU, SI, SK	1-2 (7)	0.18-0.30		
	Spring oilseed rape	DASYBR	CZ, DE	PL	-	1-2 (7)	0.30	-	May-Jun
			-	-	HU, SK	1-2 (7)	0.18-0.30		

Further details are in the table “All intended uses” in Part B - Section 0.



## Description of the target pests

**Table 3.2-4: Glossary of pests mentioned in the dossier.**

Pest group	Pest species	EPPO code	Common name
Aphids and scales (sucking)	<i>Aphididae</i>	1APHIF	Aphids ( <i>Aphididae</i> )
	<i>Aphis</i> spp.	APHISP	Aphids of the genus <i>Aphis</i>
	<i>Brachycaudus helichrysi</i>	ANURHE	Leaf-curling plum aphid
	<i>Aphis fabae</i>	APHIFA	Black bean aphid
	<i>Aphis pomi</i>	APHIPO	Green apple aphid
	<i>Aphis gossypii</i>	APHIGO	Melon and cotton aphid
	<i>Aulacorthum solani</i>	AULASO	Green potato aphid
	<i>Eriosoma lanigerum</i>	ERISLA	Apple woolly aphid
	<i>Elatobium abietinum</i>	LIOAAB	Green spruce aphid
	<i>Sitobion avenae</i> (formerly: <i>Macrosiphum avenae</i> )	MACSAV	Grain aphid
	<i>Macrosiphum euphorbiae</i>	MACSEU	Potato / tomato aphid
	<i>Macrosiphum rosae</i>	MACSRO	Green rose aphid
	<i>Metopolophium dirhodum</i>	METODR	Rose-grain aphid
	<i>Myzus ascalonicus</i>	MYZUAS	Shallot aphid
	<i>Myzus persicae</i>	MYZUPE	Green peach aphid
	<i>Phyllaphis fagi</i>	PHYAFA	Beech woolly aphid
	<i>Rhopalosiphum padi</i>	RHOPPA	Oat aphid
	<i>Quadraspidiotus perniciosus</i>	QUADPE	San Jose scale
Beetles and weevils (biting)	<i>Ceutorhynchus obstructus</i> (formerly: <i>C. assimilis</i> )	CEUTAS	Cabbage shoot weevil
	<i>Ceutorhynchus napi</i>	CEUTNA	Rape stem weevil
	<i>Ceutorhynchus picipitarsis</i>	CEUTPI	Black stem weevil
	<i>Ceutorhynchus pallidactylus</i> (formerly: <i>C. quadridens</i> )	CEUTQU	Cabbage stem weevil
	<i>Diabrotica virgifera virgifera</i>	DIABVI	Western corn rootworm
	<i>Leptinotarsa decemlineata</i>	LPTNDE	Colorado potato beetle
	<i>Brassicogethes aeneus</i> (formerly <i>Meligethes aeneus</i> )	MELIAE	Oilseed rape pollen beetle
	<i>Phyllotreta</i> spp.	PHYESP	Flea beetles
	<i>Phyllotreta atra</i>	PHYEAT	Cabbage flea beetle
	<i>Phyllotreta cruciferae</i>	PHYECR	Cabbage flea beetle
	<i>Psylliodes chrysocephala</i>	PSYICH	Cabbage stem flea beetle
Virus vectors (aphids)	<i>Aphis</i> spp.	APHISP	-
	<i>Sitobion avenae</i>	MACSAV	Grain aphid
	<i>Myzus persicae</i>	MYZUPE	Green peach aphid
	<i>Rhopalosiphum padi</i>	RHOPPA	Oat aphid
Other pests	<i>Cydia pomonella</i>	CARPPPO	Codling moth
	<i>Dasineura brassicae</i>	DASYBR	Brassica pod midge
	<i>Ostrinia nubilalis</i>	PYRUNU	European corn borer

The importance of pests and crops in C-EU where the product is applied for is presented in the following table:

**Table 3.2-5: Major / minor status of intended uses (for all cMS and zRMS)**

Crop and/or situation	Crop status		Pests or group of pests controlled	Pest status	
	Major	Minor		Major	Minor
Apple MABSD	DE, NL, PL, HU, SK, SI	CZ	APHISP	CZ, NL, PL <sup>(3)</sup> , SK, DE, SI	HU <sup>(4)</sup>
			ERISLA	HU, SK, SI	-
			QUADPE		CZ, SK, DE, HU
			CARPPPO	CZ, DE, PL <sup>(3)</sup> , HU, SK, SI	
Maize	HU, SK, SI	-	DIABVI	HU, SK, SI	-

Crop and/or situation	Crop status		Pests or group of pests controlled	Pest status	
	Major	Minor		Major	Minor
ZEAMX			PYRUNU	HU, SK, SI	-
Winter oilseed rape BRSNW	CZ, DE, PL, HU, SK, SI	-	MYZUPE (as virus vector)	CZ, DE, SI	-
			CEUTAS	CZ, DE, PL <sup>(3)</sup> , HU, SK, SI	-
			CEUTNA	CZ, DE, PL <sup>(3)</sup> , HU, SK, SI	-
			CEUTQU	CZ, DE, PL <sup>(3)</sup> , HU, SK, SI	-
			MELIAE	CZ, DE, PL <sup>(3)</sup> , HU, SK, SI	-
			CEUTPI	DE, SI	-
			PHYESP	CZ, DE, SI	-
			PSYICH	CZ, DE, PL, SI	-
Spring oilseed rape BRSNS	CZ, SI	DE, PL, HU, SK	DASYBR	CZ, DE, PL <sup>(3)</sup> , SK, SI	HU <sup>(4)</sup>
			CEUTAS	CZ, DE, HU, SK, SI	-
			CEUTNA	CZ, HU, SK, PL, SI	DE
			CEUTQU	CZ, HU, SK, SI	DE
			MELIAE	CZ, PL <sup>(3)</sup> , HU, SK, SI	DE
Potato SOLTU	CZ, DE, NL, PL, SK, SI	-	DASYBR	CZ, DE, PL <sup>(3)</sup> , SK, SI	HU <sup>(4)</sup>
			MYZUPE	CZ, DE, NL, PL, SI	-
			MACSEU	CZ, DE, NL, PL, SI	-
			LPTNDE	CZ, DE, NL, PL <sup>(3)</sup> , HU, SK, SI	-
Winter (soft) wheat TRZAW	CZ, DE, NL, PL, SI	-	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Winter barley HORVW	CZ, DE, SI, PL	NL	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Winter rye SECCW	CZ, DE, PL, SK, SI	NL	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Winter triticale TTLWI	CZ, DE, PL, SI	NL	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Spring (soft) wheat TRZAS	CZ, DE, NL, PL, SI	-	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Spring barley HORVS	CZ, DE, NL, PL, SI	-	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Spring triticale TTLSO	PL, CZ, SI	DE	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Spring oat AVESA	DE, CZ, SI	NL, HU	1APHIF (also as virus vector)	CZ, DE, NL, PL, SI	-
Sugar beet BEAVA	CZ, DE, NL, SI, PL	-	MYZUPE	CZ, DE, NL, PL, SI	-
			APHIFA	CZ, DE, NL, PL, SI	-
			MACSEU	CZ, DE, NL, PL, SI	-
Flower bulbs, tubers LILSS	-	NL <sup>(1)</sup>	1APHIF	-	NL, SI
Floriculture CHYSS HIBSS ROSSS	-	NL <sup>(2)</sup>	1APHIF	-	NL, SI
	-	NL <sup>(2)</sup>	1APHIF	-	NL, SI
	-	NL <sup>(2)</sup>	1APHIF	-	NL, SI
Nursery FAUSY	-	NL <sup>(1)</sup>	1APHIF	-	NL, SI

(1) Protected conditions

(2) Unprotected conditions

(3) Since it is not included in the minor uses list (minor uses list available), we assume that it is considered a major use (major uses list not available).

(4) Acc. to EUMUDA: All uses not listed in the list of major uses provided by Hungary can be considered as minor.

## Compliance with the Uniform Principles

The overall assessment was performed according to the uniform principles. All trials were conducted to GEP and followed the appropriate EPPO standards by officially recognised testing organisations.

### Information on trials submitted (3.1 Efficacy data)

In the following table, an overview of the efficacy trials provided is given. A part of these trials also or only includes minimum effective dose (MED) and/or yield/processing data. For an overview of MED trials and trials involving phytotoxicity assessment and yield determination/processing, please refer to the relevant chapters 3.2.2 and 3.4. Lists of all individual trials in detail are provided in the BAD.

**Table 3.2-6: Presentation of efficacy trials (500 efficacy trials + 7 supportive trials)**

Crop <sup>(1)</sup>	Country	Type of trial <sup>(2)</sup>	No. of efficacy trials (EPPO zone)			Years	Trial status
			Maritime	North-East	South-East		
Maize	Hungary	E	-	-	7	2013-2015	GEP
	Romania	E	-	-	7	2014-2015, 2022	GEP
	Slovakia	E	-	-	4	2014, 2022	GEP
<b>TOTAL</b>	-	-	-	-	<b>18</b>	-	-
Apple	Czech Rep.	E	34 (30)	-	-	2013 - 2015, 2021, 2022	GEP
	Poland	E	-	21 (17)	-	2011 - 2015, 2021	GEP
	Hungary	E	-	-	4+3 <sup>(3)</sup> (5)	2013, 2014, 2021	GEP
	Romania	E	-	-	15 (13)	2012 - 2015, 2021	GEP
	Slovakia	E	-	-	17	2013 - 2015, 2021	GEP
	Germany	E	3	-	-	2022	GEP
	The Netherlands	E	1	-	-	2022	GEP
	UK	E	2	-	-	2022	GEP
<b>TOTAL</b>	-	-	<b>40 (36)</b>	<b>21 (17)</b>	<b>39 (35)</b>	-	-
Potato	Czech Rep.	E	10	-	-	2013, 2014, 2021, 2022	GEP
	Germany	E	9	-	-	2014, 2015, 2022	GEP
	Poland	E	-	29	-	2013, 2014, 2021, 2022	GEP
	Romania	E	-	-	9	2014 - 2015, 2021	GEP
	Hungary	E	-	-	3	2021	GEP
	Latvia	E	-	1	-	2020	GEP
	The Netherlands	E	2	-	-	2022	GEP
	Sweden	E	1	-	-	2020	GEP
	Slovakia	E	-	-	5	2013, 2014	GEP
	UK	E	1	-	-	2022	GEP
<b>TOTAL</b>	-	-	<b>23</b>	<b>30</b>	<b>17</b>	-	-
Winter wheat	Czech Rep.	E	5	-	-	2014, 2015, 2020, 2021	GEP
	Germany	E	6	-	-	2012-2015	GEP
	France	E	1	-	-	2014	GEP
	Latvia	E	-	1	-	2021	GEP
	UK	E	2	-	-	2015, 2016	GEP
	Poland	E	-	4	-	2014/15, 2021	GEP
	Romania	E	-	-	11+1 <sup>(3)</sup>	2012-2015	GEP
Spring wheat	Czech Rep.	E	3	-	-	2014-2015	GEP
	Latvia	E	-	2 <sup>(3)</sup>	-	2021	GEP

Crop <sup>(1)</sup>	Country	Type of trial <sup>(2)</sup>	No. of efficacy trials (EPPO zone)			Years	Trial status
			Maritime	North-East	South-East		
Winter barley	Germany	E	8	-	-	2013 - 2016, 2020, 2021	GEP
	Czech Rep.	E	2	-	-	2020	GEP
	France	E	1	-	-	2014	GEP
	Lithuania	E	-	3 <sup>(4)</sup>	-	2020, 2021	GEP
	The Netherlands	E	1	-	-	2021	GEP
	Poland	E	-	2	-	2021	GEP
	UK	E	3	-	-	2015, 2020	GEP
Spring barley	Czech Rep.	E	1	-	-	2014	GEP
	Germany	E	1	-	-	2014	GEP
	Poland	E	-	2	-	2015	GEP
Winter triticale	Poland	E	-	2	-	2015	GEP
Winter oat	UK	E	1	-	-	2015	GEP
<b>TOTAL</b>	-	-	<b>35</b>	<b>16</b>	<b>15</b>	-	-
Oilseed rape	Czech Republic	E	31	-	-	2014 - 2017, 2020 - 2022	GEP
	Germany	E	34	-	-	2014 - 2017, 2020 - 2022	GEP
	UK	E	12	-	-	2015 - 2017, 2020 - 2022	GEP
	France	E	24	-	-	2012 - 2016, 2018	GEP
	Hungary	E	-	-	33	2011, 2013 - 2017	GEP
	Poland	E	-	45 <sup>(4)</sup>	-	2014 - 2017, 2020 - 2022	GEP
	Slovakia	E	-	-	21	2013 - 2015, 2022	GEP
	Sweden	E	1	-	-	2020	GEP
	Latvia	E	-	2	-	2020	GEP
<b>TOTAL</b>	-	-	<b>102</b>	<b>47</b>	<b>54</b>	-	-
Sugar beet	Czech Republic	E	<b>3</b>	-	-	2022	GEP
	Germany	E	<b>6</b>	-	-	2021-2022	GEP
	The Netherlands	E	<b>2</b>	-	-	2020	GEP
	Lithuania	E	-	<b>1</b>	-	2020	GEP
	Poland	E	-	<b>19</b>	-	2020 - 2022	GEP
<b>TOTAL</b>	-	-	<b>11</b>	<b>20</b>	-	-	-
Ornamentals	The Netherlands	E	22	-	-	2020 - 2022	GEP
<b>TOTAL</b>	-	-	<b>22</b>	-	-	-	-

(1) According to the GAP table.

(2) E = efficacy trial.

(3) Trials submitted as supportive data due to application numbers exceeding the GAP (yield data), dose rates below the GAP (dose justification data) or infestation levels below the threshold (supportive efficacy data)

GEP: Good Experimental Practices.

(4) the number of 45 trials in the OSR in Poland includes one trial that is irrelevant for the submission, as it does not assess the test item MCW-2222

Maps with trial locations per crop and zone are provided in Appendix 3\*. Trials were evenly distributed according to the crop growing areas in all countries of the Maritime, North-East and South-East EPPO climatic zone. All trials were conducted according to standard agricultural practice, taking into account the usual growing periods, soil types and relevant parameters requested by the crop/pest specific EPPO standards. Trials with infestation levels below the recommended threshold for control in field or insufficient control levels of the registered reference product were excluded from the evaluation.

**\*Comments of zRMS:**

Appendices 2-8 have been submitted as 5 separate files, along with the BAD file.

## Information on the reference products

Within the trials, additional insecticidal efficacy data are provided to support the registration of MCW-2222 and demonstrate the comparability with registered standard products at the registered rates per hectare. These additional products (reference products) for which efficacy data are presented in this BAD are presented in the following table.

**Table 3.2-7: Presentation of reference standards used in trials**

Reference standard	Country(ies) where the product is registered	Authorisation number	Active substance(s)	Formulation		Application rates in trials	
				Type	Concentration of a.s.	Crop	L, kg/ha
<b>Actara 25 WG</b>	Czech Republic	4476-0/2015-08 (CZ)	thiametoxam	WG	250 g/kg	apple:	0.30
<b>Avaunt 150 SC</b>	Romania	2002/22.06.1999 (RO)	indoxacarb	SC	150 g/L	maize:	0.15
<b>Activator 90</b>	United Kingdom	ADJ 0547 (UK)	alkohols, fatty acids	EC	900 g/L	winter oilseed	0.1 % v/v
			+ chlorpyrifos		+500 g/L	rape:	
<b>Biscaya, Biscaya 240 OD</b>	Hungary, United Kingdom	04.2/2312-1/2013 (HU), MAPP 15014 (UK)	thiacloprid	OD	240 g/L	maize:	0.30
						cereals:	0.30
						winter oilseed	0.30
						rape:	
<b>Calypso, Calypso 480 SC</b>	Czech Republic	4328-1/2017-04 (CZ)	thiacloprid	SC	480g/L	apple:	0.20
<b>Coragen 20 SC</b>	Czech Republic	4870-2 (CZ)	chlorantraniliprole	SC	200 g/L	potato:	0.060
<b>CYPERKILL MAX 500 EC</b>	- Germany, Austria, France, Hungary, Poland	007456-00/00-006 (DEU), 3998 (AT), 2170803 (FR), 6300/2007-2/2021 (HU), R-55/2012 (PL)	cypermethrin	EC	500 g/L	oilseed rape:	0.05
<b>Decis 50 EW, Decis Mega, Decis Mega 50 EW</b>	Slovakia, Czech Republic	96-05-0309 (SK)	deltamethrin	EW	50 g/L	apple:	0.20
						cereals	0.125
						sugar beet	0.2
<b>Decis Protech</b>	France	- 2010023	deltamethrin	EW	15 g/L	cereals:	0.42
<b>Fastac 100 EC</b>	Poland	R-39/2012 (PL)	alpha- cypermethrin	EC	100 g/L	cereals:	0.12
<b>Fury 100 EW</b>	use expired	AS2-111/2015	zeta-Cypermethrin	EW	100 g/L	sugar beet	0.1
<b>Gandalf / MCW-5976</b>	United Kingdom	MAPP 12865 (UK)	beta-cyfluthrin	EC	25 g/L	winter oilseed	-0.3
<b>Gazelle SG</b>	Netherlands	12809N (NL)	acetamiprid	SG	200 g/kg	potato:	0.25
						maize:	0.60
<b>Gladiator</b>	Germany	025044-61 (DE)	methoxyfenozid	SC	240 g/L	maize:	0.60

Reference standard	Country(ies) where the product is registered	Authorisation number	Active substance(s)	Formulation		Application rates in trials	
				Type	Concentration of a.s.	Crop	L, kg/ha
<b>Hallmark Zeon</b>	United Kingdom	MAPP 12629 (UK)	lambda-cyhalothrin	CS	100 g/L	winter oilseed rape: winter cereals:	0.075 0.05
<b>Insyst</b>	United Kingdom	MAPP 19873 (UK)	acetamiprid	SP	200 g/kg	potato:	0.25
<b>INAZUMA</b>	Hungary, Poland, Romania	04.2/7/172012 (HU), R-83/2016 (PL), 127PC (RO)	acetamiprid, lambda-cyhalothrin		100 g/kg, 30 g/kg	oilseed rape:	0.15
<b>Karate Zeon 050 CS, Karate 5 CS</b>	Poland, Czech Republic,	R-31/2013 (PL), 4419-1/2015-12 (CZ),	lambda-cyhalothrin	CS	50 g/L	maize: potato: winter oilseed rape:	0.25 0.15 0.10, 0.12, 0.125, 0.15
<b>Karate Zeon, Karate Zeon 100 CS</b>	Austria, Belgium, Netherlands, Germany,	- 3061/0 (AT), 1067P/P (BE), 9800336 (FR), W2-12698 (NL), 024675-00 (DE)	lambda-cyhalothrin	CS	100 g/L	potato: cereals: winter oilseed rape:	0.075 0.075 0.075
<b>Karate K</b>	France	8800395 (FR)	lambda-cyhalothrin + pyrimicarb	EC	5 g/L +100 g/L	winter oilseed rape:	1.25
<b>Kohinor 200 SL</b>	Poland	R-40/2009 (PL)	imidachlopyrd	SL	200 g/L	apple:	0.30
<b>Magma</b>	Hungary, Czech Republic, Slovakia	5036-3 (CZ), 6300/130-2/2020 (HU), 20-00844-AU (SK)	Etofenprox	EC	287.5 g/L	winter oilseed rape:	0.2
<b>Mavrik 240 EW, Mavrik</b>	Poland, Germany	R-229/2014 (PL), 024218-00 (DE)	tau-fluvalinate	EW	240 g/L	winter oilseed rape:	0.12, 0.20
<b>Mavrik Flo, MCW-5023</b>	France	8900564 (FR)	tau-fluvalinate	EW	240 g/L	winter oilseed rape:	0.20
<b>Mospilan SP, Mospilan 200 SP</b>	Poland, Slovakia, Czech Republic, Hungary	R-37/2008 (PL), 96-05-0296 (SK), 4053-2/2017-04 (CZ), 04.2/28009/2/2011 (HU)	acetamiprid	SP	200 g/kg	apple: potato: winter oilseed rape:	0.12, 0.125, 0.15, 0.2, 0.25 0.08, 0.12, 0.15 0.12, 0.15, 0.18, 0.20
<b>Mospilan SG, Mospilan 200 SG</b>	Germany, Hungary	005655-00 (DE), 04.2/1218/1/2013 (HU)	acetamiprid	SG	200 g/kg	maize: apple: potato: cereals:	0.15, 0.20 0.075, 0.125, 0.15, 0.25, 0.4 0.10, 0.15 0.10, 0.12, 0.15, 0.20

Reference standard	Country(ies) where the product is registered	Authorisation number	Active substance(s)	Formulation		Application rates in trials	
				Type	Concentration of a.s.	Crop	L, kg/ha
						winter oilseed rape:	0.12, 0.15, 0.18, 0.20
<b>Nurelle D</b>	Slovakia	3721 (SK)	cypermethrin	EC	50 g/L	apple:	0.60
<b>Nexide</b>	Romania, Poland, Austria, Germany, Slovakia, Czech Republic	2172 (RO), R-198/2019 (PL), 4052/0 (AT), 025631/00 (DE), 10-05-1131 (SK), 4549-1V (CZ)	gamma-Cyhalothrin	CS	60 g/L	winter oilseed rape	0.08
<b>Pirimor 500 WG</b>	Poland	R-30/2013 (PL)	pirimicarb	WG	500 g/kg	potato: sugar beet	0.50 0.3, 0.4
<b>Proteus 110 OD</b>	Poland	R-10/2009 (PL)	tiachlopyrd + deltametryna	OD	100 g/L +10 g/L	winter oilseed rape:	0.60
<b>PLENUM 50 WG</b>	Germany, Romania, Slovakia, Netherlands	use expired	pymetrozin	WG	500 g/kg	winter oilseed rape:	0.15
<b>PYRINEX ME</b>	Italy, Portugal	3195 (PT), 09131 (IT)	chlorpyrifos	ME	250 g/L	winter oilseed rape:	0.75
<b>Rafan Max</b>	Czech Republic, Slovakia	5488-1 (CZ), 17-05-1885 (SK)	cypermethrin		500 g/L	winter oilseed rape:	0.05
<b>Steward</b>	Slovakia	07-05-0882 (SK)	indoxacarb	WG	300 g/kg	maize:	0.125
<b>SUMI ALPHA 5 EW</b>	Czech Republic, Slovakia	B9010437 4794-3 (CZ), 12-05-1293 (SK)	esfenvalerat	EW	50 g/L	winter oilseed rape:	0.15
<b>Supreme 20 SG</b>	- Switzerland	F-6501	acetamiprid	SG	200 g/kg	winter oilseed rape:	0.2
<b>Teppeki</b>	Germany, Poland, Hungary, Czech Republic, Netherlands	025691-00/07-003 (DE), W1-16289 (NL), R-54/2012 (PL), 02.5/1174/4/2007 (HU), 4622-0 (CZ)	flonicamid	WG	500 g/kg	sugar beet	0.14
<b>Trebon 30 EC</b>	Poland, Germany	R-56/2009 (PL), 004634-00 (DE)	etofenprox	EC	300 g/L	winter oilseed rape:	0.30
<b>Trebon OSR</b>	Czech Republic, Slovakia, Hungary	5036-1 (CZ), 20-00823-AU (SK), 04.2/732-1/2018 (HU)	etofenprox	EC	287.5 g/L	winter oilseed rape:	0.20



## General information about trial grouping

Data was summarised by EPPO climatic zone. Since it was proved that there is no significant difference seen between trials from the Maritime, North-East and South-East EPPO climatic zone, data from all zones can be used for support of relevant GAP uses. In addition, reference is made to the document of Lopatka, A. *et al.*, 2012<sup>3</sup>, an expert study on the usability of efficacy data for different EPPO zones as demonstrated by comprehensive cluster analysis. The expert study concludes that the soil and climatic conditions are comparable in the following countries from different EPPO zones: CZ, DE, PL, BG, CR, HU, RO, SK when using a division into 5 clusters, and CZ, DE, PL, BG, CR, HU, RO, SK, SI and AT when using a division into 3 clusters.

Data was summarised by application timing (e.g., spring vs. autumn), the number of applications (DAA, DAB) and by assessment timing (e.g., no. of days, weeks after application).

Regarding the evaluation of the minimum effective dose, a trial per trial presentation was decided in some cases due to different application rates in the trials which may result in irregular mean values.

The minimum level of infestation used for validation of the trial, or each assessment timing is depending on the pest and official thresholds. Please note, that in case of low pest severity levels, the pest incidence is often very high with 50-100 % infestation and the data therefore usable.

### 3.2.1 Preliminary tests (KCP 6.1)

Preliminary information is not provided and not considered necessary, as products based on the active ingredient acetamiprid are well known insecticides and have been registered and widely used across the EU Central registration zone for many years. Based on this use the required dose rates and applications timings to control the target pests are already well known. Furthermore, a detailed data package of a total of 506 efficacy trials including dose justification results, yield and phytotoxicity data is provided with this application. The data are considered to be sufficient to support the registration of MCW-2222 according to the GAP uses provided in Part B, Section 0 in countries of the Maritime, North-East and South-East EPPO climatic zone.

**Comments of zRMS:** Accepted.

### 3.2.2 Minimum effective dose tests (KCP 6.2)

#### Introductory information on dose justification tests

According to EPPO PP 1/225(2) '*Minimum effective dose*' it should be established in trials that the recommended dose provides a higher level of effectiveness and/or a longer persistence of action compared to the lower dose. The recommended dose may further be a compromise based on the potential for resistance, the safety of the product to the crop and other aspects.

To evaluate the minimum effective dose of MCW-2222 in the different GAP uses, 412 (numerous trials including more than one pest) out of the 500 efficacy tests carried out in maize, apple, potato, cereals, oilseed rape, ornamentals and sugar beet include at least one reduced application rate. The rates reflect the proposed label rate and approximately 33-89 % of the minimum recommended rate of MCW-2222, in accordance with EPPO standard PP 1/225. In further 7 trials conducted in cereals only rates below

<sup>3</sup> Lopatka, A. *et al.*, 2012: Expert report regarding division of Europe into regions characterized by homogenous soil and climatic conditions, within the boundaries of which the results of efficacy evaluation of pesticides can be relevant for the entire region; Institute of Soil Science and Plant Cultivation – State Research Institute Puławy

the GAP rate were tested. An overview of all available trials to evaluate the minimum effective dose of MCW-2222 in the different GAP uses is presented in the following table.

**Table 3.2-8: Overview of dose justification trials**

Pest group	Crop(s)	No. of dose justification trials <sup>(1)</sup> (EPPO zone)			
		Maritime	North-East	South-East	Sum
(1)	<i>Aphids and scales (sucking)</i>				
(1a)	Apple (ha rates)	13	9	23	45
	(LWA rates)	9	8	8	25
(1b)	Potato	8	14	2	24
(1c)	Winter cereals (spring appl)	10	4	11	25
(1d)	Spring cereals (spring appl)	5	2	-	7 <sup>(2)</sup>
(1e)	Sugar beet	6	16	-	22
(1f)	Ornamentals	22	-	-	22
(2)	<i>Beetles and weevils (biting)</i>				
(2a)	Maize	-	-	11	11
(2b)	Potato	12	12	12	36
(2c)	Winter oilseed rape	75	39 38	44	158 157
(2d)	Spring oilseed rape	1	1	-	2 <sup>(3)</sup>
(3)	<i>Codling moth (biting)</i>				
(3)	Apple (ha rates)	9	6	7 6	22 21
	(LWA rates)	9	6	5 4	20 19
(4)	<i>European corn borer</i>				
(4)	Maize	-	-	7	7
(5)	<i>Virus vectors</i>				
(5a)	Winter cereals (autumn appl)	20	8	-	28
(5b)	Spring cereals (spring appl)	5	2	-	7 <sup>(4)</sup>
(5c)	Winter oilseed rape	10	-	-	10
(6)	<i>Brassica pod midge</i>				
(6)	Winter oilseed rape	6	9	9	24

(1) The no. of trials per crop may differ from the no. of trials per GAP use (numerous trials with more than one pest)

(2) Sufficient trials available, as extrapolation from winter to spring cereals is possible in addition.

(3) Sufficient trials available, as extrapolation from winter oilseed rape to spring oilseed rape is possible.

(4) Same trials as under (1d).

### 3.2.2.1 (1) Aphids and scales (sucking)

#### 3.2.2.1.1 (1a) Aphids and scales in apple

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L product /ha	g ai/ha	L product /ha LWA
Apple	APHISP	May-Oct BBCH 62-PHI	Mar, N-E	1-2 (8)	0.125	25	0.078
			S-E	1-2 (8)	0.09-0.125	18-25	0.056-0.078
	ERISLA	Jun-Aug BBCH 71-PHI	S-E	1	0.20-0.40 0.30	40-80 60	0.125-0.25 0.1875
			S-E	1	0.40 0.30	80 60	0.25 0.1875
	QUADPE	Jun-Oct BBCH 71-PHI	S-E	1	0.20-0.40 0.30	40-80 60	0.125-0.25 0.1875

An overview of all efficacy and dose justification trials against aphids in apple and a short description of the trial methodology is presented in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information

please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations.

### Dose rates

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), this section includes data from apple trials conducted in 2012-2015, the rates applied in these trials was based on L/ha and newer apple trials conducted in 2022, the rates of MCW-2222 applied in these trials was based on L/ha tLWA. The data from the older trials conducted using L/ha has been recalculated to L/ha tLWA based on the canopy height and the row distance in each trial. To allow grouping of the application rates, the calculated L/ha tLWA application rates are presented in ranges with a 10-47 % deviation from the minimum and maximum target rate.

The efficacy studies with the rates applied in L/ha have been recalculated to L/ha tLWA rates as far as possible. However, the necessary calculation parameters (e.g. treated crop height) were not available from all trials, therefore the number of trials with L/ha and L/ha tLWA rates are slightly different. Furthermore, after recalculation some of the trials didn't match the proposed GAP rates/ranges in L/ha tLWA. Therefore, the number of trials with L/ha and L/ha tLWA rates matching the label claim are presented in separate tables in the following:

**Table 3.2-9: Summary of dose justification trials (aphids and scales in apple) based on application rates in L/ha**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year			Total	Total by zone	Total by pest
				2013	2014	2015			
APHISP	Apple	MAR	CZ	2	-	2	4	4	18
		N-E	PL	4	3	2	9	9	
		S-E	HU	1	-	-	1	5	
			SK	2	-	2	4		
ERISLA	Apple	S-E	RO	1	2	2	5	10	10
			SK	-	3	2	5		
QUADPE	Apple	MAR	CZ	-	3	6	9	9	17
		S-E	RO	1	4	-	5	8	
			SK	-	3	-	3		

**Table 3.2-10: Summary of dose justification trials (aphids and scales in apple) based on application rates in L/ha tLWA (leaf wall area)**

Pest	Crop	EPPO zone	Country	No. of trials							
				Year					Total	Total by zone	Total by pest
				2012	2013	2014	2015	2022			
APHISP	Apple	MAR	CZ	-	-	-	1	1*	2	6	14
			DE	-	-	-	-	1*	1		
			NL	-	-	-	-	1*	1		
			UK	-	-	-	-	2*	2		
		N-E	PL	1	4	2	1	-	8	8	
ERISLA	Apple	S-E	RO	-	1	-	-	-	1	4	4
			SK	-	-	3	-	-	3		
QUADPE	Apple	MAR	CZ	-	-	2	1	-	3	3	7
		S-E	RO	-	1	-	-	-	1	4	
			SK	-	-	3	-	-	3		

\* These trials used original application rates in L/ha tLWA. For all other trials the application rates in L/ha tLWA were recalculated from the L/ha rates.

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates in L/ha.

**Table 3.2-11: Overview of application rates in L/ha against aphids and scales in apple (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate	
			product/ha	active ingredient/ha		MAR, N-E	S-E
Apple	APHIPO	MCW-2222	0.0625-0.07 L	13-14 g	acetamiprid	50-56	70
			<b>0.09-0.1 L</b>	18 g	acetamiprid	72	<b>100</b>
			<b>0.125 L</b>	25 g	acetamiprid	<b>100</b>	<b>100</b>
	ERISLA	MCW-2222	0.125 L	25 g	acetamiprid	<del>25</del> 42	62.5
			<b>0.2 L</b>	40 g	acetamiprid	<del>50</del> 67	<b>100</b>
			<b>0.25 L</b>	50 g	acetamiprid	<del>62.5</del> 83	<b>100</b>
			<b>0.3 L</b>	60 g	acetamiprid	<del>75</del> <b>100</b>	<b>100</b>
			0.4 L	80 g	acetamiprid	<del>100</del> 133	<del>100</del> 133
	QUADPE	MCW-2222	0.125 L	25g	acetamiprid	<del>25</del> 42	62.5
			<b>0.2 L</b>	40 g	acetamiprid	<del>50</del> 67	<b>100</b>
			<b>0.25 L</b>	50 g	acetamiprid	<del>62.5</del> 83	<b>100</b>
			<b>0.3 L</b>	60 g	acetamiprid	<del>75</del> <b>100</b>	<b>100</b>
			0.4 L	80 g	acetamiprid	<del>100</del> 133	<del>100</del> 133

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), efficacy studies in 2022 have been conducted with ha LWA rates in addition to the ha rates. Only the 2022 trials were conducted with original L/ha LWA rates, whereas for the older trials the LWA rates have been recalculated based on the canopy height and the row distance. To allow grouping of the application rates, please note, that these calculated L/ha LWA application rates were presented in ranges with a 10-47 % deviation from the minimum and maximum target rate (refer to the following table).

**Table 3.2-12: Overview of application rates in L/ha LWA against aphids and scales in apple (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate	
			product/ha LWA	active ingredient/ha LWA	MAR, N-E	S-E
Apple	APHIPO	MCW-2222	<b>0.05<sup>(1)</sup>-0.0675<sup>(3)</sup> L</b>	10-14 g acetamiprid	64 - 87	<b>90-100</b>
			<b>0.0675<sup>(3)</sup>-0.086<sup>(2)</sup> L</b>	14-17 g acetamiprid	<b>87-110</b>	<b>100-110</b>
	ERISLA	MCW-2222	0.1125 <sup>(4)</sup> - <b>0.1875<sup>(6)</sup> L</b>	23-38 g acetamiprid	-	90- <b>100</b>
			<b>0.1875<sup>(6)</sup>-0.275<sup>(5)</sup> L</b>	38-55 g acetamiprid	-	<b>100-140</b> <del>147</del>
	QUADPE	MCW-2222	0.1125 <sup>(4)</sup> - <b>0.1875<sup>(6)</sup> L</b>	23-38 g acetamiprid	<del>45-75</del> <b>60-100</b>	90- <b>100</b>
			<b>0.1875<sup>(6)</sup>-0.275<sup>(5)</sup> L</b>	38-55 g acetamiprid	<del>75-110</del> <b>100-147</b>	<b>100-140</b> <del>147</del>

(1) this value (0.05 L/ ha LWA) is the minimum target rate (0.056 L/ha LWA) minus 10 percent.

(2) this value (0.086 L/ ha LWA) is the maximum target rate (0.078 L/ha LWA) plus 10 percent.

(3) this cut off value (0.0675 L/ha LWA) is the mean value of the minimum and maximum target rate.

(4) this value (0.1125 L/ha LWA) is the minimum target rate (0.125 L/ha LWA) minus 10 percent.

(5) this value (0.275 L/ha LWA) is the maximum target rate (~~0.25~~ 0.1875 L/ha LWA) plus ~~40~~ 47 percent.

(6) this cut off value (0.1875 L/ha LWA) is the mean value of the ~~old~~ minimum and maximum target rate.

## Results

Across the 45 dose justification trials conducted in apple it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to ~~25-75~~ ~~60~~ 42-87 % of the target rate. A summary of the dose-response results is provided in the following tables, which are split up by pest and application rate.

Please refer to:

Table 3.2-13 and

Table 3.2-14 for *Aphis pomi*

Table 3.2-15 and Table 3.2-16 for *Eriosoma lanigerum*

Table 3.2-17, Table 3.2-18, and Table 3.2-19 for *Quadraspidiotus perniciosus*.

**Table 3.2-13: Minimum effective dose. Efficacy of MCW-2222 at 0.125 L/ha (target rate for the Maritime and North-East EPPO zone) and 0.09-0.125 L/ha (target range for South-East EPPO zone) compared to reduced rates in apple against APHIPO (PESSEV; no. of aphids/ shoot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ shoot)		% control with MCW-2222					
				0.0625-0.07 L/ha (50-56 % of target rate for MAR and N-E, 70 % of target range for S-E)		0.09 L/ha (72 % of target rate for MAR and N-E, target rate for S-E)		0.125 L/ha (target rate for all EPPO zones)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-4 DAA									
MAR	1	806	806	53	53	56	56	70	70
N-E	7	52.5	19.0-139	50	3-91	64	25-92	91	83-100
S-E	5	114.2	9.4-333	66	51-75	93	86-96	96	95-98
C-EU	13	134.2	9-806	56	3-91	74	25-96	92	70-100
5 DAA									
N-E	5	76.4	26-135	37	8-84	61	31-84	93	86-100
7-11 DAA									
MAR	2	1586	716-2457	84	75-94	92	90-95	99	97-100
N-E	9	73.8	17.9-153	63	8-93	77	28-95	94	87-100
S-E	5	139.4	16.7-335	67	56-76	92	83-97	97	96-98
C-EU	16	283.4	17-2457	67	8-94	83	28-97	95	87-100
14-16 DAA									
MAR	2	1649	675-2622	88	77-99	95	90-100	100	100
N-E	7	49.6	17.8-89.8	51	0-84	71	39-87	92	77-100
C-EU	9	404.9	18-2622	59	0-99	76	39-100	94	77-100
16-22 DAA									
MAR	2	1620	450-2791	87	77-98	94	90-99	100	100
7-8 DAB									
MAR	2	80.8	55-107	83	81-85	94	93-96	100	100
14 DAB									
MAR	2	74.1	42-106	86	85-86	95	93-96	100	100
21 DAB									
MAR	2	54.0	34-74	88	88	95	94-96	100	100

**Table 3.2-14: Minimum effective dose. Efficacy of MCW-2222 at two different LWA rates (one target and one reduced rate for the Maritime and North-East EPPO zone, presented in ranges due to LWA calculation) in apple against APHIPO (PESSEV; no. of aphids/ shoot). For single trial data please refer to Appendix 4 of the BAD.**

Single trial data please refer to Appendix 4 of the DAE.

EPPO zone	No. of trials	Untreated control aphids (no./ shoot)		% control with MCW-2222			
				0.05-0.0675 L/ha LWA (64-87 % of target rate)		0.0675-0.086 L/ha LWA 87-110% of target rate)	
		mean	min-max	mean	min-max	mean	min-max
1-4 DAA							
MAR	5*	38	4-113	63	38-82	54	0-94
N-E	6	48.4	12.1-139	60	3-87	81	45-94
C-EU	11	43.7	4-139	61	3-87	68	0-94
5 DAA							
N-E	4	81.9	26-135	48	8-84	84	66-95
7-11 DAA							
MAR	5*	31,2	5-105	84	56-97	85	50-99
MAR	1	2457	-	75		90	

N-E	8	71.2	12.3-153	<b>70</b>	17-93	<b>88</b>	77-97
C-EU	14	227.3	5-2457	<b>76</b>	17-97	<b>87</b>	50-99
<b>14-16 DAA</b>							
MAR	2	1325.8	30-2622	<b>62</b>	46-77	<b>58</b>	26-90
N-E	7	42.8	12.8-89.8	<b>67</b>	33-87	<b>86</b>	77-100
C-EU	9	327.9	13-2622	<b>66</b>	33-87	<b>80</b>	26-100

\* trials with original L/ha LWA application rates

**Table 3.2-15: Minimum effective dose. Efficacy of MCW-2222 at 0.2-0.4 L/ha (target range for South-East EPPO zone) compared to 0.125 L/ha in apple against ERISLA (PESSEV; no. of aphids/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ plot)		Untreated control aphids (no./ shoot)		% control with MCW-2222										
						0.125 L/ha (62.5 % of target rate)		0.2 L/ha (target rate)		0.25 L/ha (target rate)		0.3 L/ha (target rate)		0.4 L/ha (133% of the target rate)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
7-8 DAA																
S-E	3	-	-	90.8	74.0-110	66	65-67	81	78-83	88	88-89	-	-	89	88-89	
S-E	3	44.9 (n=1)	-	118.5 (n=2)	113-125	-	-	72	60-91	82	74-93	93	92-94	94	92-97	
mean	6	44.9 (n=1)	-	101.9	74-124.5			76	60-91	85	74-93			91	88-97	
9-15 DAA																
S-E	6	108.6 (n=3)	52-173	115.8 (n=3)	89.5-139	77	64-90	87	79-97	94	91-100	-	-	95	91-100	
S-E	4	34.0 (n=2)	31.2-36.7	150.2 (n=2)	139-161	-	-	79	68-90	88	83-93	94	93-95	95	94-97	
mean	10	78.7 (n=5)	31.2-173	129.5 (n=5)	89.5-161			84	68-97	92	83-100			95	91-100	
20-21 DAA																
S-E	3	-	-	138.8	112-162	63	56-71	82	79-87	93	91-94	-	-	93	91-94	
S-E	2	-	-	171.4	159-184	-	-	64	62-66	84	83-85	94	94-95	95	94-96	
mean	5	-	-	151.8	112-184			75	62-87	90	83-94			94	91-96	

EPPO zone	No. of trials	Untreated control aphids (no./ plot)		Untreated control aphids (no./ shoot)		% control with MCW-2222			
						0.125 L/ha LWA (0.1125-0.1875 L/ha LWA) (90-100 % target rate)		0.25 L/ha LWA (0.1875-0.275 L/ha LWA) (100-110 % target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>7-8 DAA</b>									
S-E	3	-	-	90.8	74-110	<b>66</b>	65-67	<b>81</b>	78-83
<b>9-15 DAA</b>									
S-E	4	100.8 (n=1)	-	115.8 (n=3)	89.5-139	<b>73</b>	64-90	<b>87</b>	79-97
<b>20-21 DAA</b>									
S-E	3	-	-	138.8	112-162	<b>63</b>	56-71	<b>82</b>	79-87

EPPO zone	No. of trials	Untreated control larvae (no./ shoot)		% control with MCW-2222							
				0.2 L/ha (50-67% of target rate)		0.25 L/ha (62.5-83% of target rate)		0.3 L/ha (75-91% of target rate)		0.4 L/ha (133% of the target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>18-24 DAA</b>											
MAR	6	127.7	11.3-216	<b>58</b>	41-72	<b>87</b>	75-97	<b>93</b>	80-100	<b>95</b>	87-100
<b>34-41 DAA</b>											
MAR	6	127.7	10.3-234	<b>69</b>	42-79	<b>91</b>	79-100	<b>95</b>	85-100	<b>98</b>	94-100
<b>96-127 DAA (fruits)<sup>(1)</sup></b>											
MAR	6	21.4 <sup>(1)</sup>	1.5-40.5	<b>71</b>	46-83	<b>94</b>	90-100	<b>99</b>	96-100	<b>100</b>	98-100

**Table 3.2-18:** Minimum effective dose. Efficacy of MCW-2222 at target rate in Maritime EPPO zone (0.4 0.3 L/ha) and target range in South-East EPPO zone (0.2-0.4 0.3 L/ha) compared to reduced and increased rates in apple against QUADPE (PESSEV; no. of larvae/ shoot). For single trial data please refer to Appendix 4 of the BAD.

EPPo zone	No. of trials	Untreated control larvae (no./ shoot)		% control with MCW-2222							
				0.125 L/ha (25.42% of target rate for MAR, 62.5 % of target rate for S-E)		0.2 L/ha (50.84% of target rate for MAR, target rate for S-E)		0.25 L/ha (62.58% of target rate in MAR, target rate for S-E)		0.4 L/ha (133% of target rate for MAR and S-E)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>13-15 DAA</b>											
S-E	5	117 <sup>(1)</sup>	94.5-134	<b>72</b>	57-86	<b>76</b>	57-87	<b>84</b>	62-98	<b>91</b>	75-100
<b>18-24 DAA</b>											
MAR	3	286	253-309	<b>74</b>	45-88	<b>78</b>	44-97	<b>92</b>	77-100	<b>97</b>	90-100
S-E	3	45	25.4-63.6	<b>64</b>	62-68	<b>74</b>	71-78	<b>89</b>	88-91	<b>90</b>	88-91
C-EU	6	166	25.4-309	<b>69</b>	45-88	<b>76</b>	44-97	<b>91</b>	77-100	<b>93</b>	88-100
<b>34-41 DAA</b>											
MAR	3	216.5	190-267	<b>65</b>	20-92	<b>80</b>	50-95	<b>93</b>	79-100	<b>97</b>	90-100
S-E	3	63.3	50.8-74.3	<b>66</b>	62-70	<b>76</b>	73-82	<b>90</b>	88-91	<b>91</b>	89-92
C-EU	6	139.9	50.8-267	<b>65</b>	20-92	<b>78</b>	50-95	<b>92</b>	79-100	<b>94</b>	89-100
<b>96-127 DAA (fruits)<sup>(2)</sup></b>											



EPPO zone	No. of trials	Untreated control larvae (no./ shoot)		% control with MCW-2222							
				0.125 L/ha (35-42% of target rate for MAR, 62.5 % of target rate for S-E)		0.2 L/ha (50-67% of target rate for MAR, target rate for S-E)		0.25 L/ha (62.5-83% of target rate in MAR, target rate for S-E)		0.4 L/ha (133% of target rate for MAR and S-E)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
MAR	2	22 <sup>(2)</sup>	21.5-22.8	68	66-70	85	82-87	100	100	100	100

(1) larvae (no./ plot)

(2) Infection/damage on fruits (%)

**Table 3.2-19: Minimum effective dose. Efficacy of MCW-2222 at two different LWA rates (one target rate and one reduced rate for in the Maritime EPPO zone (0.1875 L/ha LWA) and target range of 0.125-0.25 L/ha LWA for South-East EPPO zone with max. 10% deviation) from 60-100 and 100-147 % of the target rate (0.1875 L/ha LWA) in the Maritime EPPO zone and from 90-100 % and 100-147 % from target range (0.125-0.1875 L/ha LWA) in the South-East EPPO zone in apple against QUADPE (PESSEV; no. of aphids/ shoot). For single trial data please refer to Appendix 4 of the BAD.**

single trial data please refer to Appendix 4 of the BAD.

EPPO zone	No. of trials	Untreated control larvae (no./ shoot)		% control with MCW-2222			
				0.125 L/ha LWA (0.1125-0.1875 L/ha LWA) (45-75 60-100 % of target rate for MAR, 90-100 % of target rate for S-E)		0.25 L/ha LWA (0.1875-0.275 L/ha LWA) (75-100-147% of target rate for MAR, 100-110 % of target rate for and S-E)	
		mean	min-max	mean	min-max	mean	min-max
18-24 DAA							
MAR	3	200	51-298	66	44-97	89	77-100
S-E	3	45	25.4-63.6	64	62-68	74	71-78
C-EU	6	122.7	25.4-298	65	44-97	82	71-100
34-41 DAA							
MAR	3	146	53.8-193	72	50-95	90	79-100
S-E	3	63.3	50.8-74.3	66	62-70	76	73-82
C-EU	6	104.4	50.8-193	69	50-95	83	73-100
96-127 DAA (fruits) <sup>(1)</sup>							
MAR	2	14.5 <sup>(1)</sup>	7.5-21.5	85	83-87	98	97-100

(1) infestation/ damage (%)

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rates is superior to the reduced application rates in all relevant EPPO zones against the relevant pests. The dose range to be registered in the South-East EPPO zone enables the professional user to adjust the rate to different infestation levels and environmental circumstances to efficiently control aphids and scales on apples in the South-East EPPO zone.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 are considered to be appropriate for the control of the target pests in apple.

### 3.2.2.1.2 (1b) Aphids in potato

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Potato	MACSEU, MYZUPE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36

## Material and methods

An overview of all efficacy and dose justification trials (one trial with both aphids assessed) against aphids in potato and a short description of the trial methodology is presented in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-20: Summary of dose justification trials (aphids in potato)**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year			Total	Total by zone	Total by pest
				2013	2014	2022			
MACSEU	Potato	MAR	CZ	-	-	1	1	5	13
			DE	-	-	3	3		
			NL	-	-	1	1		
		N-E	PL	-	-	8	8	8	
MYZUPE	Potato	MAR	NL	-	-	2	2	4	10
			SE	-	-	1	1		
			UK	-	-	1	1		
		N-E	PL	2	-	4	6	6	
APHISP	Potato	S-E	RO	-	2	-	2	2	2
Total:				2	2	21	25		

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-21: Overview of application rates against aphids in potato (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate	
			product/ha	active ingredient/ha		MAR, N-E	S-E
Potato	MACSEU, MYZUPE, APHISP	MCW-2222	0.10 L	20 g	acetamiprid	55	-
			<b>0.12 L</b>	<b>24 g</b>	<b>acetamiprid</b>	66	<b>100</b>
			<b>0.144 L</b>	<b>29 g</b>	<b>acetamiprid</b>	80	-
			<b>0.15 L</b>	<b>30 g</b>	<b>acetamiprid</b>	83	<b>100</b>
			<b>0.18 L</b>	<b>36 g</b>	<b>acetamiprid</b>	<b>100</b>	<b>100</b>

## Results

Across the 24 dose justification trials conducted in potato it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 56-83 % of the target rate. A summary of the dose-response results is provided in split up by pest and application rate is provided in the respective tables in the BAD. Please refer to Table 3.2-22 and Table 3.2-23 for *Myzus persicae*, Table 3.2-24 for *Macrosiphum euphorbiae* and Table 3.2-25 for *Aphis* sp..

**Table 3.2-22: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 56, 66 and 83 % dose rate on potato against MYZUPE (PESSEV; no. of aphids/ leaf). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222							
				0.1 L/ha (56 % rate)		0.12 L/ha (66 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
2-3 DAA											
MAR	1	0.4	-	22	-	80	-	80	-	85	
N-E	2	3.8	1.6-6.0	-	-	84	77-91	93	92-94	93	91-95

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222							
				0.1 L/ha (56 % rate)		0.12 L/ha (66 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
C-EU	3	2.7	0.4-6.0	-	-	83	77-91	89	80-94	90	85-95
<b>7-9 DAA</b>											
MAR	1	0.7	-	91	-	90	-	88	-	84	-
N-E	2	2.8	0.6-4.9	-	-	79	77-81	83	80-86	88	86-90
C-EU	3	2.1	0.6-4.9	-	-	83	77-90	85	80-88	87	84-90
<b>12-14 DAA</b>											
MAR	1	0.7	-	91	-	84	-	97	-	93	-
N-E	2	2.3	0.6-4.1	-	-	67	64-70	74	72-75	82	81-82
C-EU	3	1.8	0.6-4.1	-	-	73	64-84	81	72-97	85	81-93

**Table 3.2-23: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 80 % dose rate on potato against MYZUPE (PESSEV; no. of aphids/ leaf). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222			
				0.144 L/ha (80 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
2-3 DAA							
MAR	3	1.4	0.6-2.1	77	58-89	88	81-93
N-E	4	32.1	3.2-76.5	65	51-83	77	62-90
C-EU	7	18.9	0.6-76.5	70	51-89	82	62-93
7-9 DAA							
MAR	3	1.5	0.3-2.2	81	61-96	88	65-100
N-E	4	34.8	3.6-82.3	80	73-90	89	85-95
C-EU	7	20.5	0.3-82.3	80	61-96	89	65-100
12-14 DAA							
MAR	2	1.8	1.6-2.0	95	91-100	99	99-100
N-E	4	35.5	6.3-86.4	75	59-93	86	77-96
C-EU	6	24.3	1.6-86.4	82	59-100	90	77-100

**Table 3.2-24: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 80 % dose rate on potato against MACSEU (PESSEV; no. of aphids/leaf). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222			
				0.144 L/ha (80 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
2-3 DAA							
MAR	5	5.6	2.4-12.0	65	15-100	75	26-100
N-E	8	11.6	2.9-59.8	71	51-86	82-83	63-93
C-EU	13	9.3	2.4-59.8	69	15-100	80	26-100
7-9 DAA							
MAR	5	5.9	0.1-14.5	73	25-100	81	50-100
N-E	8	13.9	3.5-67.5	77	69-89	90	84-99
C-EU	13	10.8	0.1-67.5	75	25-100	87	50-100
12-14 DAA							
MAR	3	4.2	3.2-4.8	77	32-100	92	75-100
N-E	8	14.9	3.5-73.3	71	54-82	84	75-95

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222			
				0.144 L/ha (80 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
C-EU	11	12.0	3.2-73.3	72	32-100	86	75-100

**Table 3.2-25: Minimum effective dose. Efficacy of MCW-2222 at proposed label rates in the South-East EPPO zone on potato against APHISP (PESSEV; no. of aphids/leaf). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Infestation of untreated control (no. aphids/leaf)		% control with MCW-2222					
				0.12 L/ha (target rate)		0.15 L/ha (target rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
1 DAA									
S-E	2	7.3	7.0-7.5	86	83-89	97-94	91-96	97	94-100
3 DAA									
S-E	2	8.0	7.8-8.2	100	100	100	100	100	100
7 DAA									
S-E	2	9.3	9.3	100	100	100	100	100	100

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 is considered to be appropriate for the control aphids in potato.

### 3.2.2.1.3 (1c) Aphids in winter cereals (spring application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L product /ha	g ai/ha	L product /ha LWA
Winter cereals (wheat, barley, triticale, rye, spelt)	1APHIF	May-Jul BBCH 40-69	Mar, N-E, S-E	1-2 (10)	0.18	36	-

## Material and methods

An overview of all efficacy and dose justification trials against aphids in winter cereals and a short description of the trial methodology is presented in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-26: Summary of dose justification trials (aphids in winter cereals, spring application)**

Pest	Winter cereal	EPPO zone	Country	No. of trials <sup>(1)</sup>					Total	Total by zone
				Year						
				2012	2013	2014	2015	2020		
MACSAV	Winter wheat	MAR	CZ	-	-	1	1	1	3	10
			DE	1	2	1	2	-	6	
			FR	-	-	1	-	-	1	
		N-E	PL	-	-	-	2	-	2	2
		S-E	RO	-	1	8	2	-	11	11
	Winter triticale	N-E	PL	-	-	-	2	-	2	2
RHOPPA	Winter wheat	N-E	PL	-	-	-	2	-	2	2
		S-E	RO	-	1	-	-	-	1	1
METODR	Winter wheat	MAR	DE	-	-	-	1	-	1	2
Total:				1	4	11	12	1	29	-

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-27: Overview of application rates against aphids in winter cereals (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate
			product/ha	active ingredient/ha	
Winter cereals	MACSAV, RHOPPA, METODR	MCW-2222	0.07 L	14 g acetamiprid	38
			0.10 L	20 g acetamiprid	55
			0.12 L	24 g acetamiprid	66
			0.15 L	30 g acetamiprid	83
			<b>0.18 L</b>	<b>36 g acetamiprid</b>	<b>100</b>
			0.20 L	40 g acetamiprid	111

## Results

Across the 25 dose justification trials conducted in winter cereals (4 trials with more than one pest) it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 38-83 % of the target rate. A summary of the dose-response results is provided in the following tables. Please refer to Table 3.2-28 for *Sitobion avenae*, Table 3.2-29 for *Rhopalosiphum padi* and Table 3.2-30 for *Metopolophium dirhodum*.

**Table 3.2-28: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate and 38-83 % dose rates on winter cereals against MACSAV (PESSEV; no. of aphids/plant). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control with MCW-2222									
				0.07 L/ha (38 % rate)		0.10 L/ha (55 % rate)		0.12 L/ha <sup>(3)</sup> (66 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1 DAA													
MAR	2	9.9	2.7-17	53	13-93	60 61	22-99	65	30-100	69	37-100	80	60-100
MAR	1	277.5	-	-	-	-	-	80 90	-	-	-	99	-
S-E	2	20.1 20.2	16.4-23.9	-	-	-	-	57 58	52-63	67	60-74	71 72	63-80
C-EU	5	-	-	-	-	-	-	61 67	30-100	68	37-100	76 80	60-100
2-3 DAA													
MAR	2	2.1 2.2	1.4-2.9	81	72-90	94	88-100	97	94-100	94	88-100	96 97	93-100
MAR	6	14.9	4.1-50.3	-	-	-	-	86	61-98	89	73-100	92	78-100
MAR	1	83.8	-	-	-	-	-	80	-	-	-	99	-
N-E	4	5.8	4.2-6.6	-	-	-	-	77	73-82	89	86-92	94	92-96
S-E	1	16.7	-	62	-	93	-	99	-	100	-	100	-
S-E	8	16.1 16.2 <sup>(2)</sup>	2.6-21.4	-	-	-	-	61 62	52-82	66	56-86	73 74	60-88
C-EU	21 22	-	-	-	-	-	-	77	52-100	81	56-100	86 87	60-100
5 DAA													
MAR	1	54.8	-	-	-	-	-	65	-	-	-	92	-
6-10 DAA													
MAR	3	7.4	1.1-18.9	61	20-95	67 66	30-100	70	29-100	80	51-100	93	87-100
MAR	6	23.7	4.2-98.0	-	-	-	-	88	80-92	93	88-98	96	90-99
MAR	1	61.0	-	-	-	-	-	43	-	-	-	76	-
N-E	4	5.3	2.0-7.3	-	-	-	-	76	65-86	94	81-98	97	88-100
S-E	1	12.8	-	56	-	94	-	100	-	100	-	100	-
S-E	10	20.0 <sup>(2)</sup>	2.8-30	-	-	-	-	86	80-95	89	83-95	94	88-98
C-EU	24	-	-	-	-	-	-	83	29-100	90	51-100	95	87-100

EPPO zone	No. of tri-als	Untreated control (aphids/plant) <sup>(1)</sup>		% control with MCW-2222									
				0.07 L/ha (38 % rate)		0.10 L/ha (55 % rate)		0.12 L/ha <sup>(3)</sup> (66 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
10-14 DAA													
MAR	2	7.9	0.16-15.6	<del>36</del> <b>37</b>	13-60	<b>37</b>	12-62	<b>52</b>	30-74	<b>64</b>	49-78	<b>84</b>	83-84
MAR	4	<del>17.6</del> <b>17.7</b>	1.0-31.8	-	-	-	-	<b>69</b>	36-98	<b>69</b>	16-99	<b>79</b>	48-98
S-E	1	4.4	-	<b>67</b>	-	<b>97</b>	-	<b>100</b>	-	<b>100</b>	-	<b>100</b>	-
C-EU	7	-	-	-	-	-	-	<b>69</b>	30-100	<b>72</b>	16-100	<del>84</del> <b>83</b>	48-100
21 DAA													
MAR	1	13.5	-	-	-	-	-	<b>98</b>	-	<b>96</b>	-	<b>97</b>	-

(1) irrespective of the growth stage present in each trial - in some trials the aphids were determined as larvae in others as adults or aphids in mixed growth stages

(2) No. of adult aphids per 25 tiller

(3) 2 trials with 0.125 instead of 0.12 L/ha test product

**Table 3.2-29: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate and 38-83 % dose rates on winter cereals against RHOPPA (PESSEV; no. of aphids/plant). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control with MCW-2222									
				0.07 L/ha (38 % rate)		0.10 L/ha (55 % rate)		0.12 L/ha (66 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-2 DAA													
N-E	2	3.7	3.2-4.1	-	-	-	-	89	84-93	97	95-98	98	97-99
S-E	1	11.0	-	53	-	85	-	98	-	100	-	100	-
C-EU	3	6.1	3.2-11.0	-	-	-	-	92	84-98	98	95-100	99	97-100
7-8 DAA													
N-E	2	2.2	1.6-5.3 2.8	-	-	-	-	86	73-98	92	86-97	96	92-100
S-E	1	5.7	-	27	-	81	-	98	-	100	-	100	-
C-EU	3	3.4 3.4	1.6-5.7	-	-	-	-	90	73-98	94	86-100	97	92-100
14-15 DAA													
S-E	1	1.8	-	48	-	94	-	97	-	100	-	100	-

(1) irrespective of the growth stage present in each trial - in some trials the aphids were determined as larvae in others as adults or aphids in mixed growth stages

**Table 3.2-30: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate and 66 and 83 % dose rates on winter cereals against METODR (PESSEV; no. of aphids/plant). For single trial data please refer to Appendix 4 of the BAD**

EPPO zone	No. of trials	Untreated control (aphids/plant)		% control with MCW-2222					
				0.12 L/ha (66 % rate)		0.15 L/ha (83°% rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
2 DAA									
MAR	1	67.5	-	70	-	84	-	91	
7 DAA									
MAR	1	77.8	-	44	-	70	-	95	-
13 DAA									
MAR	1	82.0	-	30	-	69	-	80	-

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates and the minimum effective dose is therefore justified.

Since a sufficient number of trials was carried out in the major crop winter wheat extrapolation is envisaged to winter barley, winter triticale and winter rye with similar growth characteristics and pests. The proposed label rate of MCW-2222 is considered to be appropriate for the control of aphids in all envisaged winter cereals.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.1.4 (1d) Aphids in spring cereals (spring application)

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring cereals (wheat, durum wheat, barley, triticale, oat)	1APHIF	Mar, N-E, S-E	Mar-Jul BBCH 40-69	1-2 (10)	0.175	35

## Material and methods

An overview of all efficacy and dose justification trials against aphids in spring cereals and a short description of the trial methodology is presented in Table 3.2-125 and Table 3.2-127 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations.

**Table 3.2-31: Summary of dose justification trials (aphids in spring cereals, spring application)**

Pest	Spring cereals	EPPO zone	Country	No. of trials <sup>(1)</sup>				
				Year		Total	Total by zone	Total by pest
				2014	2015			
MACSAV	Spring wheat	MAR	CZ	1	1	2	2	6
	Spring barley	MAR	CZ	1	-	1	2	
			DE	1	-	1		
		N-E	PL	-	2	2	2	



(1) Please note, that due to the separation by pest, trials with more than one pest are double counted.

**Table 3.2-32: Overview of application rates against aphids in spring cereals (bold letters = target rate)**

## Results

**Table 3.2-33: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 69 and 86 % dose rates on spring cereals against MACSAV (PESSEV; no. of aphids/plant). For single trial data please refer to Appendix 4 of the BAD.**

(1) irrespective of the growth stage present in each trial - in most trials the aphids were determined as adults but also in mixed growth stages

EPPO zone	No. of trials	Infestation of untreated control (aphids/plant) <sup>(1)</sup>		% control with MCW-2222							
				0.10 L/ha (57 % rate)		0.12 L/ha (69 % rate)		0.15 L/ha (86 % rate)		0.175-0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>1-3 DAA</b>											
MAR	1	3.5	-	-	-	82	-	100	-	100	-
<b>7-8 DAA</b>											

MAR	1	0.7	-	-	-	65	-	100	-	100	-
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(1) mixed growth stages

## Conclusion

The data demonstrated that the efficacy of MCW-2222 at the proposed label rate of 0.175-0.18 L/ha is superior to the reduced application rates and the minimum effective dose is therefore justified.

A sufficient number of trials was carried out in the major crop winter wheat (please refer to 1c above). As the growth characteristics, application timings and target pests enable extrapolation from winter to spring cereals, the proposed label rate of MCW-2222 is also considered to be appropriate for the control of aphids in spring cereals.

Furthermore, extrapolation of efficacy data from the Maritime and North-East EPPO zone to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.1.5 (1e) Aphids in sugar beet

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Sugar beet	MYZUPE, APHIFA, MACSEU	Mar, N-E, S-E	Apr-Aug BBCH 12-39	1 (PL, SI) or 2 (7) (CZ, DE, NL)	0.25	25 or 50

## Material and methods

An overview of all efficacy and dose justification trials (one trial with both aphids assessed) against aphids in sugar beet and a short description of the trial methodology is presented in Table 3.2-132 and Table 3.2-134 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-35: Summary of dose justification trials (aphids in sugar beet)**

Pest	Crop	EPPO zone	Country	No. of trials <sup>(1)</sup>					
				Year			Total	Total by zone	Total by pest
				2020	2021	2022			
APHIFA	Sugar beet	MAR	CZ	-	-	2	2	4	15
			DE	-	-	1	1		
			NL	1			1		
		N-E	PL	2	2	6	10	11	
			LT	1	-	-	1		
MYZUPE	Sugar beet	MAR	CZ	-	-	2	2	3	8
			NL	1	-	-	1		
		N-E	PL		1	4	5	5	
			Total:	5	3	15	23		

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-36: Overview of application rates against aphids in sugar beet (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment <sup>(1)</sup>		% of the target rate
			product/ha	active ingredient/ha	
Sugar beet	APHIFA, MYZUPE	MCW-2222	0.1 L	20 g acetamiprid	40
			0.12 L	24 g acetamiprid	48
			0.125 L	25 g acetamiprid	50
			0.145 L	29 g acetamiprid	58
			0.2 L	40 g acetamiprid	80
			<b>0.25 L</b>	<b>50 g acetamiprid</b>	<b>100</b>

(1) Not every rate of the test product was tested in every trial

## Results

Across the 22 dose justification trials conducted in sugar beet (one trial with both aphids) it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 40-80 % of the target rate. A summary of the dose-response results is provided in the following tables. Please refer to Table 3.2-37 for *Aphis fabae* and Table 3.2-38 for *Myzus persicae*.

**Table 3.2-37: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 40-80 % dose rates in sugar beet against APHIFA (PESSEV; no. of aphids/ plant or leaf). For single trial data please refer to Appendix 4 of the BAD.**

data please refer to Appendix 4 of the DAB.													
EPPO zone	No. of trials	Untreated control (no. of aphids/ plant or leaf)		% control with MCW-2222									
				0.1 L/ha (40 % rate)		0.12 L/ha (48 % rate)		0.145-0.15 L/ha (~60 % rate)		0.2 L/ha (80 % rate)		0.25 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1 DAA													
MAR	1	10.9	-	-	-	-	-	36	-	41	-	35	-
N-E	6	67.8	7.5-289	-	-	-	-	53	9-86	65	40-89	72	43-100
N-E	1	8.2	-	9	-	5	-	9	-	49	-	54	-
C-EU	8	53.2	7.5-289	-	-	-	-	46	9-86	60	40-89	65	35-100
2-3 DAA													
MAR	2	11	5.5-16.5	-	-	-	-	30	4-55	51	33-70	47	19-76
N-E	8	64.0	6.6-302	-	-	-	-	71	60-89	78	62-100	83	64-100
C-EU	10	53.4	5.5-302	-	-	-	-	62	4-89	72	33-100	76	19-100
5 DAA													
N-E	4	108.8	31-298	-	-	-	-	80	66-94	87	79-99	95	81-100
7-9 DAA													
MAR	4	18.2	2.8-46.1	-	-	-	-	66	52-75	89	82-97	93	81-100
N-E	10	55.6	7.7-239	-	-	-	-	72	39-93	82	49-99	91	62-100
N-E	1	8.2	-	26	-	39	-	48	-	49	-	76	-
C-EU	15	42.5	2.8-239	-	-	-	-	69	39-93	82	49-99	91	62-100
12-14 DAA													
MAR	4	21.4	0.3-58.1	-	-	-	-	79	67-91	93	84-100	97	93-100
N-E	8	48.2	0.3-188	-	-	-	-	59	32-88	72	29-97	81	29-100
N-E	1	3.0	-	51	-	0	-	43	-	28	-	72	-
C-EU	13	36.4	0.3-188	-	-	-	-	64	32-91	75	28-100	85	29-100
1-3 DAB													
N-E	5	29.9	8.1-106	-	-	-	-	70	45-85	85	82-89	91	85-96

7-8 DAB													
N-E	5	38.7	8.4-145	-	-	-	-	72	38-93	<del>89</del> 90	85-95	94	91-98
13-15 DAB													
N-E	5	35.7	9.1-124	-	-	-	-	<del>76</del> 75	53-98	88	76-98	93	87-99

**Table 3.2-38: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 48-80 % dose rates in sugar beet against MYZUPE (PESSEV; no. of aphids/ plant or leaf). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of aphids/ plant or leaf)		% control with MCW-2222							
				0.12 L/ha (48 % rate)		0.15-0.17 L/ha (~60 % rate)		0.2 L/ha (80 % rate)		0.25 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-2 DAA											
N-E	4	7.9	4.3-12.7	-	-	47	24-75	58	35-87	58	<del>20</del> 23-85
3 DAA											
MAR	1	5.0	-	-	-	0	-	50	-	<del>57</del> 60	-
MAR	1	19.2	-	60	-	75	-	75	-	84	-
N-E	2	6.2	4.8-7.6	-	-	50	47-52	55	54-55	54	49-59
C-EU	4	9.2	4.8-19.2	-	-	44	0-75	58	50-75	63	49-84
5 DAA											
N-E	1	5.3	-			63	-	74	-	77	-
7-9 DAA											
MAR	2	8.4	5.9-11.0	-	-	<del>33</del> 39	16-61	<del>59</del> 63	<del>29</del> 37-88	<del>79</del> 81	<del>64</del> 68-93
MAR	1	19.0	-	79	-	82	-	100	-	100	-
N-E	5	9.7	5.7-14.9	-	-	71	51-83	80	64-86	85	71-93
C-EU	8	10.5	5.7-19.0	-	-	<del>63</del> 64	16-83	<del>77</del> 78	<del>29</del> 37-100	86	64-100
12-15 DAA											
MAR	2	9.7	6.1-13.3	-	-	<del>45</del> 50	<del>13</del> 24-77	66	40-91	<del>86</del> 84	<del>78</del> 73-95
MAR	1	7.4	-	62	-	77	-	94	-	100	-
N-E	2	5.9	5.8-6.1	-	-	51	27-76	59	25-93	60	24-95
C-EU	5	7.7	5.8-13.3	-	-	<del>54</del> 56	<del>13</del> 24-77	69	25-94	<del>77</del> 78	24-100
2-3 DAB											
N-E	<del>3</del> 4	<del>12.4</del> 11.5	<del>9.3</del> 8.5-16.5	-	-	<del>79</del> 80	64-93	<del>88</del> 86	75-100	<del>90</del> 91	78-98
7-8 DAB											
N-E	<del>3</del> 4	<del>12.3</del> 11.7	7.9-19.5	-	-	78	75-83	<del>88</del> 89	83-98	<del>91</del> 92	88-99
14 DAB											
N-E	<del>3</del> 4	<del>13.6</del> 12.5	9.0-21.7	-	-	<del>80</del> 77	<del>72</del> 67-89	<del>88</del> 85	<del>85</del> 76-92	<del>92</del> 91	87-94

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates.

Furthermore, extrapolation of efficacy data between the Maritime and North-East EPPO zone as well as from Maritime and North-East to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 are considered to be appropriate for the control of aphids in sugar beet.

### 3.2.2.1.6 (1f) Aphids in ornamentals

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. And interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Flower bulbs and flower tubers	Aphids	Mar-Jul BBCH 12-91	Mar	1	0.23	46
			Mar, S-E	1-2 (7)	0.17	34
Floriculture crops, tree nursery crops, perennial nursery crops	Aphids	Mar-Aug BBCH 12-91	Mar	1	0.23	46
			Mar, S-E	1-2 (7)	0.17	34

#### Material and methods

An overview of all efficacy and dose justification trials against aphids in ornamental crops including flower bulbs (*Lilium* sp.), in ornamentals/floriculture (*Hibiscus* sp., *Chrysanthemum* sp., *Rosa* sp.) and in nursery (*Fagus sylvatica* var. *sylvatica*) and a short description of the trial methodology is presented in Table 3.2-139 and Table 3.2-141 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years. Trials on ornamentals with the target pests *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae*, *Aphis fabae* are evaluated together as extrapolation from trials involving the respective pests and crops to the whole group of aphids (except PHYAFA) in ornamentals is not considered to be restricted in accordance with the Dutch guidance document for extrapolation in ornamental crops<sup>4</sup>.

**Table 3.2-39: Summary of dose justification trials (aphids in ornamentals)**

EPPO Zone	Country	Pest	Crop	No. of trials <sup>(1)</sup>				
				Year			Total	Total by pest
				2020	2021	2022		
MAR	NL	APHIFA	Ornamentals <sup>(2)</sup>	1	-	-	1	1
		APHIGO	Lily	2	5	4	11	14
		MYZUPE	Ornamentals <sup>(2)</sup>	-	-	3	3	3
		MACSEU	Ornamentals <sup>(2)</sup>	1	2	-	3	3
		PHYAFA	Beech	-	2	-	2	2
		Total:		4	9	10	23	-

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

(2) *Chrysanthemum* sp. (7 trials), *Hibiscus* sp. (7 trials), *Rosa* sp. (3 trials)

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-40: Overview of application rates against aphids in ornamentals**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate	
			product/ha	active ingredient/ha	1 appl.	2 appl.
Ornamentals	1APHIF	MCW-2222	0.125 L	25 acetamiprid	54	74
			0.17 L	34 acetamiprid	74	100
			0.23 L	46 acetamiprid	100	135

<sup>4</sup> Netherlands Food and Consumer Product Safety Authority, Division Tactical Direction & Expertise, Department of Expertise 2018, updated 2020: Possibilities for extrapolation of efficacy and phytotoxicity of plant protection products for ornamental crops, Version 1.2.

## Results

Across the 22 dose justification trials conducted in ornamentals (one trial with more than one pest) it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 74 % of the target rate. A summary of the dose-response results is provided in the following tables. Please refer to Table 3.2-41 for *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae*, *Aphis fabae*. Control of *Phyllaphis fagi* on beech was reflected separately (

Table 3.2-42).

In three trials, there was no efficacy in the reference product or in the test product after the first application (two trials with APHIGO and one trial with PHYAFA). Therefore, a second application was conducted and the assessment data from this application was used for the calculation.

**Table 3.2-41: Minimum effective dose. Efficacy of MCW-2222 at 74 % dose (0.125 L/ha) and target rates (0.23 L/ha for single application and 0.17 L/ha for two applications) on ornamentals against aphids (PESSEV; no. of aphids/shoot). For single trial data please refer to Appendix 4 of the BAD.**

Maritime EPPO Zone	Crop	No. of trials	Untreated control aphids (no./ shoot)		% control with MCW-2222					
					0.125 L/ha (74 % rate)		0.17 L/ha (target rate)		0.23 L/ha (target rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-4 DAA, resp. and 3 DAB										
APHIGO protected (DAA)	Ornamentals	3	80.9	10-147	86	74-99	84	66-98	83	66-99
APHIGO unprotected (DAA)	Ornamentals	6 5	53.6 60.9	8.8-245	56 65	25 38-93	67 74	28 53-98	78 82	57 69-100
APHIGO unprotected (3 DAB)	Ornamentals	1	17.5	-	54	-	64	-	61	-
APHIGO unprotected (DAA)	Lily	3 2	71.8 80.0	41-118	72 68	55-81 80	65	48 50-79	69	50-88
APHIGO unprotected (3 DAB)	Lily	1	55.7	-	81	-	68	-	69	-
APHIGO all		12	65.0	8.8-245	68 71	25 38-99	71 74	28 50-98	77	50-100
MYZUPE unprotected (DAA)	Ornamentals	2	64.7	3.3-126	46 65	0 38-92	58 65	25 39-90	49 73	11 58-88
MACSEU unprotected (DAA)	Ornamentals	3	31.6	13-51	85	72-92	83	62-94	85	64-97
APHIFA protected (DAA)	Ornamentals	1	13.8	-	80	-	62	-	52	-
All aphids protected (DAA)		5 4	51.3 64.1	0.1 10-147	83 85	74-99	73 78	50 62-98	64 75	20 52-99
All aphids unprotected (DAA)		14 12	54.4 57.4	3.3-245	64 71	0 38-93	69 73	25 39-98	73 79	11 50-100
All aphids unprotected (DAB)		2	36.6	17.5-56	68	54-81	66	64-68	65	61-69
All aphids		19 18	53.6 56.6	0.1 3.3-245	69 73	0 38-99	70 74	25 39-98	71 77	11 50-100
6-8 DAA, resp. and 6-7 DAB										
APHIGO protected (DAA)	Ornamentals	3	44.6	8.1-103	94	83-99	93	84-99	94	84-99
APHIGO unprotected (DAA)	Ornamentals	8 7	59.4 65.5	9.7-324	79 83	42 62-100	84 85	39 56-100	88 90	59 72-100

Maritime EPPO Zone	Crop	No. of trials	Untreated control aphids (no./ shoot)		% control with MCW-2222					
					0.125 L/ha (74 % rate)		0.17 L/ha (target rate)		0.23 L/ha (target rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max
APHIGO unprotected (DAB)	Ornamentals	1	16.3	-	34	-	26	-	56	-
APHIGO unprotected (DAA)	Lily	3 2	66.4 48.4	12-102 84.7	84 77	62-98 91	91 87	80-98 94	88 84	69-99 98
APHIGO unprotected (6-7 DAB)	Lily	1	102.4	-	98	-	99	-	99	-
APHIGO all		14	57.7	8.1-324	83 82	42 34-100	87 84	39 26-100	89 88	59 56-100
MYZUPE protected	Ornamentals	1	28.2	-	50	-	72	-	88	-
MYZUPE unprotected	Ornamentals	2	54.1	6.9-101	84	69-99	89	79-99	95	89-100
MYZUPE all (DAA)		3	45.5	6.9-101	73	50-99	83	72-99	92	88-100
MACSEU unprotected (DAA)	Ornamentals	3	30.4	13-41	82	66-95	86	76-94	92	80-98
APHIFA protected (DAA)	Ornamentals	1	25.1	-	95	-	91	-	97	-
All aphids protected		5	37.4	8.1-103	85	50-99	88	72-99	93	84-99
All aphids unprotected (DAA)		16 14	54.6 53.9	6.9-324	81 82	42-100	86	39-100	90	59-100
All aphids unprotected (6-7 DAB)		2	59.4	16.3-102.4	66	34-98	62	26-98	78	56-99
All aphids		21	50.5	6.9-324	82 81	42 34-100	87 84	39 26-100	91 90	59 56-100
<b>13-15 DAA, resp. and 13 DAB</b>										
APHIGO protected (DAA)	Ornamentals	2	3.8	0.3-765 7.3	43	25-61	51	25-76	59	25-92
APHIGO unprotected (DAA)	Ornamentals	7 6	135.1 153.7	13.2-765	73 79	40 41-99	77	23-100	86 89	72 73-100
APHIGO unprotected (13 DAB)	Ornamentals	1	23.6	-	40	-	77	-	72	-
APHIGO unprotected (DAA)	Lily	3 2	86.2 48.3	23.5-163 73	91 93	88 91-95	95 92	87-100 97	96 95	90-100 99
APHIGO unprotected (13 DAB)	Lily	1	162.6	-	88	-	100	-	100	-
APHIGO all		12	101.0	0.3-765	73	25-99	77	23-100	84	25-100
MYZUPE unprotected (DAA)	Ornamentals	2	35.1	10.1-60	83	76-90	81 82	79-84	91	88-93
MACSEU unprotected (DAA)	Ornamentals	2	43.1	43-43.1	84	76-91	81	80-81	96	94-98
APHIFA protected (DAA)	Ornamentals	1	18.6	-	99	-	97	-	100	-
All aphids protected (DAA)		3	8.7	0.3-19	62	25-99	66	25-97	72	25-100

Maritime EPPO Zone	Crop	No. of trials	Untreated control aphids (no./ shoot)		% control with MCW-2222						
					0.125 L/ha (74 % rate)		0.17 L/ha (target rate)		0.23 L/ha (target rate)		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
All aphids unprotected (DAA)		14	12	97.2 97.9	10.1-765	80 83	40 41-99	82 81	23-100	90 91	72 73-100
All aphids unprotected (13 DAB)		2		93.1	23.6-162.6	64	40-88	89	77-100	86	72-100
All aphids		17		78.3 81.6	0.3-765	76 77	25-99	77 79	23-100	85 87	25-100
6-7 DAB											
APHIGO protected	Ornamentals	1		131.5	-	72	-	86	-	96	-
APHIGO unprotected	Ornamentals	1		5.1	-	29 84	-	25 76	-	62 90	-
APHIGO all		2		68.3	5.1-132	50 78	29-72-84	56 81	25-76-86	79 93	62-90-96
MYZUPE protected	Ornamentals	1		51	-	88	-	89	-	99	-
MACSEU unprotected	Ornamentals	1		12.1	-	54	-	73	-	86	-
All aphids protected		2		91.3 91.5	51-132	80	72-88	88	86-89	97 98	96-99
All aphids unprotected		2		8.6	5.1-12	42 69	29-54-84	49 75	25-73-76	74 88	62-86-90
All aphids		4		49.9	5.1-132	61 75	29-54-88	68 81	25-73-89	86 93	62-86-99
13-15 DAB											
APHIGO protected	Ornamentals	1		206	-	24	-	34	-	52	-
APHIGO unprotected	Ornamentals	1		6.8	-	21 78	-	57 76	-	53 90	-
APHIGO all		2		106.4	6.8-206	23 51	21-24-78	45 55	34-57-76	52 71	52-53-90
MYZUPE protected	Ornamentals	1		181.1	-	79	-	89	-	95	
MACSEU unprotected	Ornamentals	1		23.1	-	53	-	55	-	70	-
All aphids protected		2		193.6	181-206	52	24-79	61 62	34-89	74	52-95
All aphids unprotected		2		15.0	6.8-23.1	37 66	21-53-78	56 66	55-57-76	62 80	53-70-90
All aphids		4		104.3	6.8-206	44 59	21-24-79	59 64	34-57-89	68 77	52-95

Protected = greenhouse; unprotected = field, non-protected

\*no./plant

**Table 3.2-42: Minimum effective dose. Efficacy of MCW-2222 at 74 % dose (0.125 L/ha) and target rates (0.23 L/ha for single application and 0.17 L/ha for two applications) on beech against PHYAFA (PESSEV; no. of aphids/shoot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone: MAR	crop	No. of tri- als	Untreated control aphids (no./ plant)		% control with MCW-2222					
					0.125 L/ha (74 % rate)		0.17 L/ha (target rate)		0.23 L/ha (target rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max
1 DAA										
PHYAFA	Beech	1	26.8	-	53	-	41-46	-	26-35	-
6 DAA, resp. and 7 DAB <sup>(1)</sup>										
PHYAFA (DAA)	Beech	2-1	15-17	13-17	46-71	21-71	53-86	20-86	62-74	50-74



EPPO zone: MAR	crop	No. of trials	Untreated control aphids (no./ plant)		% control with MCW-2222					
					0.125 L/ha (74 % rate)		0.17 L/ha (target rate)		0.23 L/ha (target rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max
PHYAFA (DAB)	Beech	1	13	-	26	-	21	-	50	-
<b>14 DAA</b>										
PHYAFA	Beech	1	17.2	-	75	-	57	-	68	-

(1) For this assessment timing, results were replaced by assessment results after the second application.

## Conclusion

The data from Maritime EPPO zone demonstrated that the efficacy of MCW-2222 at the proposed label rates is superior to the reduced application rate against *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae*, and *Aphis fabae*. Sufficient trials are available to cover the GAP uses on aphids in ornamentals as trials on Chrysanthemum, Hibiscus or Rose with the target pests *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae*, *Aphis fabae* can be extrapolated to the whole group of aphids (except PHYAFA) on the whole group of ornamental crops (i.e. flower bulb and flower tuber crops, floriculture crops, tree nursery crops, perennial plant cultivation, flower seed cultivation, swamp and aquatic plants and plant breeding crops and seed production acc. to GD) in accordance with the Dutch guidance document for extrapolation in ornamental crops.

The control of *Phyllaphis fagi* in beech at the proposed label rate is demonstrated in specific trials. The somewhat lower efficacy to this species compared to the efficacy against other aphid species mentioned above, and the corresponding weaker dose response, are due to the characteristics of the beech woolly aphid. The most notable feature of the woolly beech aphid is the dense wax covering of the aphids. This is secreted afresh after each moult, so newly moulted individuals have little or no wax, whilst adults often have long tendrils of accumulated wax. This wax wool covering the body is leading to a practical issue during trial conduction, as the aphids are difficult to reach with the spray liquid: With an early application (younger individuals with less wax wool but also a still lower number of aphids present) the individuals are better to reach, but in that case the trials are not supportive due the low number of aphids. With a later application (more aphids present and trials valid, but also more woolly wax material) the aphids are more difficult to reach, which leads to a lower efficacy.

However, as the use involves only minor crops, any further trials are not considered to be required. Efficacy in practice can be increased by correct application timing (early in pest development), and therefore, the target rate is considered to be appropriate for the control of *Phyllaphis fagi*.

Furthermore, extrapolation of efficacy data from the Maritime EPPO zone to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2.

Thus, the GAP use as summarised above and stated in Part B, Section 0 is considered to be appropriate for the control of aphids in ornamental plants, i.e., flower bulbs, flower tubers, floriculture and nursery.

### 3.2.2.2 (2) Beetles and weevils (biting)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	DIABVI	Jun-Aug BBCH 51-75	S-E	1	0.20-0.30	40-60
Winter oilseed rape	LPTNDE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36
	CEUTAS, CEUTNA, CEUTQU	Mar-Jun BBCH 31-61-71 BBCH 31-59-74 BBCH 31-59-74	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60
	CEUTPI	Oct-Nov BBCH 13-17	Mar	1	0.30 0.24	60 48
	PHYESP	Aug-Nov BBCH 11-19	Mar	1	0.30 0.24	60 48
	PSYICH	Aug-Nov BBCH 11-19	Mar, N-E, S-E	1	0.30 0.24	60 48
Spring oilseed rape	CEUTAS, CEUTNA, CEUTQU	Mar-Jul BBCH 31-69 BBCH 61-71 BBCH 31-59 BBCH 31-59	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60

#### 3.2.2.2.1 (2a) Beetles in maize

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	DIABVI	Jun-Aug BBCH 51-75	S-E	1	0.20-0.30	40-60

### Material and methods

An overview of all efficacy and dose justification trials against Western corn rootworm in maize and a short description of the trial methodology is presented in Table 3.2-145 and Table 3.2-147 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-43: Summary of dose justification trials (Western corn rootworm in maize)**

Pest	Crop	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone/pest
				2013	2014		
DIABVI	Maize	S-E	HU	3	2	5	11
			RO	-	3	3	
			SK	-	3	3	

Pest	Crop	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone/pest
				2013	2014		
			<b>Total</b>	3	8	-	

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-44: Overview of application rates against Western corn rootworm in maize (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate
			product/ha	active ingredient/ha		
Maize	DIABVI	MCW-2222	0.09 L	18 g	acetamiprid	45
			0.15 L	30 g	acetamiprid	75
			0.20 L	40 g	acetamiprid	100
			0.30 L	60 g	acetamiprid	100

## Results

Across the 11 dose justification trials conducted in maize it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 45-75 % of the target rate. A summary of the dose-response results is provided in the following tables.

**Table 3.2-45: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 45 and 75 % dose rates against DIABVI in maize (PESSEV, no. of adults/ plant). For single trial data please refer to Appendix 4 of the BAD.**

Please refer to Appendix 4 of the DAL.											
EPPO zone	No. of trials	Untreated control (no. of adults/ plant)		% control with MCW-2222							
				0.09 L/ha (45 % rate)		0.15 L/ha (75%% rate)		0.20 L/ha (target rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
2-3 DAA											
S-E	3	2.7	2.5-3.0	79	76-82	90	86-93	-	-	96	95-97
S-E	8	1.9	0.7-3.8	-	-	77	58-92	90	70-100	92 93	84-100
mean	11	2.1	0.7-3.8	-	-	81	58-93	-	-	93	84-100
7-8 DAA											
S-E	3	2.0	1.5-2.4	70	51-83	87	78-96	-	-	96	91-99
S-E	8	1.7	0.6-2.7	-	-	74	26-96	80	26-99	86	16-100
mean	11	1.8	0.6-2.7	-	-	82 77	26-96	-	-	90 89	45 99 16-100
14-16 DAA											
S-E	1	2.1	-	71	-	82	-	-	-	87	-
S-E	8	1.4	0.3-2.3	-	-	48	4-88	56	19-100	62	7-100
mean	9	1.5	0.3-2.3	-	-	56 52	4-88	-	-	57 64	7-100

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates. Therefore, the minimum effective dose is justified and the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.2.2 (2b) Beetles in potato

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Potato	LPTNDE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36

#### Material and methods

An overview of all efficacy and dose justification trials against Colorado potato beetle in potato and a short description of the trial methodology is presented in Table 3.2-150 and Table 3.2-152 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to Appendix 2 (experimental details) and Appendix 3 (maps with trial locations). All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-46: Summary of dose justification trials (Colorado potato beetle in potato)**

Pest	Crop	EPPO zone	Country	No. of trials						
				Year				Total	Total by zone	Total by pest
				2013	2014	2015	2020			
LPTNDE	Potato	MAR	CZ	3	3	-	-	6	12	36
			DE	-	3	3	-	6		
		N-E	PL	4	7	-	-	11	12	
			LV	-	-	-	1	1		
		S-E	RO	-	5	2	-	7	12	
			SK	2	3	-	-	5		

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-47: Overview of application rates against Colorado potato beetle in potato**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate	
			product/ha	active ingredient/ha		MAR, N-E	S-E
Potato	LPTNDE	MCW-2222	0.06 L	12 g	acetamiprid	33	50
			0.10 L	20 g	acetamiprid	56	83
			0.12 L	24 g	acetamiprid	67	100
			0.15 L	30 g	acetamiprid	83	100
			0.18 L	36 g	acetamiprid	100	100

#### Results

Across the 36 dose justification trials conducted in potato it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 33-83 % of the target rate. A summary of the dose-response results is provided in the following tables.

EPPO zone	No. of trials	Untreated control L1-L3 (no./plant)		% control with MCW-2222							
				0.10 L/ha (56 % rate)		0.12 L/ha (67 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>1 DAA</b>											
MAR	6	7.2	0.7-18.8	-	-	75-79	54-91	76-80	55-90	83-87	59-100
N-E	1	10.9	-	-	-	86	-	91	-	99	-
C-EU	7	7.7	0.7-18.8	-	-	77-80	54-91	78-82	55-91	85-89	59-100
<b>2-3 DAA</b>											
MAR	7	35.1	0.7-118	-	-	97	89-100	95	81-100	99	96-100
N-E	4	21.5	12.5-37.2	-	-	97	91-99	98	96-99	99	98-100
N-E	1	9.4	-	99	-	100	-	100	-	99	-
C-EU	12	28.5	0.7-118	-	-	97	89-100	96	81-100	99	96-100
<b>6-12 DAA</b>											
MAR	9	24.3	0.2-61.3	-	-	95	80-100	96	87-100	96	87-100
N-E	4	8.6	4.9-12.0	-	-	90	89-95	98	97-99	100	98-100
N-E	1	13.0	-	100	-	95	-	100	-	96	-
S-E	2	34.3	27.0-41.5	-	-	100	100	100	100	100	100
C-EU	16	20.9	0.2-61.3	-	-	95	80-100	97	87-100	98	89-100
<b>11-14 DAA</b>											
MAR	5	9.3	0.1-19.8	-	-	94	68-100	94	68-100	95	77-100
N-E	1	10.6	-	-	-	86	-	98	-	99	-
N-E	1	4.7	-	98	-	93	-	88	-	70	-
C-EU	7	8.9	0.1-19.8	-	-	92	68-100	93	68-100	92	70-100

EPPO zone	No. of trials	Untreated control L4 (no./plant)		% control with MCW-2222							
				0.10 L/ha (56 % rate)		0.12 L/ha (67 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>1 DAA</b>											
MAR	5	3.4	1.3-5.8	-	-	75-85	50-53-95	77-87	50-74-100	74-84	50-55-100
N-E	1	4.6	-	-	-	91	-	91	-	97	-
C-EU	6	3.6	1.3-5.8	-	-	78-86	50-53-95	79-88	50-100	78-86	50-55-100
<b>2-3 DAA</b>											
MAR	6	18.7	1.5-59.0	-	-	88	80-93	89	68-100	98	94-100
N-E	3	3.2	1.1-5.4	-	-	99	96-100	99	98-100	100	100
N-E	1	3.1	-	100	-	100	-	100	-	100	-
C-EU	10	12.5	1.1-59.0	-	-	93	80-100	93	68-100	99	94-100
<b>6-12 DAA</b>											
MAR	9	25.2	1.0-106	-	-	89	56-100	91	38-100	94	71-100
N-E	3	3.1	1.7-5.7	-	-	79	50-94	91	75-100	92	75-100
N-E	1	3.6	-	100	-	99	-	99	-	100	-
C-EU	13	18.5	1.0-106	-	-	87	50-100	92	38-100	94	71-100
<b>11-14 DAA</b>											

EPPO zone	No. of trials	Untreated control L4 (no./plant)		% control with MCW-2222							
				0.10 L/ha (56 % rate)		0.12 L/ha (67 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
MAR	5	34.4	0.8-109	-	-	<del>87</del> <b>97</b>	<del>40</del> 92-100	<del>89</del> <b>99</b>	<del>50</del> 96-100	<del>93</del> <b>98</b>	<del>65</del> 92-100
N-E	1	5.0	-	-	-	<b>91</b>	-	<b>100</b>	-	<b>100</b>	-
N-E	1	1.7	-	<b>100</b>	-	<b>98</b>	-	<b>97</b>	-	<b>95</b>	-
C-EU	7	25.5	0.8-109	-	-	<del>89</del> <b>96</b>	<del>40</del> 92-100	<del>92</del> <b>99</b>	<del>50</del> 96-100	<del>94</del> <b>98</b>	<del>65</del> 92-100

**Table 3.2-50: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate (0.18 L/ha) compared to 33-83 % dose rate against LPTNDE at all larval stages (no./plant) on potato. All larvae exclusively presented from trials without larval stage classification to avoid double counting of trials presented above. For single trial data please refer to Appendix 4 of the BAD.**

DAD.											
EPPO zone	No. of trials	Untreated control all larvae (no./plant)		% control with MCW-2222							
				0.06 L/ha (33 % rate)		0.12 L/ha (67 % rate)		0.15 L/ha (83 % rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
2-3 DAA											
MAR	2	125.1	53.3-197	-	-	98	96-100	99	98-100	100	99-100
N-E	7	48.3	3.9-247	-	-	87 94	38 85-99	93 95	73 89-100	96 97	87 91-100
S-E	6	6.9	6.0-8.9	-	-	80	65-96	86	70-100	88	72-100
S-E	2	6.8	4.5-9.0	87	85-89	97	94-100	97	95-100	98	97-100
C-EU	17	37.8	3.9-247	-	-	87 90	38 65-100	92 93	70-100	94	72-100
6-12 DAA											
MAR	2	187	59.8-314	-	-	96	95-97	98	97-100	100	100
N-E	5	61.2	9.5-224	-	-	93 94	85 91-98	95 96	91-99	96	92-100
S-E	8	8.2	6.3-8.3	-	-	85	81-87	92	85-100	95	88-100
S-E	2	8.3	6.4-10.2	91	91-92	99	98-100	100	99-100	100	100
C-EU	17	44.8	6.3-314	-	-	90 91	77 98 81-100	95	85-100	96	88-100
11-14 DAA											
N-E	4	17.3	4.2-35.5	-	-	95	93-96	97	93-100	99	95-100
S-E	6	7.0	3.0-8.2	-	-	61	57-68	77	70-100	79	71-100
S-E	1	8.0	-	91	-	100	-	100	-	100	-
C-EU	11	10.8	3.0-35.5	-	-	77	57-100	87	70-100	88	71-100

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates. Therefore, the minimum effective dose is justified and the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.2.3 (2c) Beetles and weevils in winter oilseed rape

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter oilseed rape (spring application)	CEUTAS, CEUTNA, CEUTQU	Mar-Jun BBCH 34-61-71 BBCH 31-59-74 BBCH 31-59-74	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
(autumn application)	MELIAE	Mar-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60
	CEUTPI	Oct-Nov BBCH 13-17	Mar	1	0.30 0.24	60 48
	PHYESP	Aug-Nov BBCH 11-19	Mar	1	0.30 0.24	60 48
	PSYICH	Aug-Nov BBCH 11-19	Mar, N-E, S-E	1	0.30 0.24	60 48

### Material and methods

An overview of all efficacy and dose justification trials against beetles and weevils in winter oilseed rape and a short description of the trial methodology is presented in Table 3.2-159 and Table 3.2-161 (CEUTAS, CEUTNA, CEUTQU), Table 3.2-162 (MELIAE), Table 3.2-163 (CEUTPI), Table 3.2-164 (PHYESP), Table 3.2-165 (PSYICH) in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations.

**Table 3.2-48: Summary of dose justification trials (beetles and weevils in winter oilseed rape)**

Table 5.12-10: Summary of dose justification trials (sectors and weeds in winter oilseed rape)																
Pest	Crop	EPPO zone	No. of trials by zone	No. of trials by pest	Country	No. of trials <sup>(1)</sup>										Total
						Year										
						2011	2013	2014	2015	2016	2017	2020	2021	2022		
CEUTAS	Winter oilseed rape	MAR	6	14	DE	-	-	-	1	-	-	-	-	-	1	
			CZ		-	-	2	3	-	-	-	-	-	5		
		N-E	8		PL	-	-	4	4	-	-	-	-	-	8	
		S-E	9		HU	3 <sup>(2)</sup>	-	2	5	-	-	-	-	-	7	
					SK	-	-	1	1	-	-	-	-	-	2	
CEUTNA	Winter oilseed rape	MAR	10	33	CZ	-	-	2	3	-	-	-	-	-	5	
					DE	-	-	1	1	-	-	-	-	-	2	
					FR	-	-	1	2	-	-	-	-	-	3	
		N-E	10		PL	-	-	4	6	-	-	-	-	-	10	
					HU	-	3	2	2	-	-	-	-	-	4	
		S-E	13		SK	-	2	4	5	-	-	-	-	-	9	
CEUTQU	Winter oilseed rape	MAR	7	27	CZ	-	-	2	4	-	-	-	-	2	6	
					DE	-	-	-	-	-	-	-	-	1	1	
		N-E	9		PL	-	-	4	3	-	-	-	-	-	9	
					HU	-	2	1	-	2	-	-	-	-	4	
		S-E	11		SK	-	1	2	4	-	-	-	-	-	7	
MELIAE	Winter oilseed rape	MAR	24	56	CZ	-	-	2	-	-	-	1	-	-	3	
					DE	-	-	1	4	-	-	2	2	2	11	
					FR	-	-	1	4	1	-	-	-	-	6	
					UK	-	-	-	-	-	1	-	2	1	4	
		N-E	15		PL	-	-	6	-	-	-	2	3	4	15	
					HU	-	-	4	5	4	-	-	-	-	13	
S-E	17	SK	-	-	2	-	-	-	-	-	2	4				
		CEUTPI	Winter oilseed rape	MAR	5	FR	-	-	1	-	-	-	-	-	1	
DE	-					-	-	-	-	-	1	3	-	4		
PHYESP	Winter oilseed rape	MAR	8	9	CZ	-	-	-	-	-	-	1	2	-	3	
					DE	-	-	-	-	-	-	-	1	-	1	
					FR	-	-	4	3	-	-	-	-	-	4	
		Mediterr.	1		1	FR	-	-	1	-	-	-	-	-	1	



Pest	Crop	EPPO zone	No. of trials by zone	No. of trials by pest	Country	No. of trials <sup>(1)</sup>										Total
						Year										
						2011	2013	2014	2015	2016	2017	2020	2021	2022		
		N-E	1		PL	-	-	-	-	-	-	1	-	-	1	
PSYICH	Winter oilseed rape	MAR	16	20	FR	-	-	3	-	-	-	-	-	-	3	
					CZ	-	-	-	-	-	-	-	1	-	1	
					DE	-	-	1	3	1	-	1	-	-	6	
					UK	-	-	-	2	1	-	1	2	-	6	
		N-E	4		PL	-	-	-	-	-	-	4	-	4		
					Total:	3 <sup>(2)</sup>	12	11	56	54	66	67	7	1	10	17

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

(2) Three Hungarian efficacy trials of 2011, which do not test the dose rates > 0.2 L/ha, are apparently not counted into the total number of MED trials for CEUTAS

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-49: Overview of application rates against beetles and weevils (bold letters = target rates)**

Crop	Pest(s)	Product	Rate per treatment <sup>(1)</sup>			% of the target rate	
			product/ha	active ingredient/ha		MAR, N-E	S-E
Winter oilseed rape	CEUTAS CEUTNA CEUTQU	MCW-2222	0.10 L	20 g	acetamiprid	-	67
			0.12 L	24 g	acetamiprid	-	80
			<b>0.15 L</b>	<b>30 g</b>	<b>acetamiprid</b>	50	<b>100</b>
			<b>0.18 L</b>	<b>36 g</b>	<b>acetamiprid</b>	60	<b>100</b>
			<b>0.20 L</b>	<b>40 g</b>	<b>acetamiprid</b>	67	<b>100</b>
			<b>0.225 L</b>	<b>45 g</b>	<b>acetamiprid</b>	75	<b>100</b>
			<b>0.25 L</b>	<b>50 g</b>	<b>acetamiprid</b>	83	<b>100</b>
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<b>100</b>	<b>100</b>
Winter oilseed rape	MELIAE	MCW-2222	0.15 L	30 g	acetamiprid	50	83
			<b>0.18 L</b>	<b>36 g</b>	<b>acetamiprid</b>	60	-
			<b>0.20 L</b>	<b>40 g</b>	<b>acetamiprid</b>	67	<b>100</b>
			<b>0.25 L</b>	<b>50 g</b>	<b>acetamiprid</b>	83	<b>100</b>
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<b>100</b>	<b>100</b>
Winter oilseed rape	CEUTPI	MCW-2222	0.20 L	40 g	acetamiprid	<del>67</del> 83	
			0.225 L	45 g	acetamiprid	<del>75</del> 94	
			0.25 L	50 g	acetamiprid	<del>83</del> 104	
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<del>100</del> 125	
Winter oilseed rape	PHYESP	MCW-2222	0.20 L	40 g	acetamiprid	<del>67</del> 83	
			0.225 L	45 g	acetamiprid	<del>75</del> 94	
			0.25 L	50 g	acetamiprid	<del>83</del> 104	
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<del>100</del> 125	
Winter oilseed rape	PSYICH	MCW-2222	0.10 L	20 g	acetamiprid	<del>33</del> 42	
			0.15 L	30 g	acetamiprid	<del>50</del> 62,5	
			0.20 L	40 g	acetamiprid	<del>67</del> 83	
			0.225 L	45 g	acetamiprid	<del>75</del> 94	
			0.25 L	50 g	acetamiprid	<del>83</del> 104	
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<del>100</del> 125	

(1) Not every rate of the test product was tested in every trial

## Results

Across the 164 dose justification trials conducted in winter oilseed rape it was clearly demonstrated that the ~~target dose~~ proposed label rate of MCW-2222 ~~provides is superior control compared to the other application rates~~ 33-83 % of the target rate. A summary of the dose-response results is provided in the following tables.

For results after spring application please refer to Table 3.2-50 and Table 3.2-51 for *Ceutorhynchus obstrictus*, Table 3.2-52 and Table 3.2-53 for *Ceutorhynchus napi*, Table 3.2-54 and Table 3.2-55 for *Ceutorhynchus pallidactylus* and Table 3.2-56 for *Brassicogethes aeneus*.

The results after autumn application are presented in Table 3.2-58 and

Table 3.2-59 for *Phyllotreta* spp. and Table 3.2-60 ,Table 3.2-61 for *Psylliodes chrysocephala*, and in Table 3.2-57 for *Ceutorhynchus picipitarsis*.

**Table 3.2-50: Minimum effective dose. Efficacy of MCW-2222 (spring application) at label rate and 50, 67, and 83 % dose rates on oilseed rape against CEUTAS ((no. of adult or larvae/ plant or shoot) or (no. of larvae/ pod)) for all C-EU EPPO zones. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/ pod)		Untreated control (no. of adult/ plant or shoot)		% control with MCW-2222							
						0.15 L/ha (50 % target rate)		0.20 L/ha (67 % target rate)		0.25 L/ha (83 % target rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-3 DAA													
MAR	4	-	-	5.3	2.0-11.5	85	55-100	88	57-100	91	64-100	100	100
N-E	8	-	-	5.7	0.7-21.3	79	63-92	84	63-95	88	67-96	91	77-97
S-E	8	-	-	12.8	1.5-51.8	65	51-84	74	66-88	79	73-94	83	75-96
C-EU	20	-	-	8.5	0.7-51.8	75	51-100	81	57-100	84	64-100	87	75-100
4-6 DAA													
MAR	6	-	-	5.0	0.5-17.8	72 75	50-100 22-100	81	50-100 22-100	85	25-100 9-100	90 88	50-100 25-100
N-E	7	-	-	5.5	0.7-19.5	84	76-90	91	86-95	94	90-100	97	91-100
S-E	7	-	-	12.3 15.9	3.2-54.5	58	38-78	68	53-85	73	58-89	78	68-95
C-EU	20	-	-	7.7	10.5-55 0.2-55	74	38-100 22-100	82 80	50-100 22-100	84 83	25-100 9-100	88 84	50-100 0-100
7-15 DAA													
N-E	1	-	-	0.8	-	68	-	77	-	77	-	83	-
S-E	1	-	-	21.8	-	68	-	73	-	69	-	83	-
C-EU	2	-	-	11.3	0.8-21.8	68	68	75	73-77	73	69-77	83	83
21-28 DAA													
MAR	5	13.7 <sup>1</sup>	1.0-21.2	13.7 <sup>1</sup>	1.0-21.2	76 74	14-100 22-100	93	75-100	99	95-100	99	96-100
N-E	8	6.3 (n=4)	1.6-15.0	10.8 <sup>1</sup> (n=4)	1.2-16.5	84	75-91	89	83-94	93	88-98	97	92-100
S-E	8	15.6 (n=5)	1.8-20.0	16.4 <sup>1</sup> (n=3)	6.0-27.5	59 (n=7)	25-79	68 (n=7)	47-92	73	44-92	77 (n=7)	62-92
C-EU	21	11.4 (n=9)	1.6-20.0	13.4 <sup>1</sup> (n=12)	1.0-27.5	72 67 (n=20)	14-100 22-100	82 (n=20)	47-100	87 88	44-100	90 91 (n=20)	62-100

1) For the last assessment according to guideline PP 1/107 the number of larvae (per plant or shoot) was counted.

**Table 3.2-51: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label range in S-E the South-Eastern EPPO zone on oilseed rape against CEUTAS (no. of adult or insect / plant, shoot, or net). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of insects/ 10 sweep-net strokes)		Untreated control (no. adult <sup>1</sup> or larvae <sup>2</sup> / plant or shoot <sup>3</sup> or pod <sup>4</sup> )		% control with MCW-2222							
		mean	min-max	mean	min-max	0.15 L/ha (50 % target rate)		0.20 L/ha (67 % target rate)		0.25 L/ha (80 83 % target rate)		0.30 L/ha (target rate)	
						mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>1-3 DAA</b>													
S-E	3	<del>69.8</del> 48.6 (n=2 3)	<del>6.3</del> 41.0-98.5	<del>6.3</del> 11.4 (n=1)	<del>0.2</del> -51.8 n=9	89	82-94	94	92-95	-	-	-	-
S-E <sup>(5)</sup>	12					72	51-94	81	66-100				
<b>4-7 DAA</b>													
S-E	3	<del>94.3</del> 64.8 (n=2 3)	<del>6.0</del> 48.5-140	<del>6.0</del> 11.5 (n=1)	<del>0.2</del> -54.5 n=10	81	60-95	85	66-97	-	-	-	-
S-E	13 <sup>(5)</sup>					67	38-95	73	25-100				
<b>7-15 DAA</b>													
S-E	1	47.5	-	-	-	49	-	54	-	-	-	-	-
<b>21-28 DAA</b>													
S-E	8	-	-	15.6 <sup>2,4</sup> (n=5) 16.4 <sup>2,3</sup> (n=3)	1.8-20.0 6.0-27.5	59 (n=7)	25-79	68 (n=7)	47-92	73	44-92	77 (n=7)	62-92

<sup>2</sup> for the last assessment according to guideline PP1/107 the number of larvae was counted.

<sup>(5)</sup> the added rows show **all** data points available, including additionally 3 HU trials (KCP 6.2 - 254, 255 and 257)), which assessed efficacy based on net-sweeping data.

**Table 3.2-52: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate and 50, 67 and 80 83 % dose rates on oilseed rape against CEUTNA for all C-EU EPPO zones (PESSEV; no. of larvae/ plant, stem, or pod). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/ plant, stem, or pod)		% control with MCW-2222							
		mean	min-max	0.15 L/ha (50 % target rate)		0.20 L/ha (67 % target rate)		0.25 L/ha (80 83 % target rate)		0.30 L/ha (target rate)	
				mean	min-max	mean	min-max	mean	min-max	mean	min-max
<b>1-6 DAA</b>											
S-E	4	69.9 <sup>1</sup>	12.1-143	68	51-80	79	65-89	81	73-90	85	73-91
<b>15-95 DAA</b>											
MAR <sup>(2)</sup>	7	15.6	1.5-32.3	<del>80</del> 63	<del>37-100</del> 17.5-85.5	<del>88</del> 80 (n=8)	<del>39-100</del> 25-100	96	83-100	97	85-100
MAR <sup>(3)</sup>	3	3.5	1.6-5.0	66	59-73	73	71-74	-	-	76	72-79
N-E	10	13.4	0.70-27.3	79	57-87	86	80-91	92	83-99	95	87-100
S-E	<del>13</del> 14	<del>30.7</del> 27.3	<del>1.7-91.0</del> 1.7-63.8	<del>83</del> 75	<del>64-100</del> 64-91	<del>83</del> 81	67-100 n=12	<del>87</del> 85	76-100 n=12	<del>89</del> 88	72-100 n=12
C-EU	33	19.8	0.7-91.0	77	37-100	84 83	<del>39-100</del> 25-100	90	76-100	91 93	72-100

(1) For the first assessment the no. of insects per net was counted

(2) EU Central zone

(3) EU South zone; Maritime part of France

**Table 3.2-53: Minimum effective dose. Efficacy of MCW-2222 (spring application) in the South-Eastern EPPO zone for lower dose rates (0.10-0.18 L/ha) on oilseed rape against CEUTNA (PESSEV; no. of larvae/ plant, stem, or pod). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/ plant, stem, or pod)		% control with MCW-2222									
				0.10 L/ha (67 % rate)		0.12 L/ha (80 % rate)		0.15 L/ha (target rate)		0.18 L/ha (target rate)			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max		
1-6 DAA													
S-E	2 1	21.2	21.1 <sup>1,2</sup>	21.0	21.3	-	-	51.34	34-68	74.67	67-82	78.73	73-84
12-35 DAA													
S-E	2 1 <sup>3</sup>	9.7	18.3	1.0	18.3	60.51	51-69	70.69	69-71	85.91	79-91	88.95	80-95
S-E	3 2 <sup>2</sup>	37.9	53-55.8	-	-	62	52-81	75	58-85	79	61-91	79	61-91
		54.2	52.5-55.8	-	-	53	52.4-52.8	69	58-81	73	61-85	73	61-85
Mean	5 3	26.6	1.0-55.8	-	-	65	52-81	79	58-91	82	61-95	82	61-95
						58	52-69	77		80		80	

(1) For the first assessment the no. of insects per trap was counted

**Comments of zRMS to Table 3.2-52:**

- (2) trial HU13IEBRSNW431B, quoted as KCP 6.2/265 in the Appendix 4.2 (p. 155), has not been submitted. KCP 6.2/265 is a cereal trial from CZ.
- (3) trial SK13IEBRSNW001A, quoted as KCP 6.2/295 in the Appendix 4.2 (p. 157), has not been submitted. KCP 6.2/295 is a Pollen beetle trial from CZ.

**Table 3.2-54: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate for C-EU for all C-EU EPPO zones and 50, 67 and 83 % dose rates on oilseed rape against CEUTQU (PESSEV, no. of larvae/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plant)		% control with MCW-2222							
				0.15 L/ha (50 % rate)		0.20 L/ha (67 % rate)		0.25 L/ha (83 % rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
12-89 DAA											
MAR	5 6	13.4	4.7-24	51	25-84	78.73	43-100 39-100	88.83	71-100 59-100	92.88	66-100 65-100
MAR	3	3.4	1.3-6.4	-	-	45	21-66	69	50-81	86	84-87
N-E	9	13.4	0.5-23.3	83	74-88	89	84-96	94	90-97	97	90-100
S-E	7 11	29.7	5.2-89.9	75	54-100	89.86	58-100	92.89	63-100	93.91	66-100
C-EU	24 26	16.8	0.5-89.9	-	-	80	21-100	88	50-100	92	66-100

**Table 3.2-55: Minimum effective dose. Efficacy of MCW-2222 (spring application) at target range (0.15-0.18 L/ha) for S-E the South-Eastern EPPO zone and 67-80 % dose rates on oilseed rape against CEUTQU (PESSEV, no. of larvae/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plant)		% control with MCW-2222							
				0.10 L/ha (67 % rate)		0.12 L/ha (80 % rate)		0.15 L/ha (target rate)		0.18 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
12-89 DAA											
S-E	1	13.3	-	51	-	81	-	88	-	95	-
S-E	2	54.0	52.5-55.5	-	-	61	52-69	70	58-81	74	61-87
Mean overall	3	40.4	13.3-55.5	-	-	67	52-81	76	58-88	81	<del>71-95</del> 61-95

**Table 3.2-56: Minimum effective dose. Efficacy of MCW-2222 (spring application) at proposed label rate (0.30 L/ha) and 50, 67 and 83 % dose rate on oilseed rape against MELIAE for all C-EU EPPO zones (PESSEV; no. of adults/plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of adults/plant)		% control with MCW-2222							
				0.15 L/ha (50 % rate)		0.20 L/ha (67 % rate)		0.25 L/ha (83 % rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-2 DAA											
MAR	7	231.7	9.7-461	83	68-100	87	76-100	89	75-100	92	81-100
N-E	6	4.5	2.6-6.6	87	74-100	89	77-100	92	82-100	92	81-100
S-E	9	16.5	1.9-81.6	69	51-80	79	66-94	80	68-94	85	77-95
C-EU	22	81.7	1.9-461	78	51-100	84	66-100	86	68-100	89	77-100
MAR	17	13.6	1.6-171	-	-	74	46-95	-	-	83	67-96
N-E	9	2.6	1.6-3.9	-	-	80	34-100	-	-	83	37-100
S-E	6	21.3	1.7-107	-	-	73	35-88	-	-	80	64-93
C-EU	32	11.9	1.6-171	-	-	76	34-100	-	-	82	37-100
2-5 DAA											
MAR	7	204.1	1.5-488	71	13-97	73	11-97	77	22-98	78	16-98
N-E	6	3.6	1.8-6.4	85	59-97	89	66-98	91	72-99	94	83-99
S-E	11	29.5	2.0-86.8	62	45-86	73	62-97	76	60-98	80	67-98
C-EU	24	74.0	1.5-488	71	13-97	77	11-98	80	22-99	83	16-99
MAR	17	12.0	1.0-155	-	-	74	30-93	-	-	80	54-94
N-E	9	2.5	1.4-3.4	-	-	88	68-99	-	-	92	75-99
S-E	6	25.6	0.9-133	-	-	78	55-94	-	-	82	64-96
C-EU	32	11.9	0.9-155	-	-	78	30-99	-	-	84	54-99
5-10 DAA											
MAR	6	177.0	37.1-381	54	11-88	56	8-91	63	11-91	63	10-91
N-E	6	2.6	1.0-4.2	74	52-90	81	65-90	84	70-94	85	70-94
S-E	10	30.1	2.1-114	43	8-86	51	12-96	57	20-97	61	26-98
C-EU	22	62.7	1.0-381	55	8-90	61	8-96	66	11-97	68	10-98
MAR	17	9.1	0.3-120	-	-	51	12-95	-	-	65	0-95
N-E	9	1.8	0.18-3.82	-	-	76	23-100	-	-	79	33-100
S-E	6	3.4	0.9-6.9	-	-	64	22-94	-	-	67	38-95
C-EU	32	6.0	0.18-120	-	-	61	12-100	-	-	67	0-100

**Table 3.2-57: Minimum effective dose. Efficacy of MCW-2222 (autumn application) at ~~proposed-label rate and 67, 75, and 83 %~~ 83 – 125 % of target dose rates on oilseed rape against CEUTPI in the Maritime EPPO zone (PESSEV; no. of larvae/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. larvae/ plant)		% control with MCW-2222							
				0.20 L/ha ( <del>67</del> 83 % target rate)		0.225 L/ha ( <del>75</del> 94 % target rate)		0.25 L/ha ( <del>83</del> 104 % target rate)		0.30 L/ha (125 % target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
118-166 DAA											
MAR	1 (FR)	12.3*	-	68	-	-	-	75	-	93	-
MAR	4 (DE)	1.6	0.18-3	-	-	64	25-94	-	-	85	72-100

\*Efficacy calculated based on PESINC / no. of plants infested (trial FR14IEBRNN113A, KCP 6.2/405)

**Table 3.2-58: Minimum effective dose. Efficacy of MCW-2222 (autumn application) at ~~proposed-label rate and 75 %~~ 94 – 125 % of target dose rate on oilseed rape against PHYESP in the Maritime and the North-Eastern EPPO zones (PESSEV; no. of larvae/ plant or % damaged plant area). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/plant)		Untreated control (% damaged plant area)		% control with MCW-2222			
						0.225 L/ha (75 94 % target rate)		0.30 L/ha (125 % target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
6-10 DAA									
MAR	3	-	-	20.8	13.6-29	73	45-90	77	49-93
N-E	1	-	-	6.4	-	63	-	86	-
C-EU	4	-	-	17.2	6.4-28.8	70	45-90	80	49-93
14-16 DAA									
MAR	3	-	-	21.9	13.1-31	59	22-85	71	41-90
N-E	1	-	-	13.3	-	39	-	75	-
C-EU	4	-	-	19.7	13.1-31.3	54	22-85	72	41-90
170-202 DAA									
MAR	2	6.5 (n=1)	-	33.8 (n=1)	-	88 (n=2)	88-88	94	91-97 (n=2)

Numbers in () = number of trials when less than the total number for this data row

**Table 3.2-59: Minimum effective dose. Efficacy of MCW-2222 (autumn application) at ~~67 83, and 83 104% and 125 %~~ dose rates on oilseed rape against PHYESP in the Maritime EPPO zone (PESSEV; damaged plant area (% or bites)). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of bites/plant)		Untreated control (% damaged plant area)		% control with MCW-2222					
						0.20 L/ha ( <del>67</del> 83 % target rate)		0.25 L/ha ( <del>83</del> 104 % target rate)		0.30 L/ha (125 % target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
6-10 DAA											
MAR	4	5.9 (n=3)	2.8-11.6	6.1 (n=1)	-	47	43-56	51	37-61	54	45-60
14-16 DAA											
MAR	4	4.8 (n=2)	2.9-6.7	8.4 (n=2)	4.9-12	52	22-87	<del>55</del> 54	27-86	<del>51</del> 55	30-91

Numbers in () = number of trials when less than the total number for this data row

**Table 3.2-60: Minimum effective dose. Efficacy of MCW-2222 (autumn application) at proposed label range (94 – 104 % dose rates) and 50 – 83 42 – 125 % dose rates on oilseed rape against PSYCH in the Maritime EPPO zone (PESSEV; total larvae (no./plant) or damaged plant area (%)). For single trial data please refer to Appendix 4 of the BAD.**

Days after application	EPPO zone	No. of trials	Untreated control (no. of larvae/ plant)		Untreated control (damaged plant area/ plot in %)		% control with MCW-2222									
							0.10 L/ha (33-42 % rate)		0.15 L/ha (50-62.5 % rate)		0.20 L/ha (67-83 % rate)		0.225-0.25 L/ha (75-83 94-104% rate)		0.30 L/ha (target 125 % rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
Maritime EPPO zone (7 trials)																
3 DAA	MAR	3	-	-	22.0	9.4-31.3	29	8-60	45	12-65	48	14-74	-	-	51	19-74
7-10 DAA	MAR	3	-	-	25.9	16.8-42.1	51	43-64	56	39-74	60	42-79	-	-	63	42-82
11-18 DAA	MAR	5	14.3 (n=1)	-	26.6 (n=4)	8.0-50.5	42	21-59	51	29-68	57 55	34-76	-	-	68 62	38-100
19-65 DAA	MAR	3	7.7	2.3-13.0	-	-	50	40-68	52	33-62	58	50-67	-	-	66 64	59-74
126-189 DAA	MAR	5	3.1	1.4-8.3	-	-	54	48-63	52	30-86	56	35-94	-	-	77	56-99
Maritime EPPO zone (4 trials)																
11-18 DAA	MAR	1	3.2		-		-	-	-	-	78	-	81*	-	85	-
19-65 DAA	MAR	2	4.3	3.5-5.2	-	-	-	-	-	-	61	59-63	62	62-62	63	50-75
126-189 DAA	MAR	3	10.8	3.6-16.0	-	-	-	-	-	-	60	49-69	61	54-71	68	56-76

Numbers in () = number of trials when less than the total number for this data row

\* 0.25 L/ha



**Table 3.2-61: Minimum effective dose. Efficacy of MCW-2222 (autumn application) at proposed label rate and 75-83 % 94 – 104, and 125 % dose rate on oilseed rape against PSYICH in the Maritime and the North-Eastern EPPO zones (PESSEV; total larvae (no./plant) or damaged plant area (%)). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/plant)		Untreated control (damaged plant area/ plot in %)		% control with MCW-2222					
		mean	min-max	mean	min-max	0.225-0.25 L/ha (75-83 94-104% rate)		0.30 L/ha (target 125 % rate)			
						mean	min-max	mean	min-max		
7-10 DAA											
MAR	4	-	-	7.5	3.8-11.3	60	62	39-74	59	30-80	
N-E	3	-	-	2.6	1.8-3.1	56		33-80	56	65	33-86
C-EU	7	-	-	5.4	1.8-11.3	58		33-80	58		30-86
11-18 DAA											
MAR	5	-	-	7.1	3.0-9.5	50		18-67	60		34-82
N-E	4	-	-	10.1	1.3-33.0	59	55	33-83	61	64	33-88
C-EU	9	-	-	8.4	1.3-33.0	54		18-83	61		33-88
19-65 DAA											
MAR	3	10.0	0.7-21.5	-	-	62		39-85	69		43-83
N-E	4	4.3	0.2-8.0	-	-	81		67-100	91		68-100
C-EU	7	6.7	0.2-21.5	-	-	73		39-100	81		43-100
126-189 DAA											
MAR	4	26.4	1.0-79.3	-	-	51		18-89	66		36-89
N-E	3	4.7	1.0-12.0	-	-	89		82-100	98		96-100
						75		82-91	87		62-100
C-EU	7	17.1	1.0-26.8	-	-	67		18-100	80		36-100

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate for each use is superior to the reduced application rates. Therefore, the minimum effective dose is justified, and the GAP uses against *Ceutorhynchus assimilis*, *Ceutorhynchus napi*, *Ceutorhynchus quadridens*, *Brassicogethes aeneus*, *Ceutorhynchus picitarsis*, *Phyllotreta* spp., and *Psylliodes chrysocephala* in winter oilseed rape as summarised above and stated in Part B, Section 0 were proven by the data.

### 3.2.2.2.4 (2d) Beetles and weevils in spring oilseed rape

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring oilseed rape (spring application)	CEUTAS, CEUTNA, CEUTQU	Mar-Jul BBCH 31-69 BBCH 61-71 BBCH 31-59 BBCH 31-59	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60

### Conclusion

A sufficient number of trials was carried out in the major crop winter oilseed rape (please refer to 2c above). As the growth characteristics, application timings and target pests enable extrapolation from winter to spring oilseed rape, the proposed label rate of MCW-2222 is also considered to be appropriate for the control of aphids in spring oilseed rape.

For results after spring application in winter oilseed rape please refer to Table 3.2-50 and Table 3.2-51 for control of *Ceutorhynchus obstrictus*, Table 3.2-52 and Table 3.2-53 for *Ceutorhynchus napi*, Table 3.2-54 and Table 3.2-55 for *Ceutorhynchus pallidactylus* and Table 3.2-56 for *Brassicogethes aeneus*.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.3 (3) Codling moth (biting) in apple

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L product /ha	g ai/ha	L/ha LWA
Apple	CARPPO ( <i>Cydia pomonella</i> )	Jun-Aug BBCH 71-PHI	Mar, N-E	1	0.4 0.3	80 60	0.25 0.1875
			S-E	1	0.2-0.4 0.3	40-80 60	0.125-0.25 0.1875

### Material and methods

An overview of all efficacy and dose justification trials against *Cydia pomonella* in apple and a short description of the trial methodology is presented in Table 3.2-190 and Table 3.2-193 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-62: Summary of dose justification trials (CARPPO in apple) based on application rates in L/ha**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year			Total	Total by zone	Total by pest
				2013	2014	2021			
CARPPO	Apple	MAR	CZ	-	7	2	9	9	22
		N-E	PL	4	-	2	6	6	
		RQ	RO	1	-	-	1	1	
		S-E	SK	2	-	2	4	7	
			HU	2	1	-	3		

**Table 3.2-63: Summary of dose justification trials (CARPPO in apple) based on application rates in L/ha tLWA (leaf wall area)**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year				Total	Total by zone
				2013	2014	2021	2022		
CARPPO	Apple	MAR	CZ	-	5	-	2**	7	19
			DE	-	-	-	2**	2	
		N-E	PL	4	-	2*	-	6	
		RQ	RO	1	-	-	-	1	
		S-E	SK	2	-	-	-	2	
			HU	1	1	-	-	2	

\* These trials used an original application rate in 0.25 L/ha LWA, in the other trials the application rates were calculated from the application rates in L/ha.

\*\* These trials used an original application rate in 0.188 and 0.25 L/ha LWA, in the other trials the application rates were calculated from the application rates in L/ha.

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.

**Table 3.2-64: Overview of application rates against CARPPO in apple (bold letters = target rates)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate	
			product/ha	active ingredient/ha	MAR, N-E	S-E
Apple	CARPPO	MCW-2222	0.125 L	25 g acetamiprid	25 42	63
		MCW-2222	<b>0.20 L</b>	40 g acetamiprid	50 67	<b>100</b>
		MCW-2222	<b>0.25 L</b>	50 g acetamiprid	62.5 83	<b>100</b>
		MCW-2222	0.35 L	70 g acetamiprid	85 117	100 117
		MCW-2222	0.40 L	80 g acetamiprid	100 133	100 133

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), efficacy studies in 2022 have been conducted with L/ha tLWA rates in addition to the ha rates. Only the 2022 trials were conducted with original L/ha tLWA rates, whereas for the older trials the LWA rates have been recalculated based on the canopy height and the row distance. Please note, that these calculated ha tLWA application rates were presented in ranges of 60-147% of ~~with a 10 % deviation from~~ the minimum and maximum target rates (refer to the following table).

**Table 3.2-65: Overview of application rates in L/ha LWA against CARPPO in apple (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate	
			product/ha LWA	active ingredient/ha LWA	MAR, N-E	S-E
Apple	CARPPO	MCW-2222	0.1125 <sup>(1)</sup> - <b>0.1875<sup>(3)</sup></b> L	23-38 g acetamiprid	45-75 <b>60-100</b>	90- <b>100</b>
			<b>0.1875<sup>(3)</sup></b> -0.275 <sup>(2)</sup> L	38-55 g acetamiprid	75-110 <b>100-147</b>	<b>100-110</b> 147

(1) this value (0.1125 L/ha LWA) is the minimum target rate (0.125 L/ha LWA) minus 10 percent.

(2) this value (0.275 L/ha LWA) is the maximum target rate (~~0.25~~ 0.1875 L/ha LWA) plus ~~10~~ 47 percent.

(3) this cut off value (0.1875 L/ha LWA) is the mean value of the minimum and ~~old~~ maximum target rates.

## Results

Across the 23 22 dose justification trials conducted in apple it was clearly demonstrated that the target dose of MCW-2222 against CARPPO (i.e., 0.2-0.4 0.3 L/ha) provides superior control compared to 63 % of the minimum target rate (i.e., 0.125 L/ha). A summary of the dose-response results is provided in the following tables.

**Table 3.2-66: Minimum effective dose. Efficacy of MCW-2222 at 0.125, 0.2, 0.25, and 0.4 L/ha (25 42 %, 50-67 %, 62.5 83 %, and 100-133 % of the target rate for Maritime and North-East EPPO zone and 63 % and 100 133 % of the target rate for South-East EPPO zone) in apple against CARPPO (PESINC on dropped and harvested fruits). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (% PESINC on fruits)		% control with MCW-2222							
				0.125 L/ha (25 42% of target rate for MAR, N-E, 63 % of target rate for S-E)		0.2 L/ha (50 67% of target rate for MAR, N-E, target rate for S-E)		0.25 L/ha (62.5 83% of target rate for MAR, N-E, target rate for S-E)		0.4 L/ha (133% of target rate for all EPPO zones)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
11-16 DAA (dropped fruits)											
MAR	7	45.0	0.5-73.5	65	26-100	74	38-100	87	49-100	93	60-100
20-24 DAA (dropped fruits)											
MAR	7	53.1	0.5-85.3	56	0-92	81	42-100	89	50-100	94	63-100
27-30 DAA (dropped fruits)											
MAR	5	48.8	0.5-77.0	29	0-48	61	23-100	84	41-100	90	53-100
30-38 DAA (dropped fruits)											
MAR	7	50.4	0.3-89.0	76	49-100	88	75-100	97	86-100	98	88-100
N-E	4	7.0	2.0-20.7	65	44-73	81	76-88	90	82-94	97	91-100
C-EU	11	34.7	0.3-89.0	72	44-100	85	75-100	94	82-100	97	88-100
38-46 DAA (dropped fruits)											
MAR	5	64.9	0.8-100	43	13-100	45	4-100	63	4-100	70	12-100
48-54 DAA (dropped fruits)											
MAR	3	39.3	0.3-61.3	19	0-39	100	100	93	78-100	100	100
20-56 DAA (harvested fruits)											
MAR	2	4.0	2.5-5.5	70	68-73	96	95-97	100	100	100	100
38 DAB-18 DAJ (harvested fruits)*											
MAR	7	18.8	9.0-28.3	77	44-97	92	83-100	96	88-99	97	83-100
S-E	3	24.9	0-74.6	43	0-100	63	40-100	87	60-100	90	69-100
C-EU	10	20.6	0-74.6	67	0-100	83	40-100	93	60-100	95	69-100

\*Trials with 2, 4, 9, and 10 applications were used for the efficacy assessment on the harvested fruits.

**Table 3.2-67: Minimum effective dose. Efficacy of MCW-2222 at 0.2, 0.35, and 0.4 L/ha (50 67%, 87.5 117%, and 100 133% of the target rate for Maritime and North-East EPPO zone and 100, 117 and 133 % of the target rates for South-East EPPO zone) in apple against CARPPO (PESINC on dropped and harvested fruits). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (% PESINC on fruits)		% control with MCW-2222					
				0.2 L/ha (50-67% of target rate for MAR, N-E, target rate S-E)		0.35 L/ha (87-117% of target rate for MAR, N-E, target rate and S-E)		0.4 L/ha (133% of target rate for all EPPO zones)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
11-16 DAA (dropped fruits)									
MAR	1	12.3	-	79	-	82	-	89	-
N-E	1	21.3	-	12	-	71	-	100	-
S-E	2	48.3	45.8-50.7	59	34-83	60	45-75	55	26-83
C-EU	4	32.5	12.3-50.7	52	12-83	68	45-82	74	26-100
20-24 DAA (dropped fruits)									
MAR	1	45.5	-	44	-	84	-	84	-
N-E	1	41.7	-	70	-	100	-	100	-
C-EU	2	43.6	41.7-45.5	57	44-70	92	84-100	92	84-100
27-30 DAA (dropped fruits)									
MAR	1	91.3	-	5	-	40	-	100	-
N-E	1	20.8	-	40	-	100	-	100	-
C-EU	2	56.0	20.8-91.3	23	5-40	70	40-100	100	100
30-38 DAA (dropped fruits)									
MAR	1	73.3	-	23	-	72	-	100	-
N-E	1	21.3	-	100	-	100	-	100	-
C-EU	2	47.3	21.3-73.3	61	23-100	86	72-100	100	100
38-46 DAA (dropped fruits)									
MAR	1	74.8	-	25	-	76	-	90	-
N-E	1	12.5	-	0	-	100	-	100	-
C-EU	2	43.6	12.5-74.8	13	0-25	88	76-100	95	90-100
48-54 DAA (dropped fruits)									
MAR	1	61.5	-	15	-	81	-	81	-
N-E	1	16.7	-	25	-	100	-	100	-
C-EU	2	39.1	16.7-61.5	20	15-25	90	81-100	91	81-100
20-56 DAA (harvested fruits)									
MAR	1	28.5*		76	-	96	-	98	-
N-E	1	6.1	-	42	-	99	-	100	-
C-EU	2	6.1 (n=1)	-	59	42-76	97	96-99	99	98-100
59 DAB-80 DAD (harvested fruits)**									
MAR	2	13.7	10-17.3	58	46-71	84	70-97	83	67-99
N-E	1	4.1	-	55	-	79	-	91	-
S-E	2	12.3	10.2-14.4	69	60-77	80	72-87	89	88-90
C-EU	5	11.2	4.1-17.3	62	46-77	81	70-97	87	67-99

\*no. of fruits damaged by insects/300 fruits

\*\* Trials with 2, 3 and 4 applications were used for the efficacy assessment on the harvested fruits.

**Table 3.2-68:** Minimum effective dose. Efficacy of MCW-2222 at 0.125, 0.2, and 0.4 L/ha (63 %, and 100 and 133% of the target rate for South-East EPPO zone) in apple against CARPPO (PESINC on dropped and harvested fruits). For single trial data please refer to Appendix 4 of the BAD.

EPPO zone	No. of trials	Untreated control (% PESINC on fruits)		% control with MCW-2222					
				0.125 L/ha (63 % of target rate)		0.2 L/ha (min target rate)		0.4 L/ha ( 133% of target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
11-16 DAA (dropped fruits)									
S-E	2	1.0	0.9-1.2	88	87-88	100	100	100	100
48-54 DAA (dropped fruits)									
S-E	2	11.0	9.9-12.0	72	70-75	96	96	97	97
60-68 DAB (harvested fruits)*									
S-E	2	66.2	-	66	60-71	93	92-94	94	93-96

\* Trials with 2 applications were used for the efficacy assessment on the harvested fruits.

**Table 3.2-69:** Minimum effective dose. Efficacy of MCW-2222 at two different LWA rates (one target rate and one reduced rate for Maritime and North-East EPPO zone and for South-East EPPO zone max. 10% deviation from the target range of 0.125-0.25 L/ha LWA) (one target rate and one increased rate for Maritime and North-East EPPO zone (target rate 0.1875L/ha LWA) and for South-East EPPO zone (target range of 0.125-1875 L/ha LWA) in apple against CARPPO (PESINC on dropped and harvested fruits). For single trial data please refer to Appendix 4 of the BAD.

EPPO zone	No. of tri- als	Untreated control CARPPO (damaged fruits (no./ plot))		Untreated control CARPPO (PESINC on dropped fruits %)		% control with MCW-2222			
						0.125 L/ha LWA (0.1125-0.1875 L/ha LWA) (45-75 60-100% of target rate for MAR and NE, 90- 100 % of target rate for S- E)		0.25 L/ha LWA (0.1875-0.275 L/ha LWA) (75-100 147% of target rate for MAR, NE, and 100-110 % of target rate for S-E)	
		mean	min- max	mean	min-max	mean	min-max	mean	min-max
11-16 DAA (dropped fruits)									
MAR	5			46.8	0.5-73.5	72	26-100	81	49-100
N-E	1			21.3	-	12	-	71	-
S-E	2			1.0	0.9-1.2	88	87-88	100	100
C-EU	8			32.1	0.5-73.5	68	12-100	84	49-100
20-24 DAA (dropped fruits)									
MAR	6			52.4	0.5-85.3	52	0-94	77	22-100
N-E	1			41.7	-	70	-	85	-
C-EU	7			50.9	0.5-85.3	54	0-94	78	22-100
30-38 DAA (dropped fruits)									
MAR	6			49.5	0.3-89.0	83	55-100	89	43-100
N-E	5			9.9	2.0-21.3	90	76-100	95	82-100
C-EU	11			31.5	0.3-89.0	86	55-100	92	43-100
20-56 DAA (harvested fruits)									
MAR	2			7.2	5.5-8.9	81	68-95	93	86-100
N-E	1			6.1	-	43	-	100	-
C-EU	3			6.8	5.5-8.9	68	43-95	95	73-100
52 DAB – 14 DAI (harvested fruits)*									
MAR	9			16.3	1.4-28.3	79	44-97	93	76-100
N-E	1			4.1	-	55	-	89	-
S-E	4	3.05 (n=2)	2.3-3.8	0.0 (n=2)	0.0-0.1	58	0-100	96	92-100

C-EU	14	3.05 (n=2)	2.3-3.8	12.6 (n=12)	0-28.3	<b>71</b>	0-100	<b>94</b>	59-100
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\* Trials with 2, 3, 4, 6, 9 applications were used for the efficacy assessment on the harvested fruits.

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates. Therefore, the minimum effective dose is justified and the GAP use against *Cydia pomonella* as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.2.4 (4) European corn borer in maize

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	PYRUNU	Jun-Aug BBCH 51-75	S-E	1	0.20-0.30	40-60

#### Material and methods

An overview of all efficacy and dose justification trials against European corn borer in maize and a short description of the trial methodology is presented in table Table 3.2-200 and table Table 3.2-202 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-70: Summary of dose justification trials (European corn borer in maize)**

Pest	Crop	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone
				2015	2022		
<b>PYRUNU</b>	Maize	S-E	HU	2	-	<b>2</b>	<b>7</b>
			RO	3	1	<b>4</b>	
			SK	-	1	<b>1</b>	

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and one lower rate. Please refer to the following table for details on the application rates.

**Table 3.2-71: Overview of application rates against European corn borer in maize (bold letters = target rate)**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate
			product/ha	active ingredient/ha		
Maize	PYRUNU	MCW-2222	0.15 L	30 g	acetamiprid	83
			0.20 L	36 g	acetamiprid	100
			0.30 L	40 g	acetamiprid	100

#### Results

Across the 7 dose justification trials conducted in maize it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 75 % of the lowest target rate. A summary of the dose-response results is provided in the following tables.

**Table 3.2-72: Minimum effective dose. Efficacy of MCW-2222 at proposed label rates and 75 % dose rate in maize against PYRUNU (PESSEV; no. of larvae or broken stems/ plant) in the South-East EPPO zone. For single trial data please refer to Appendix 4 of the BAD.**

South-East EPPO zone. For single trial data please refer to Appendix 4 of the DAD.									
South-East EPPO zone (part of crop assessed)	No. of trials	Untreated control		% control with MCW-2222					
				0.15% L/ha (75 % rate)		0.20 L/ha (target rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
14-38 DAA									
below husk	7	15.0 <sup>1</sup>	0.8-71.8	42	7-83	57	28-96	75	51-98
above husk	7	5.3 <sup>1</sup>	0.8-21.0	54	23-100	72	53-100	82	63-100



husk itself	7	6.9 <sup>1</sup>	0.3-26.5	<b>41</b>	12-71	<b>63</b>	28-100	<b>78</b>	48-100
<b>28-82 DAA</b>									
below husk	7	2.1 <sup>2</sup>	1.5-3.5	<b>39</b>	0-100	<b>66</b>	13-100	<b>83</b>	38-100
above husk	6	3.4 <sup>2</sup>	2.0-6.5	<b>52</b>	21-100	<b>71</b>	44-100	<b>89</b>	65-100
husk itself	4	4.1 <sup>2</sup>	2.8-5.5	<b>42</b>	35-46	<b>65</b>	60-71	<b>84</b>	82-88

<sup>1</sup> no. of larvae/ plant was assessed in the first assessment

<sup>2</sup> no. of broken stem/ plant was assessed in the second assessment

**Table 3.2-73: Minimum effective dose. Efficacy of MCW-2222 at proposed label rates and 75 % dose rate in maize against PYRUNU (PESSEV; no. of larvae or broken stems/ 20 plants) in the South-East EPPO zone. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control		% control with MCW-2222					
				0.15% L/ha (75 % rate)		0.20 L/ha (target rate)		0.30 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
14-38 DAA									
S-E	7	60.5 <sup>1</sup>	19.8-99.5	46	20-80	64	45-97	77	56-98
28-82 DAA									
S-E	7	8.7 <sup>2</sup>	3.5-10.8	50	28-91	69	49-100	85	67-100

<sup>1</sup> no. of larvae/ 20 plants was assessed in the first assessment

<sup>2</sup> no. of broken stem/ 20 plants was assessed in the second assessment

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rates (target range) is superior to the reduced application rate of 75 %. Thus, the GAP use as summarised above and stated in Part B, Section 0 is considered to be appropriate for the control of European corn borer in maize.

### 3.2.2.5 (5) Virus vectors (aphids)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter cereals (wheat, barley, triticale, rye, spelt)	IAPHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	Aug-Nov BBCH 12-29	Mar, N-E, S-E	1	0.15	30
Spring cereals (wheat, durum wheat, barley, triticale, oat)		Mar-Jun BBCH 12-29	Mar, N-E	1	0.175	35
Winter oilseed rape	Aphid vectors of Turnip Yellow Virus - MYZUPE	Aug-Nov BBCH 11-19	Mar	1	0.20	40

#### 3.2.2.5.1 (5a) Virus vectors in winter cereals (autumn application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter cereals (wheat, spelt, barley, triticale, rye)	IAPHIF, e.g. RHOPPA, MACSAV (BYDV, WYLV)	Aug-Nov BBCH 12-29	Mar, N-E, S-E	1	0.15	30

## Material and methods

An overview of all efficacy and dose justification trials against virus vectors in winter cereals (autumn application) and a short description of the trial methodology is presented in table Table 3.2-205 and table

Table 3.2-207 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-74: Summary of dose justification trials (aphids as virus vectors in winter cereals)**

Pest	Winter cereal	EPPO zone	Country	No. of trials								Total by zone	Total by pest
				Year						Total			
				2013	2014	2015	2016	2020	2021				
RHOPPA	Winter wheat	MAR	CZ	-	-	-	-	1	1	2	4	20	
			UK	-	-	1	1	-	-	2			
		N-E	LT	-	-	-	-	-	1	1	3		
			PL	-	-	-	-	-	2	2			
	Winter barley	MAR	CZ	-	-	-	-	-	1	1	7		
			DE	-	-	1	-	1	2	4			
			FR	-	1	-	-	-	-	1			
			UK	-	-	-	-	1	-	1			
		N-E	PL	-	-	-	-	-	2	2	5		
			LT	-	-	-	-	1	2	3			
Winter oat	MAR	UK	-	-	1	-	-	-	1	1			
MACSAV	Winter barley	MAR	CZ	-	-	-	-	1	-	1	8	8	
			DE	1	1	1	2	-	-	5			
			NL	-	-	-	-	-	1	1			
			UK	-	-	1	-	-	-	1			
			Total	1	2	5	3	5	12	28	-		

**Table 3.2-75: Overview of application rates against virus vectors (aphids) in winter cereals (bold letters = target rates)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate
			product/ha	active ingredient/ha	
Winter cereals	MACSAV, RHOPPA	MCW-2222	0.07 L	14 g acetamiprid	46
		MCW-2222	0.10 L	20 g acetamiprid	66
		MCW-2222	0.12 L	24 g acetamiprid	80
		<b>MCW-2222</b>	<b>0.15 L</b>	<b>30 g</b> acetamiprid	<b>100</b>
		MCW-2222	0.18 L	36 g acetamiprid	120
		MCW-2222	0.20 L	40 g acetamiprid	133

## Results

In all ~~29~~ **28** dose justification trials conducted in winter cereals against aphids as virus vectors it was clearly demonstrated that the autumn application of 0.15 L/ha MCW-2222 provides superior control compared to 46-80 % of the target rate.

**Table 3.2-76: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 75 % dose rate on winter cereals (autumn application) against RHOPPA (PESSEV; no. of wingless aphids/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO Zone	No. of trials	Untreated control PESSEV (no. of wingless aphids/ plant)		% control with MCW-2222			
				0.113 L/ha (75 % rate)		0.15 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
1-3 DAA							
MAR (HORVW)	5 3	5.8 5.4	0.7-12.0 1.1-10.2	77 72	56-86 84	89 83	66-98 93
MAR (TRZAW)	2	6.4	0.7-12.0	86	85-86	98	98-98
N-E (HORVW)	4 2	1.5 1.4	1.2-2.1 1.42-1.43	56 49	38-76 60	70 67	56-87 77
N-E (TRZAW)	2	1.6	1.2-2.09	62	48-76	74	61-87
7-10 11 DAA							
MAR (HORVW)	5 3	6.5 7.5	0.2 1.2-17.0	71 80	53 65-90	89 92	83 88-94
MAR (TRZAW)	2	4.9	0.2-9.5	59	53-65	85	83-86
N-E (HORVW)	4 2	1.8	1.4-2.4 2.1	67 74	58-77 89	79 82	68-86 96
N-E (TRZAW)	2	1.9	1.4-2.4	73	68-77	85	83-86

**Table 3.2-77: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 75 % dose rate on winter cereals (autumn) against RHOPPA (PESSEV; no. of winged aphids/ plant). For single trial data please refer to Appendix 4 of the BAD.**

Single trial data please refer to Appendix 4 of the DAA.

EPPO Zone	No. of trials	Untreated control PESSEV (no. of winged aphids/ plant)		% control with MCW-2222			
				0.113 L/ha (75 % rate)		0.15 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
1-3 DAA							
MAR (HORVW)	4 2	9.3 1.6	0.8-20.5 0.4-2.7	74 66	56-85 75	85 70	56-100 84
MAR (TRZAW)	2	1.8	0.3-3.3	83	81-85	100	100-100
N-E (HORVW)	4 2	0.5	0.3-0.8 0.4	56 52	32-71 72	70 71	56-86
N-E (TRZAW)	2	0.8	0.7-0.8	59	52-66	70	60-79
7-10 DAA							
MAR (HORVW)	4 2	1.6 2.1	0.1 0.3-3.8	66 68	47-89	82 80	76-85 84
MAR (TRZAW)	2	1.1	0.1-2.0	64	53-75	84	82-85
N-E (HORVW)	4 2	0.6 0.4	0.3-0.9 0.4	68 69	54-83	76	66-85
N-E (TRZAW)	2	0.8	0.7-0.9	67	65-68	78	76-79

**Table 3.2-78: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 47-80 % dose rate on winter cereals (autumn application) against RHOPPA and MACSAV (PESSEV; no. of aphids/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO Zone	Pest	No. of tri- als	Untreated control PESSEV (no. of aphids/ plant)		% control with MCW-2222									
					0.07 L/ha (46 %rate)		0.1 L/ha (67 % rate)		0.113 L/ha (75 % rate)		0.12 L/ha (80 %rate)		0.15 L/ha (target rate)	
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
1-3 DAA														
MAR (HORVW)	RHOPPA	1	2.4	-			-	-	45	-	-	-	40	
	MACSAV	1	3.8	-	77	-	85	-	-	-	-	-	87	-
	MACSAV	6	3.5	0.3-16.3	-	-	80	54-96	-	-	-	-	86	48-100
N-E (HORVW)	RHOPPA	4 2	0.24 0.13	0.1-0.4 0.16	-	-	70 80	56 75-84	-	-	71 92	24 90-94	54 56	39-66 52-59
N-E (TRZAW)	RHOPPA	2	0.35	0.3-0.4	-	-	61	56-65	-	-	51	24-78	53	39-66
3-10 DAA														
MAR (HORVW)	RHOPPA	1	0.9	-	-	-	-	-	66	-	-	-	91	-
	MACSAV	1	5.6	-	86	-	93	-	-	-	-	-	96	-
	MACSAV	5	1.6 1.5	0.2-3.5 3.4	-	-	81 82	15-100	-	-	-	-	91	59-100
N-E (HORVW)	RHOPPA	4 2	0.4 0.09	0.07-1.5 0.11	-	-	78 70	63-100 76	-	-	71 76	42-95 68-83	82 72	66-100 77
N-E (TRZAW)	RHOPPA	2	0.8	0.1-1.5	-	-	87	74-100	-	-	68	42-94	93	86-100
7-15 DAA														
MAR (HORVW)	MACSAV	1	9.4	-	96	-	99	-	-	-	-	-	100	-
	MACSAV	6 5	1.2 2.6	0.2-3.4 9.5	-	-	90 88	66-100	-	-	-	-	94 93	76 81-100
N-E (HORVW)	RHOPPA	3 1	1.3 3.9	0.04-3.9	-	-	70 89	50-87	-	-	50 87	12-87	63 75	50-74
NE (TRZAW)	RHOPPA	2	0.07	0.04-0.1	-	-	62	50-73	-	-	31	12-50	58	50-66

**Table 3.2-79: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 67-75 % dose rate on winter cereals (autumn application) against RHOPPA and MACSAV (virus symptom: foci area %), Maritime zone. For single trial data please refer to Appendix 4 of the BAD.**

Pests in MAR EPPO zone	No. of trials	Untreated control PESSEV (foci area in %)		% control with MCW-2222					
				0.1 L/ha (67 % rate)		0.113 L/ha (75 % rate)		0.15 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max
21- 54 DAA									
MACSAV (HORVW)	1	41.8	-	33	-	-	-	57	-
RHOPPA (HORVW)	4	<del>48.7</del> 18.8	4.0-57.5	-	-	75	39-100	<del>75</del> 76	37-100
154-174 DAA									
RHOPPA (HORVW)	<del>3</del> 1	<del>42.5</del> 19.6	<del>7.3-19.6</del>	58	<del>50-66</del>	-	-	<del>65</del> 72	<del>55-72</del>
RHOPPA (HORVW)	3	<del>6.6</del> 8.5	1.3-14.5	-	-	<del>76</del> 53	<del>75</del> 31-76	<del>86</del> 73	<del>75</del> 38-97
RHOPPA (TRZAW)	1	7.3	-	66	-	-	-	69	-
RHOPPA (AVESW)	1	10.8	-	50	-	-	-	55	-
166-217 DAA									
MACSAV (HORVW)	1	<del>31.3</del> 6.0	-	<del>32</del> 100	-	-	-	<del>68</del> 100	-
RHOPPA (HORVW)	<del>4</del> 2	<del>9.4</del> 24.0	<del>2.5-16.6</del> 31.3	<del>60</del> 47	<del>50-65</del> 32-61	-	-	<del>68</del> 73	<del>55</del> 68-77
RHOPPA (HORVW)	<del>4</del> 3	<del>17.2</del> 21.1	4.0-46.3	-	-	<del>66</del> 55	<del>37-100</del> 75	<del>70</del> 60	<del>41-100</del> 75
RHOPPA (TRZAW)	2	5.2	2.5-7.8	65	65-65	-	-	71	70-71
RHOPPA (AVESW)	1	10.8	-	50	-	-	-	55	-

**Table 3.2-80: Minimum effective dose. Efficacy of MCW-2222 at proposed label rate and 67-75 % dose rate on winter cereals (autumn application) against RHOPPA and MACSAV (virus symptom: stunting in %), Maritime zone. For single trial data please refer to Appendix 4 of the BAD.**

Pests in MAR EPPO zone	No. of trials	Untreated control (stunting in %)		% control with MCW-2222							
				0.1 L/ha (67 % rate)		0.113 L/ha (75 % rate)		0.12 L/ha (80 % rate)		0.15 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max
154-174 DAA											
RHOPPA (HORVW)	1	12.5 19.6	7.3-19.6	58	50-66	-	-	-	-	65-72	55-72
RHOPPA (HORVW)	2	15.1	1.3-28.8	-	-	31	23-39	-	-	53	15-91
RHOPPA (TRZAW)	1	7.3	-	66	-	-	-	-	-	69	-
RHOPPA (AVESW)	1	10.8	-	50	-	-	-	-	-	55	-

<b>166-217 DAA</b>											
MACSAV	1	1.5	-	29	-	-	-	-	-	90	-
RHOPPA (HORVW)	4 <b>2</b>	9.4 13.6	2.5 10.5- 16.6	60 <b>45</b>	50 -65 29-61	-	-	-	-	68 <b>84</b>	55-70 77-90
RHOPPA (TRZAW)	2	5.2	2.5-7.8	<b>65</b>	65-65	-	-	-	-	<b>71</b>	70-71
RHOPPA (HORVW)	2	27.9	9.5-46.3	-	-	<b>30</b>	22-37	-	-	<b>45</b>	41-49
RHOPPA (HORVW)	1	2.5	-	-	-	-	-	<b>100</b>	-	<b>100</b>	-
RHOPPA (AVESW)	1	10.8	-	<b>50</b>	-	-	-	-	-	<b>55</b>	-

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate of 0.15 L/ha is in general superior to the reduced application rates comprising 46-80 % of the target rate. Thus, the GAP use as summarised above and stated in Part B, Section 0 is considered to be appropriate for the control of aphids as virus vectors in winter cereals.

### 3.2.2.5.2 (5b) Virus vectors in spring cereals (spring application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring cereals (wheat, durum wheat, barley, triticale, oat)	1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	Mar-Jun BBCH 12-29	Mar, N-E	1	0.175	35

An overview of trials against aphids as virus vectors in spring cereals (spring application) is presented in subchapter (1d) ‘Aphids in spring cereals (spring application)’. Due to the relevance for both GAP uses all trials were evaluated under the subchapter above.

**Table 3.2-81: Overview of application rates against virus vectors (aphids) in spring cereals (bold letters = target rates)**

Crop	Pest(s)	Product	Rate per treatment		% of the target rate
			product/ha	active ingredient/ha	
Spring cereals	MACSAV, RHOPPA	MCW-2222	0.12 L	24 g acetamiprid	66
		MCW-2222	0.15 L	30 g acetamiprid	83
		MCW-2222	0.18 L	36 g acetamiprid	100

The data of 7 dose justification trials conducted in spring cereals in the Maritime and North-East EPPO climatic zone demonstrated that the target dose of MCW-2222 provides superior control compared to 57, 69 and 86 % of the target rate.

For a more extensive database please also refer to subchapter (1c) ‘Aphids in winter cereals (spring application)’ above, since similar growth characteristics, application timings and target pests enable to extrapolate from winter to spring cereals. Thus, the proposed label rate of MCW-2222 for winter cereals is also considered to be appropriate for the control of aphids in spring cereals.

In conclusion, the GAP uses as summarised above and stated in Part B, Section 0 was proven by the data.

EPPO zone	No. of trials	Untreated control (no. of aphids/plant)		% control with MCW-2222			
				0.15 L/ha (75 % rate)		0.2 L/ha (target rate)	
		mean	min-max	mean	min-max	mean	min-max
<b>2-3 DAA</b>							
MAR	5	79.5	6.8-253	<b>72</b>	34-98	<b>74</b>	38-100
<b>7 DAA</b>							

MAR	5	114.5	5.2-278	93	70-100	96	81-100
<b>14 DAA</b>							
MAR	5	91.1	2.8-278	93	86-100	98	93-100
<b>21 DAA</b>							
MAR	5	68.5	0.1-278	93	84-100	98	91-100

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rates is superior to the reduced application rate of 75 %. Thus, the GAP uses as summarised above and stated in Part B, Section 0 were proven by the data. The proposed label rate of MCW-2222 is considered to be appropriate for the control of virus vectors (aphids) in winter oilseed rape.

### 3.2.2.6 (6) Brassica pod midge

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter oilseed rape	DASYBR	Mar-Jun BBCH 31-71 May-Jun BBCH 61-71	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60
Spring oilseed rape	DASYBR	May-Jun BBCH 61-71	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60

## Material and methods

An overview of all efficacy and dose justification trials against brassica pod midge in oilseed rape and a short description of the trial methodology is presented in Table 3.2-220 and Table 3.2-222 in chapter 3.2.3 Efficacy tests (KCP 6.2). For detailed information please refer to the BAD and to Appendix 2 (experimental details), Appendix 3 (maps with trial locations) and Appendix 4 (detailed trial results) thereof. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years:

**Table 3.2-85: Summary of dose justification trials (Brassica pod midge in oilseed rape)**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year			Total	Total by zone	Total by pest
				2014	2015	2020			
DASYBR	Winter oilseed rape	MAR	CZ	2	3	-	5	7	25
			DE	1	-	-	1		
			SE	-	-	1	1		
		N-E	PL	4	3	-	7	9	
			LV	-	-	2	2		
		S-E	HU	-	5	-	5	9	
			SK	2	2	-	4		
		Total:	9	13	3	25			

The test product MCW-2222 was applied according to the proposed GAP use with the target rate and lower rates. Please refer to the following table for details on the application rates.



**Table 3.2-86: Overview of application rates against brassica pod midge in oilseed rape**

Crop	Pest(s)	Product	Rate per treatment			% of the target rate	
			product/ha	active ingredient/ha		MAR, N-E	S-E
Oilseed rape	DASYBR	MCW-2222	0.12 L	24 g	acetamiprid	40	67
			0.15 L	30 g	acetamiprid	50	83
			<b>0.18 L*</b>	<b>36 g</b>	<b>acetamiprid</b>	60*	<b>100*</b>
			<b>0.20 L</b>	<b>40 g</b>	<b>acetamiprid</b>	67	<b>100</b>
			<b>0.25 L</b>	<b>50 g</b>	<b>acetamiprid</b>	83	<b>100</b>
			<b>0.30 L</b>	<b>60 g</b>	<b>acetamiprid</b>	<b>100</b>	<b>100</b>

\* while the 0.18 L/ha dose rate was not tested in DASYBR trials, it has been used in 4 trials in the OSR, testing efficacy against stem weevils and pollen beetle (3 trials in the SE EPPO zone and 1 trial in the Maritime zone).

## Results

Across the 25 dose justification trials conducted in oilseed rape (16 trials with more than one pest) it was clearly demonstrated that the target dose of MCW-2222 provides superior control compared to 40-83 % of the target rate. A summary of the dose-response results is provided in the following tables.

**Table 3.2-87: Minimum effective dose. Efficacy of MCW-2222 at 50 %, 67 %, and 83 % dose (0.15, 0.2, and 0.25 L/ha) and target rate (0.3 L/ha) on oilseed rape against DASYBR (PESSEV; no. of larvae or insects/ plant, shoot or pod). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/ plant or pod)		Untreated control (no. of insects/ plant or shoot)		% control with MCW-2222							
		mean	min-max	mean	min-max	0.15 L/ha (50 % rate)		0.20 L/ha (67 % rate)		0.25 L/ha (83 % rate)		0.30 L/ha (target rate)	
						mean	min-max	mean	min-max	mean	min-max	mean	min-max
2-6 DAA													
MAR	5	12.5 (n=1)	-	<del>16.1</del> <b>13.6</b> (n=4)	<del>7.5-36.8</del> <b>3.3-36.8</b> (n=5)	<b>72</b>	0-93	<del>86</del> <b>83</b>	<del>50-98</del> <b>44-98</b>	<b>98</b>	97-100	<b>99</b>	97-100
N-E	6	-	-	6.0	0.1-17	<b>80</b>	50-100	<b>86</b>	63-100	<b>91</b>	67-100	<b>92</b>	67-100
S-E	3	-	-	2.8	0.1-5.8	<b>55</b>	20-75	<del>75</del> <b>77</b> (n=4)	<del>67-88</del> <b>67-92</b>	<del>83</del> <b>79</b>	75-88	<b>91</b>	82-100
C-EU	14	12.5 (n=1)	-	8.4 (n=13)	0.1-36.8	<b>72</b>	0-100	<b>84</b>	50-100	<b>91</b>	67-100	<b>95</b>	67-100
10-18 DAA													
MAR	3	<del>1023</del> <b>1024</b>	<del>11-3043</del> <b>15-3043</b>	-	-	<b>80</b>	59-85	<b>88</b>	77-90	<b>94</b>	<del>86-95</del> <b>86-100</b>	<b>98</b>	93-100
N-E	7	-	-	10.3	0.8-24.8	<b>83</b>	74-91	<b>87</b>	78-94	<b>92</b>	83-99	<b>94</b>	88-99
S-E	6	<del>37.1</del> (n=3) <b>4.75</b> (n=1)	<del>4.8-6.3</del> <b>-</b>	<del>4.6</del> (n=3) <b>5.3</b> (n=5)	0.1-12	<del>55</del> <b>53</b>	23-67	<b>67</b>	54-81	<b>79</b>	<del>67-86</del> <b>67-91</b>	<b>83</b>	<del>78-90</del> <b>78-92</b>
C-EU	16	530.1 (n=6)	4.8-3043	8.6 (n=10)	0.1-24.8	<b>72</b>	23-95	<b>79</b>	54-97	<b>87</b>	67-100	<b>91</b>	78-100
20-30 DAA													
MAR	2	20.5	17.9-23	-	-	<b>95</b>	95-96	<b>96</b>	96-97	<b>99</b>	99-99	<b>99</b>	99-99
S-E	3	6.3 (n=23)	5.5-7.0	6.5 (n=1)	-	<b>52</b>	33-63	<b>60</b>	39-72	<b>84</b>	79-89	<b>82</b>	73-90
C-EU	5	13.4 (n=4)	5.5-23.1	6.5 (n=1)	-	<b>69</b>	33-96	<b>75</b>	39-97	<b>90</b>	79-99	<b>88</b>	73-99

## Conclusion

Data demonstrated that the efficacy of MCW-2222 at the proposed label rate is superior to the reduced application rates. A sufficient number of trials was carried out in the major crop winter oilseed rape. As the growth characteristics, application timings and target pests enable extrapolation from winter to spring oilseed rape, the proposed label rate of MCW-2222 is considered to be appropriate for the control of Brassica pod midge in winter and spring oilseed rape.

## Summary and conclusions on the minimum effective dose

According to the presented results, the proposed dose rates of MCW-2222 provided the optimum overall control and should be considered as effective against aphids and scales, beetles and weevils and all other pests, for which activity of MCW-2222 is claimed.

~~As insect pests often occur as complexes of different pathogens throughout a season and with different infestation levels, some of the GAP uses include a range of target doses.~~

The proposed rates of MCW-2222 as stated in Part B, Section 0 should be considered the minimum effective dose to deliver broad spectrum control of all target pests under a wide range of environmental conditions.

The dose justification for the GAP uses of MCW-2222 complies with the uniform principles.

### Comments of zRMS on: Minimum effective dose tests (3.2.2)

To determine the Minimum effective dose (MED) of MCW-2222, results from 494 efficacy trials carried out between 2012 and 2022 in three EPPO zones: Maritime (220 trials), North-East (135 trials) and South-East (139 trials) have been presented.

#### MABSD: APHISP

Results from 24 efficacy trials carried out in 3 EPPO zones: MAR (9), N-E (10) and S-E (5) have been presented to determine minimum effective dose of MCW-2222 in the control of aphids in apple.

A clear dose response was demonstrated comparing the target dose rate 0.125 L/ha with lower dose rates: 0.0625-0.07 L/ha; 0.09 L/ha of MCW-2222 in the control of APHIPO in MAR, N-E and S-E EPPO zone.

Considering LWA dose rate, a clear dose response was noted between a dose rate around 0.056 L/ha LWA and dose rate around 0.078 L/ha LWA in N-E EPPO zone.

**It can be concluded, that dose rate of 0.125 L/ha (0.078 L/ha LWA) can be considered as the minimum effective dose for the control of APHISP in apple.**

Dose rate range 0.09-0.125 L/ha (0.056-0.078 L/ha LWA) has been determined in GAP table for the control of APHISP in S-E EPPO zone (HU, SI, SK). **Lower dose rate is acceptable and can be recommended under conditions of low pest pressure in South-East EPPO zone (HU, SI, SK).**

#### MABSD: CARPPO

Results from 27 efficacy trials carried out in 3 EPPO zones: MAR (13), N-E (6) and S-E (8) have been presented to determine minimum effective dose of MCW-2222 in the control of CARPPO in apple.

A visible dose response was demonstrated between dose rates 0.125 L/ha, 0.2 L/ha, 0.25 L/ha and between 0.2 L/ha and 0.35 L/ha in MAR, N-E and S-E EPPO zone on dropped and harvested fruits. Considering LWA dose rate, a clear dose response was noted between dose rate around 0.125 L/ha LWA and increased dose rate around 0.25 L/ha LWA in MAR, N-E and S-E EPPO zone.

The maximum recommended dose rate of 0.3 L/ha was not directly tested in Minimum effective dose trials. As similar efficacy level was demonstrated for dose rate of 0.25 and 0.35 L/ha and the efficacy was higher than the results achieved for lower tested dose rates: 0.125 and 0.2 L/ha in most of the assessments, the claimed dose rate 0.3 L/ha can be considered as the Minimum effective dose to provide sufficient efficacy in the control of CARPPO in apple.

#### MABSD: QUADPE

Results from 17 efficacy trials carried out in 2 EPPO zones: MAR (9), S-E (8) have been presented to determine

the minimum effective dose of MCW-2222 in the control of QUADPE in apple.

The increase of efficacy with increasing dose rate was demonstrated in the trials, where MCW-2222 was tested at 0.2 L/ha; 0.25 L/ha and 0.3 L/ha in MAR EPPO zone and at 0.125 L/ha, 0.2 L/ha and 0.25 L/ha in MAR and S-E EPPO zone.

A clear dose response was also noted between dose rate around 0.125 L/ha LWA and increased dose rate around 0.25 L/ha LWA in MAR and S-E EPPO zone.

High efficacy was demonstrated for the recommended dose rate of 0.3 L/ha. The efficacy results achieved for lower dose rates 0.125 and 0.2 L/ha were visibly lower. The dose rate 0.3 L/ha can be considered as the Minimum effective dose to provide sufficient efficacy in the control of QUADPE in apple.

#### **MABSD: ERISLA**

Results from 10 efficacy trials carried out in S-E EPPO zone have been presented to determine the minimum effective dose of MCW-2222 in the control of ERISLA in apple.

A clear dose response was demonstrated comparing the dose rates 0.125 L/ha, 0.2 L/ha, 0.25 L/ha and 0.3 L/ha of MCW-2222 in the control of ERISLA in S-E EPPO zone. A visible dose response was also noted between dose rate around 0.125 L/ha LWA and increased dose rate around 0.25 L/ha LWA in S-E EPPO zone.

High efficacy was demonstrated for the recommended dose rate of 0.3 L/ha. The efficacy results achieved for lower dose rates 0.125, 0.2 and 0.25 L/ha were visibly lower. The dose rate 0.3 L/ha can be considered as the Minimum effective dose to provide sufficient efficacy in the control of QUADPE in apple.

**It can be concluded, that the dose rate of 0.3 L/ha (0.1875 L/ha LWA) can be considered as the minimum effective dose for the control of CARPPO, ERISLA and QUADPE in apple.**

Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) has been determined in GAP table for the control of CARPPO, QUADPE and ERISLA in S-E EPPO zone (HU, SI, SK). **Lower dose rate is acceptable and can be recommended under conditions of low pest pressure in South-East EPPO zone (HU, SI, SK).**

#### **SOLTU: LPTNDE, MYZUPE, MACSEU**

Results from 24 efficacy trials carried out in 3 EPPO zones: MAR (8), N-E (14) and S-E (2) have been presented to determine minimum effective dose of MCW-2222 in the control of aphids in potato. Thirty six trials carried out in MAR EPPO zone (12 trials), N-E EPPO zone (12 trials) and S-E EPPO zone (12 trials) have been submitted to determine the minimum effective dose in the control of LPTNDE in potato.

A clear dose response was seen comparing the target dose rate 0.18 L/ha with lower dose rate 0.144 L/ha of MCW-2222 in the control MYZUPE and MACSEU in MAR and N-E EPPO zone. The increase in efficacy with increasing dose was seen 2-3 DAA, 7-9 DAA and 12-14 DAA (MAR, N-E). A visible dose response in the control of MYZUPE was also noted comparing the target dose rate 0.18 L/ha with lower dose rates: 0.12 L/ha and 0.15 L/ha 7-9 DAA and 12-14 DAA in two efficacy trials conducted in N-E EPPO zone. Limited data is available for S-E EPPO zone for this use. The increase in efficacy with increasing dose was seen 1 DAA in the control of APHISP in S-E EPPO zone based on the results from 2 efficacy trials. MCW-2222 was tested in three dose rates: 0.12 L/ha, 0.15 L/ha and 0.18 L/ha (the highest recommended dose rate for S-E EPPO zone) in these trials.

A slight dose response was seen comparing the target dose rate (0.18 L/ha) with lower dose rates of MCW-222: 0.12 L/ha, 0.15 L/ha in the control of LPTNDE in all concerned EPPO zones (MAR, N-E, S-E) in a part of assessments carried out. The increase in efficacy with increasing dose was particularly seen 1 DAA (MAR, NE), 6-12 DAA the control of L1-L3 larval stages; 2-3 DAA (MAR), 6-12 DAA (MAR, N-E) in the control of larva L4; 2-3 DAA, 6-12 DAA, 11-14 DAA (S-E) in the control all larva. Based also on the efficacy trial results for MYZUPE and MACSEU, where the dose response was much more visible, the dose rate of 0.18 L/ha can be considered as MED for the whole group of target insect pests in potato.

**It can be concluded that the minimum effective dose rate of 0.18 L/ha has been justified for the control of MYZUPE, MACSEU and LPTNDE in potato.**

Dose rate range 0.12-0.18 L/ha has been determined in GAP table for the control of LPTNDE and MYZUPE in Slovenia and LPTNDE in Slovakia. **Lower dose rate is acceptable and can be recommended under conditions of low pest pressure in South-East EPPO zone (SI, SK).**

#### **TRZAW, HORVW, SECCW, TTLWI, TRZSP (spring application): 1APHIF**

A total of 25 efficacy trials (10 trials in MAR, 4 trials in NE, 11 trials in SE) have been submitted to determine minimum effective dose to control of aphids in winter cereals (winter wheat and winter triticale) in the CEU zone. All trials from the MAR and SE zone were carried out on winter wheat. In the NE zone, 2 trials were conducted on winter wheat and 2 trials on winter triticale.

In the Maritime EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved significant higher results

compared to the lower doses. Dose response was visible in most of trials and the differences was approximately 10-20% between the target dose and the lower doses. The test product at claimed dose rate presented the results of >90% in case of control of MACSAV and METODR. **Based on the submitted dataset, dose rate of 0,18 l/ha can be considered MED for control aphids in winter wheat.** Because no efficacy trials were conducted on other winter cereals in the MAR zone, cMSs are kindly asked to consider these uses on national level.

In the North-East EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved high effectiveness in all available trials. Also 9 trials from the neighbouring countries (Czech Republic and Germany) were included in the general calculation as support for Polish registration. Taking into account all results, the claimed dose rate achieved significant higher efficacy compared to the lower doses. **Based on the submitted dataset, dose rate of 0,18 l/ha can be considered MED for control of aphids in winter wheat and using extrapolation also on winter triticales.**

In the South-East EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved significant superior effectiveness compared to the lower doses. Dose response was visible in case of MACSAV control. The difference was 10-20% between the claimed dose and the lower doses. The test product at 0,18 l/ha presented the results of >90% after 6-14 DAA for MACSAV and full effectiveness in one trial with RHOPPA. **Based on the submitted dataset, dose rate of 0,18 l/ha can be considered MED for control aphids in winter wheat.** Because no efficacy trials were conducted on other winter cereals in the SE zone, cMSs are kindly asked to consider these uses on national level.

#### **TRZAS, HORVS, AVESP, TRZDS, TTLSO (spring application): 1APHIF**

A total of 7 efficacy trials (5 trials in MAR, 2 trials in NE) have been submitted to determine minimum effective dose to control of aphids in spring cereals (spring wheat and spring barley) in the CEU zone. Both trials from the NE zone were carried out on spring barley. In the MAR zone, 2 trials were conducted on spring barley and 3 trials on spring wheat. MCW-2222 at dose rate of 0,18 l/ha was tested in all trials, not 0,175 l/ha. However, taking into account slight difference, zRMS decided to accept this dataset.

In the Maritime EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved significant higher results compared to the lower doses. Dose response was visible in one trial after 14 DAA and the differences was approximately 10-20% between the target dose and the lower doses. The test product at claimed dose rate presented the results of 86-100% in case of control of MACSAV and RHOPPA. Based on the submitted dataset, dose rate of 0,175 l/ha can be considered MED for control aphids in spring cereals. However, limited number of trials has been presented for individual species: only 2 trials for spring barley and 3 trials for spring wheat. The cMSs are kindly asked to consider this use on national level.

In the North-East EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved high effectiveness in both trials in spring barley. Also 2 trials from the neighbouring countries (Czech Republic and Germany) were included in the general calculation as support for Polish registration. Taking into account all results, the claimed dose rate achieved significant higher efficacy compared to the lower doses. However, limited number of trials was available in the NE zone and an extrapolation to other spring cereals is not possible.

No efficacy trials were available in the South-East EPPO climatic zone. The cMSs are kindly asked to consider this use on national level.

#### **BEAVA: APHIFA, MYZUPE, MACSEU**

Results from 22 efficacy trials carried out in 2 EPPO zones: MAR (6) and N-E (16) have been presented to determine minimum effective dose of MCW-2222 in the control of aphids in sugar beet.

A clear dose response was seen comparing the target dose rate (0.25 L/ha) with lower dose rates of MCW-2222: 0.145-0.17 L/ha, 0.2 L/ha in the control APHIFA and MYZUPE in MAR and N-E EPPO zone. The increase in efficacy with increasing dose was particularly seen 5 DAA (NE), 7-9 DAA and 12-15 DAA (MAR, NE); and 1-3 DAB, 7-8 DAB and 13-15 DAB (NE). No data is available for S-E EPPO zone for this use, therefore the cMS are kindly advised to consider MED trial data from MAR and NE EPPO zone according to the national requirements.

**It can be concluded, that minimum effective dose rate of 0.25 L/ha has been justified for the control of APHIFA, MYZUPE in sugar beet.**

#### **Flower bulbs and flower tubers: 1APHIF**

##### **Floriculture crops, tree nursery crops, perennial nursery crops: 1APHIF**

A total of 22 efficacy trials (3 trials on lily, 2 trials on beech, 17 trials on other ornamental plants like *Chrysanthemum* sp., *Hibiscus* sp. and *Rosa* sp.) have been submitted to determine minimum effective dose to control of aphids in ornamental plants, flower bulbs and tree nursery crops in the Maritime EPPO climatic zone. According to the applicant remarks: "trials on ornamentals with the target pests *Aphis gossypii*, *Myzus persicae*,

*Macrosiphum euphorbiae*, *Aphis fabae* are evaluated together as extrapolation from trials involving the respective pests and crops to the whole group of aphids (except PHYAFA) in ornamentals is not considered to be restricted in accordance with the Dutch guidance document for extrapolation in ornamental crops”. However, zRMS decided to evaluate each uses separately.

In case of ornamentals, 12 trials were conducted under unprotected conditions and 5 greenhouse trials have been presented as support. In the unprotected trials, MCW-2222 at dose rate of 0,23 l/ha achieved the results of >90% after 6-8 DAA and 13-15 DAA. Also good effectiveness has been observed in 5 protected trials. The test product at claimed dose rate had the mean results of 75% after 1-4 DAA, 93% after 6-8 DAA and 72% after 13-15 DAA. For the option of two applications per growth season, MCW-2222 at 0,17 l/ha achieved the results of 75% after 6-7 DAB and 66% after 13-15 DAB in the field trials. The mean efficacy in the protected trials was 88% and 62%, respectively. **Based on the available dataset, the dose rate of 0,17 l/ha (2 applications per growth season) and 0,23 l/ha (once per growth season) can be considered MED for control of aphids on ornamental plants.**

In case of flower bulbs, MCW-2222 at dose rate of 0,23 l/ha achieved good control with the results of 84% after 6-8 DAA and 95% after 13-15 DAA. Also high effectiveness has been noted after two applications at dose rate of 0,17 l/ha. The test product achieved 99-100% in one trial. Taking into account that the flower bulbs growing in the field are major crops in the Netherlands, in opinion of zRMS only 3 efficacy trials are insufficient for the assessment. However, cMS NL is kindly asked to consider this use on national level.

Very limited number of trials was available for tree nursery crops (only 2 trials). MCW-2222 at dose rate of 0,23 l/ha achieved medium effectiveness after 6 and 14 DAA in one trial. Insufficient control (21%) was observed after second application at dose rate of 0,17 l/ha. However, good result has been noted after first application. Due to limited number of trials, cMS NL is kindly asked to consider this use on national level.

No efficacy trials have been submitted for the South-East EPPO climatic zone. The cMS Slovenia is kindly asked to consider this use on national level.

#### **ZEAMX: DIABVI**

A total of 11 efficacy trials have been submitted to determine minimum effective dose to control of Western corn rootworm in maize in the South-East EPPO climatic zone. Dose response was visible in the initial assessment. The claimed dose rate of 0,2-0,3 l/ha achieved the mean results of 90-93% after 2-3 DAA and 80-86% after 7-8 DAA in 8 out of 11 trials. The lower doses presented medium efficacy at the same time. The difference was approximately 20% compared to the dose rate of 0,3 l/ha. **Based on the available dataset, MCW-2222 at 0,2 l/ha can be considered MED for control of DIABVI in maize.** However, taking into account low pests pressure on untreated control in the submitted trials, the dose rate of 0,3 l/ha can be recommended by higher pest pressure.

#### **ZEAMX: PYRUNU**

A total of 7 efficacy trials have been submitted to determine minimum effective dose to control of European corn borer in maize in the South-East EPPO climatic zone. Dose response was visible either in case of number of larvae per 20 plants and number of broken stem per plant. The claimed dose rate of 0,2-0,3 l/ha achieved medium to high effectiveness with the mean results of 72-82% after 14-38 DAA and 71-89% after 28-82 DAA, above husk. The lower dose of 0,15 l/ha presented significant inferior efficacy with the difference of 30% compared to the dose rate of 0,3 l/ha. **Based on the available dataset, MCW-2222 at 0,2 l/ha can be considered MED for control of PYRUNU in maize.** However, the dose rate of 0,3 l/ha should be recommended at higher pest pressure.

#### **TRZAW, HORVW, SECCW, TTLWI, TRZSP (autumn application): 1APHIF, e.g. RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control**

A total of 28 efficacy trials (20 in MAR, 8 in NE) have been submitted to determine minimum effective dose to control of virus vectors in winter cereals (winter wheat, winter barley and winter oat) in the CEU zone. Two parameters have been assessed in the efficacy trials: number of aphids and virus symptoms (foci area % and stunting in %).

In the Maritime EPPO climatic zone, MCW-2222 at dose rate of 0,15 l/ha achieved significant superior results compared to the lower doses. Dose response was visible in case of number of wingless and winged aphids per plant. The test product at claimed dose had high efficacy for both pest forms whilst the dose rate of 0,113 l/ha presented medium or inferior results. Moderate efficacy was observed also in case of virus symptoms at dose rate of 0,15 l/ha. Significant differences between higher and lower doses have been detected. **Taking into account all dataset, dose rate of 0,15 l/ha can be considered MED for control aphids in winter wheat and winter barley.** Only 1 trial was available for winter oats. No trials in other winter cereals have been submitted. The cMSs are kindly asked to consider winter triticale, winter rye and spelt on national level.

In the North-East EPPO climatic zone, MCW-2222 at dose rate of 0,15 l/ha achieved medium to high level of control. Also results for the efficacy trials conducted in the neighbouring countries (Germany and Czech Republic) can be included to the general calculation as support for Polish registration. Dose response was visible in case of number of wingless and winged aphids. The claimed dose presented significant superior results compared to the lower doses. Based on the trials conducted in Germany and Czech Republic, moderate efficacy was observed also in case of virus symptoms at dose rate of 0,15 l/ha. Significant differences between higher and lower doses have been detected. **Taking into account all valid trials, dose rate of 0,15 l/ha can be considered MED for control of aphids in winter wheat and winter barley.** Because no efficacy trials have been submitted for other winter cereals, these uses cannot be accepted in Poland.

No efficacy trials were available in the South-East EPPO climatic zone. The cMSs are kindly asked to consider this use on national level.

**TRZAS, HORVS, AVESP, TRZDS, TTLSO (spring application): 1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ virus vectors**

No new dataset has been submitted for the control of virus vectors in spring cereals. The applicant proposed to use of the trial results presented in subchapter 1d 'Aphids in spring cereals (spring application)'. According to the EPPO guideline PP 1/70(4) *Aphid vectors of Barley yellow dwarf virus*, two types of assessment should be included: assessment of the aphid vectors and assessment of BYDV infection. No visible foci have been noted in the efficacy trials submitted in subchapter 1d. Taking into account only assessment of the aphid vectors, zRMS decided to present the summary of conclusions relevant to the above subchapter. Because no new efficacy trials were available for subchapter 5b, the below conclusions are appropriate for the use of virus vectors in spring cereals (spring application).

A total of 7 efficacy trials (5 trials in MAR, 2 trials in NE zone) have been submitted to determine minimum effective dose to control of aphids in spring cereals (spring wheat and spring barley) in the CEU zone. Both trials from the NE zone were carried out on spring barley. In the MAR zone, 2 trials were conducted on spring barley and 3 trials on spring wheat. MCW-2222 at dose rate of 0,18 l/ha was tested in all trials, not 0,175 l/ha. However, taking into account slight difference, zRMS decided to accept this dataset.

In the Maritime EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved significant higher results compared to the lower doses. Dose response was visible in one trial after 14 DAA and the differences was approximately 10-20% between the target dose and the lower doses. The test product at claimed dose rate presented the results of 86-100% in case of control of MACSAV and RHOPPA. Based on the submitted dataset, dose rate of 0,175 l/ha can be considered MED for control aphids in spring cereals. However, limited number of trials has been presented for individual species: 2 trials for spring barley and 3 trials for spring wheat. The cMSs are kindly advised to consider this use on national level.

In the North-East EPPO climatic zone, MCW-2222 at dose rate of 0,18 l/ha achieved high effectiveness in both trials in spring barley. Also 2 trials from the neighbouring countries (Czech Republic and Germany) were included in the general calculation as support for Polish registration. Taking into account all results, the claimed dose rate achieved significant higher efficacy compared to the lower doses. However, limited number of trials was available in the NE zone and an extrapolation to other spring cereals is not possible.

No efficacy trials were available in the South-East EPPO climatic zone. The cMSs are kindly asked to consider this use on national level.

**BRSNW, BRSNS; spring application: CEUTNA, CEUTQU, MELIAE, CEUTAS, DASYBR;  
autumn applications: PSYICH, PHYESP, CEUTPI, MYZUPE**

A total of **174** trials have been carried out in winter oilseed rape and **2** trials – in spring oilseed rape (OSR), in order to demonstrate the Minimum Effective Dose (MED), **172 trials in the Central Zone**, 3 – in the North Zone and 1 trial – in the South Zone.

The **87** trials carried out in the **Maritime** EPPO zone as a whole include 86 within the Central EU zone (24 trials in CZ, 28 in DE, 12 in the UK) as well as 22 trials in FR (EU South Zone), and 1 trial in the SE (EU North zone). The **42** trials carried out in the **North-Eastern** EPPO zone as a whole include 40 trials within the Central EU zone (PL) as well as 2 trials in LV (EU North zone). The **46** trials carried out in the **South-Eastern** EPPO zone as a whole include 25 trials in HU and 21 trials in SK, both MSs within the Central EU zone. The two spring OSR trials were carried out in UK (2021) and in PL (2022) and the single trial from the South zone was carried out in the Mediterranean part of FR.

An apparent discrepancy between the number of trials reported in Tables 3.2-8 and 3.2-48 on the one hand and the trial count given above – on the other – is the result of assessing > 1 target pest species per trial, which the applicant explains in the tables' footnotes.

**Target pest presence in trials:**

The total of 37 trials tested MED in control of CEUTNA, including 11 in the Maritime zone, and 29 tested MED for the control of CEUTQU, including 9 in the Maritime zone. The respective trial counts for CEUTAS are: 30 overall (7 in Maritime), for MELIAE: 82(36), and for DASYBR: 25(7).

Control of MYZUPE as the pest *per se* was tested in 12 trials, all in the Maritime zone (CZ, DE, FR, UK). Five of these 12 trials were used in the MED section and tested the effect of vector control on the incidence of virus infection, based on visual assessment and / or plant height measurements.

A total of 29 trials assessed efficacy in control of flea beetles (PSYICH, PHYEAT, PHYECR, or unit-coded as PHYESP), with 24 of these trials carried out in the Maritime zone.

It had been originally assessed by zRMS that: “Based on the submitted data, the dose rate of **0.3 L/ha**, as claimed in the GAP table, can be considered justified as the MED in **spring application** in winter OSR in control of CEUTNA, CEUTQU, MELIAE, CEUTAS and DASYBR, and in **autumn application** against PSYICH, PHYESP and CEUTPI, in the concerned Member States within the Central EU zone.”

### **TARGET DOSE RATE UPDATE TO 0.24 L/ha**

Following the update of B3 triggered by Section 8, the target dose rate for the autumn application against PSYICH, PHYESP and CEUTPI has been reduced to **0.24 L/ha**. Since the dose rates lower than 0.3 L/ha and available in the trials submitted initially had been designed relative to that 0.3 L/ha target rate, these dose rates now make 83%, 94% or 104 % of the new target dose rate 0.24 L/ha (Table 3.2-49). The zRMS has reassessed the available data:

#### **CEUTPI, Maritime zone only, Table 3.2-57**

Each one of the **0.200** and **0.250** L/ha dose rates (83% and 104% of new target dose) is included **once** in 7 trials with CEUTPI (in the FR14IEBRNN113A trial, KCP 6.2/405), and the **0.225** L/ha (94% new target dose) has been used **in 5 trials** per 7. Consequently, the comparisons summarized in order to justify the new target dose rate of **0.24 L/ha** are far from orthogonal. Even more importantly, the summaries lack the necessary distance between the target and the lower dose rates: the 94% is too close to 100% dose to produce any “dose response” while the 83% is represented just once, the same as 104% (0.250L/ha), the closest “surrogate” target dose rate. The lower dose rates tested had shown efficacy of 68% (0.20 L/ha, n=1) or 64% (0.225 L/ha, n=4) and the 0.250 L/ha (104% target dose) performed at **75% level (n=1)**, compared to **85% (n=4)** or 93% (n=1) observed at the old target 0.3 L/ha.

#### **PHYESP, Maritime zone, Table 3.2-58, Table 3.2-59**

Table 3.2-58 demonstrates efficacy of 73% (moderate control) at 6-10 DAA at the tested dose rate of 0.225 L/ha (94% of the target dose). The assessment at 14-16 DAA with the same set of trials shows the efficacy <60%. The outstanding value of 88% at 0.225 L/ha has been produced by averaging efficacy measured by severity and by the extent of damage, with each data point taken from a different trial (CZ20IEBRNNW534B - KCP 6.2/362, and CZ21IEBRNNW570A - KCP 6.2/366, respectively). This summary (Table 3.2-58) does not include 0.25 L/ha dose rate.

The figures in Table 3.2-59 have been attained by including three Maritime and one Mediterranean trial (FR14IEBRNN108A, KCP 6.2/401) and by combining results based on two different measures of plant damage (no. of holes and *per cent* damage area on plant). The level of control at 0.25 L/ha (6-16 DAA) is low nevertheless: 51%. The old target dose rate 0.3 L/ha performed only little better: 54% (n=4). The respective values are 54% and 55% at the next assessment, 14-16 DAA.

#### **PHYESP, North-Eastern zone, Table 3.2-58**

The efficacy in control of PHYESP in the NE zone using the 0.225 L/ha is even less unacceptable, since it is drastically lower compared to original dose rate (63%; 39% - first; second assessment, compare to 86%; 75% respectively, at 0.3 L/ha). Moreover, these data points come from a single trial.

#### **PSYICH, Maritime zone, Table 3.2-60, Table 3.2-61**

The results are either summarized for 0.20 L/ha dose rate, or for the averaged 0.225-0.250 L/ha (83% or 94-104% of the new target dose respectively). The 0.25 L/ha, the dose relatively closest to the newly claimed target 0.24 L/ha, is missing from these summaries completely. Although used in 5 Maritime trials, efficacy of that dose has not been presented separately. As traced by zRMS in the individual trial reports, **the efficacy of the 0.25 L/ha** is as follows: 62.4%, 81.1%, 100% (by PESSEV larvae), and 57.5%, 93.4% (by no. of plants damaged). It may be noticed that the 100% efficacy based on larvae density has been calculated at 0.1 *per plant* pest density in the UNCK. The mean of the other results is: **73.6%** (n=4, min-max 57.5-93.4), or otherwise: 71.8% (PESSEV; n=2) or 75.5% (no. of plants damaged; n=2).

The 11-18 DAA summary (n=5), based on the merged data on larvae density (n=1) and on the *per cent* of damaged plant area (n=4), demonstrates 55% efficacy at 0.20 L/ha. A single trial assessed within the same 11-18 DAA interval shows efficacy of 78% or 81%, at 0.20 or 0.225-0.250 L/ha dose rates respectively. It is in fact the only data point suggesting existence of a **faint (3%) dose response**, between **the range**, within which the new target dose can be found, **and one of the lower dose rates**. The summarized assessments at 19-65 DAA (n=3, or n=2) show mean efficacy of 58%, 61% (0.2L/ha), or 62% (0.225-0.250 L/ha), in principle demonstrating no dose response at all, between the 83% and 94-104% of the target dose rates. Table 3.2-61 demonstrates little except the fact that there is dose response **elsewhere**: between the the old target dose rate of **0.30 L/ha** and the “averaged” **0.225-0.250 L/ha**, both in the Maritime, and in the NE zone.

#### **CONCLUSION on the target dose rate update**

It is apparently clear that the autumn application data set is not well-suited to demonstrate what the actual efficacy is, at the 0.24 L/ha dose rate. Since all the trials had been designed with another target dose (0.3 L/ha) in mind, all data apparently show that the **optimum** dose rate providing effective control of both *C. pictarisis* and the flea beetles (*P. chrysocephala* and *Phyllotreta* sp.) is still the **0.3 L/ha** dose rate and not the 0.24 L/ha, the dose resulting from the assessment by the Section 8.

The above review has been based on the **initial summaries**, not amended by the applicant following the change of the target dose rate, thus not revealing efficacy values of the key individual dose rates that had approached the new target rate but that were used only sporadically across the data set. The review had to be restricted to the averaged performance of the 94-104% (yet with predominant use of the 94% - 0.225 L/ha - over the 0.250 L/ha) *versus* 83% of the target dose. To the opinion of zRMS it is justified to conclude that using 83% *versus* 94-104% comparisons, in the absence of the proper target dose data, results in negligible error in estimating the performance of MCW-2222 at the (new) full 0.24 L/ha dose rate against the autumn pests in question. Since the efficacy of the 0.25 L/ha (104% target rate), when considered separately is > 70%, one may expect that the experimental results produced might have been less erratic (and the dose response more distinct) should there were more data generated directly with the new target dose rate. In view of that, the zRMS has decided to accept the 0.24 L/ha as the **minimum effective dose** in this autumn use, although on the *sine qua non* condition that the **efficacy level would be described as moderate**, in the product label, with respect to *C. pictarisis*, *Phyllotreta* sp and *P. chrysocephala*.

The dose rate of **0.2 L/ha**, as claimed in the GAP table, can be considered justified as the MED in **autumn application** in control of aphids (*Myzus persicae*) – vectors of Turnip Yellow Virus (TUYV00).

[To zRMS comments to Efficacy section](#)

[To zRMS abstract](#)



### 3.2.3 Efficacy tests (KCP 6.2)

#### Introductory information on efficacy tests

The efficacy of MCW-2222 for the control of different insect pests in the crops maize, apple, potato, sugar beet, ornamentals, cereals and oilseed rape was evaluated in a total of ~~507~~ **494 efficacy trials** (numerous trials including more than one pest). The tested rates included the proposed label rates. All trials were conducted to GEP by officially recognised testing organisations and followed the appropriate EPPO standards. The trials ~~were~~ performed in a randomised complete block design with 4 replicates. Trials have been conducted in different seasons in diverse countries of the Maritime, North-East and South-East EPPO climatic zone.

In the following table an overview is provided on the efficacy trials per pest group submitted with this dossier and covering the GAP uses of MCW-2222.

**Table 3.2-88: Overview of effectiveness trials**

Pest group	Crop(s)	No. of efficacy trials* (EPPO zone)				EPPO guidelines (PP)
		Maritime	North-East	South-East	Sum	
(1)	<i>Aphids and scales (sucking)</i>					
(1a)	Apple	25	11	28	<del>64</del> <b>64</b>	1/7(3), 1/33(2), 1/131(3), 1/258(1), 1/174(2), 1/254(1), 1/255(1)
(1b)	Potato	8	15	2	<del>24</del> <b>25</b>	1/230(1)
(1c)	Winter cereals (spring appl)	10	4	11	<b>25</b>	1/20(3), 1/70(3), 1/126(2), 1/236(1), CEB 75
(1d)	Spring cereals (spring appl)	5	2	-	<b>7</b>	1/20(3), 1/236(1)
(1e)	Sugar beet	11	20	-	<b>31</b>	PP 1/228(2)
(1f)	Flower bulbs and flower tubers, floriculture, nursery	22	-	-	<b>22</b>	PP 1/23(2)
(2)	<i>Beetles and weevils (biting)</i>					
(2a)	Maize	-	-	<del>11</del> <b>8</b>	<del>11</del> <b>8</b>	PP 1/274(1)
(2b)	Potato	15	16	17	<b>48</b>	1/12(4)
<del>(2c)</del>	<del>Winter oilseed rape<sup>2)</sup></del>	<del>87</del>	<del>47</del>	<del>54</del>	<del>188</del>	<del>1/73(3), 1/73(4), 1/107(3), 178(3), 218(1), 1/219(1), 1/294(1),</del>
(2c)	Winter oilseed rape	88	<del>45</del> <b>44<sup>1)</sup></b>	49	<del>182</del> <b>181</b>	
(2d)	Spring oilseed rape	<b>1</b>	<b>1</b>	-	<b>2</b>	
(3)	<i>Codling moth (biting)</i>					
(3)	Apple	<del>17</del> <b>13</b>	<del>10</del> <b>6</b>	<del>11</del> <b>7</b>	<del>38</del> <b>26</b>	1/7(3), 1/131(3), 1/258(1)
(4)	<i>European corn borer</i>					
(4)	Maize	-	-	7	<b>7</b>	1/13(3)
(5)	<i>Virus vectors (aphids)</i>					
(5a)	Winter cereals (autumn appl)	20	8	-	<b>28</b>	1/20(3), 1/70(4)
(5b)	Spring cereals (spring appl)	-	-	-	-	
(5c)	Winter oilseed rape	12	-	-	<b>12</b>	<del>n.s.</del> 1/223(2), CEB No 191 (Pucerons du colza)
(6)	<i>Brassica pod midge</i>					1/220(1)
(6)	Winter oilseed rape	7	9	9	<b>25</b>	1/220(1)

\* The no. of trials per crop may differ from the no. of trials per GAP use (numerous trials with more than one pest)

<sup>1); 2)</sup> see the commenting box below

For detailed information about the envisaged GAP uses please refer to Part B, Section 0.

## Summary and conclusions on the effectiveness

Subsuming the efficacy results in all crops and against all pests, the efficacy of MCW-2222 was always on a similar level or superior compared to the reference products. Thus, the ~~507~~ **494** **evaluated efficacy trials** support the GAP uses applied for maize, apple, potato, cereals, oilseed rape, sugar beet and ornamentals (refer to the following pages).

The efficacy evaluation for the GAP uses of MCW-2222 complies with the uniform principles.

### Comments of zRMS to the updated Table 3.2-88:

- 1) Altogether, 507 Efficacy and Efficacy+MED trial reports have been submitted. One of the trials in control of MELIAE in winter oilseed rape in the NE zone (1)report no. PL16IEBRSNW309A, KCP 6.2-426) does not include the test item, MCW-2222, in the trial design. The report has been included by the applicant in the folders submitted along with the dossier, but the trial is irrelevant to the submission and has been listed, by zRMS, as submitted but not used in the evaluation.
- 2) The zRMS sees no reason to update the trial count following the applicant's amendments to the Table 3.2-88 in the line (2c), resulting from the dossier update in April 2024. The number of trials had been already verified on the initial assessment, as were their validity status and their relevance to particular uses, according to the target species **actually observed** (not just declared in protocol) in them. The last update by the applicant does not include submission of any new data on the OSR, but is essentially kind of re-assessment, of the data submitted previously, leading to amendment of data summary tables and of the respective parts of the text. Therefore the entry (2c) in the Table 3.2-88 has been finally retained by zRMS, in the shape resulting from the initial assessment, during which all the trials had been reviewed and registered.

Twelve trials carried out in apple were not considered valid (due to no target dose rate tested or no assessments after 1<sup>st</sup> application of MCW-2222) for efficacy assessment.

### 3.2.3.1 (1) Aphids and scales (sucking)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L pro-duct /ha	g ai/ha	L pro-duct /ha LWA
Apple	APHISP	May-Oct BBCH 62-PHI	Mar, N-E	1-2 (8)	0.125	25	0.078
			S-E	1-2 (8)	0.09-0.125	18-25	0.056-0.078
	ERISLA	Jun-Aug BBCH 71-PHI	S-E	1	<del>0.20-0.40</del> <b>0.30</b>	<del>40-80</del> <b>60</b>	<del>0.125-0.25</del> <b>0.1875</b>
	QUADPE	Jun-Oct BBCH 71-PHI	Mar	1	<del>0.40</del> <b>0.30</b>	<del>80</del> <b>60</b>	<del>0.25</del> <b>0.1875</b>
			S-E	1	<del>0.20-0.40</del> <b>0.30</b>	<del>40-80</del> <b>60</b>	<del>0.125-0.25</del> <b>0.1875</b>
	MACSEU, MYZUPE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36	-
Potato			S-E	1	0.12-0.18	24-36	-
Winter cereals (wheat, barley, triticale, rye)	1APHIF	May-Jul BBCH 40-69	Mar, N-E, S-E	1-2 (10)	0.18	36	-
Spring cereals (wheat, barley, triticale, oat)	1APHIF	Mar-Jul BBCH 40-69	Mar, N-E, S-E	1-2 (10)	0.175	35	-
Sugar beet	MYZUPE, APHIFA,	Apr-Aug	Mar, N-E,		0.25	<del>25</del> <b>or</b>	-

	MACSEU	BBCH 12-39	S-E	1 or 2 (7)		50	
Flower bulbs and flower tubers	1 APHIF	Mar-Aug BBCH 12-91	Mar, S-E	1	0.23	46	-
				2	0.17	34	
Floriculture, nursery	1 APHIF	Mar-Aug BBCH 12-91	Mar, S-E	1	0.23	46	-
				2	0.17	34	

## Conclusion (aphids and scales)

The effectiveness of MCW-2222 against aphids and scales was tested in 174 efficacy trials and 3 supportive trials in apple, potato, winter and spring cereals, sugar beet and ornamentals conducted during 2012 and 2022 diverse countries of the Maritime, North-East and South-East EPPO climatic zone. The results determined in the different target crops are presented under subheading (1a) for apple, (1b) for potato, (1c) for winter cereals, (1d) for spring cereals, for (1e) for sugar beet and (1f) for ornamentals.

Data demonstrated that the efficacy of MCW-2222 at the proposed label rates was equivalent to the efficacy of Mospilan 20 SG and Mospilan 20 SP against aphids and scales in the different target crops.

In case of the availability of efficacy data from the Maritime and North-East EPPO climatic zones for a use to be registered in one of the zones (i.e., MACSAV in spring cereals), reference is made to chapter 3.2 'Efficacy data', subchapter 'General information about trial grouping', where it is discussed in detail, that data from both zones can be evaluated together and extrapolation is possible.

Since a sufficient number of trials was carried out in the major cereal crops winter and spring wheat, winter and spring barley as well as winter triticale, extrapolation is envisaged to spring triticale, winter rye and spring oat. Furthermore, extrapolation in case of aphids on cereals is considered to be possible as the same aphid species are relevant in all cereal crops applied for.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 were proven by the data. MCW-2222 is considered to be appropriate for the control of aphids and scales in apple, potato, winter and spring cereals, sugar beet and ornamentals.

### 3.2.3.1.1 (1a) Aphids and scales in apple

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L pro-duct /ha	g ai/ha	L pro-duct /ha LWA
Apple	APHISP	May-Oct BBCH 62-PHI	Mar, N-E	1-2 (8)	0.125	25	0.078
			S-E	1-2 (8)	0.09-0.125	18-25	0.056-0.078
	ERISLA	Jun-Aug BBCH 71-PHI	S-E	1	0.20-0.40 0.30	40-80 60	0.125-0.25 0.1875
			Mar	1	0.40 0.30	80 60	0.25 0.1875
	QUADPE	Jun-Oct BBCH 71-PHI	S-E	1	0.20-0.40 0.30	40-80 60	0.125-0.25 0.1875

## Material and methods

An overview of trials against aphids in apple is presented in the following, for detailed information please refer to Appendix 2 (experimental details) of the BAD. Additionally, the trial locations are marked on the corresponding maps in Appendix 3 of the BAD.

**Table 3.2-89: Overview of efficacy and dose justification trials with MCW-2222 against aphids in apple (64 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>		Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
	L/ha	L/ha LWA						
Maritime EPPO Zone (25 trials)								
6.2/001	M+E+Y	-	CZ13IEMABSD028A	Apple	APHIPO	CZ	2013	GEP
6.2/002	M+E+Y	E+Y	CZ13IEMABSD028B	Apple	APHIPO	CZ	2013	GEP
6.2/003	E	-	CZ14IEMABSD010A	Apple	APHIPO	CZ	2014	GEP
6.2/004	E	-	CZ14IEMABSD010B	Apple	APHIPO	CZ	2014	GEP
6.2/005	E	-	CZ14IEMABSD010C	Apple	APHIPO	CZ	2014	GEP
6.2/006	E	-	CZ14IEMABSD010D	Apple	APHIPO	CZ	2014	GEP
6.2/007	E	-	CZ14IEMABSD010E	Apple	APHIPO	CZ	2014	GEP
6.2/011	E+Y	-	CZ14IEMABSD011D	Apple	APHIPO, CARPPO	CZ	2014	GEP
6.2/012	E+Y	-	CZ14IEMABSD011E	Apple	APHIPO, CARPPO	CZ	2014	GEP
6.2/015	M+E+Y	E+Y	CZ14IEMABSD012A	Apple	QUADPE	CZ	2014	GEP
6.2/016	M+E+Y	M+E+Y	CZ14IEMABSD012B	Apple	QUADPE	CZ	2014	GEP
6.2/017	M+E	M+E	CZ14IEMABSD012C	Apple	QUADPE	CZ	2014	GEP
6.2/018	M+E	M+E	CZ15IEMABSD001A	Apple	APHIPO	CZ	2015	GEP
6.2/019	M+E	-	CZ15IEMABSD001B	Apple	APHIPO	CZ	2015	GEP
6.2/020	M+E+Y	-	CZ15IEMABSD005A	Apple	QUADPE	CZ	2015	GEP
6.2/021	M+E+Y	E+Y	CZ15IEMABSD005B	Apple	QUADPE	CZ	2015	GEP
6.2/022	M+E	E	CZ15IEMABSD005C	Apple	QUADPE	CZ	2015	GEP
6.2/023	M+E	M+E	CZ15IEMABSD005D	Apple	QUADPE	CZ	2015	GEP
6.2/024	M+E	-	CZ15IEMABSD005E	Apple	QUADPE	CZ	2015	GEP
6.2/025	M+E+Y	-	CZ15IEMABSD005F	Apple	QUADPE	CZ	2015	GEP
6.2/112	E	M*+E	CZ22IEMABSD524A	Apple	APHIPO	CZ	2022	GEP
6.2/171	E	M*+E	DE22IEMABSD524A	Apple	APHIPO	DE	2022	GEP
6.2/172	E	M*+E	NL22IEMABSD010A	Apple	APHIPO	NL	2022	GEP
6.2/173	E	M*+E	UK22IEMABSD601A	Apple	APHIPO	UK	2022	GEP
6.2/174	E	M*+E	UK22IEMABSD601B	Apple	APHIPO	UK	2022	GEP
North-East EPPO Zone (11 trials)								
6.2/032	E+Y	E+Y	072_01_F12_134	Apple	APHIPO	PL	2012	GEP
6.2/033	E+Y	M*+E+Y	072_01_F12_135	Apple	APHIPO	PL	2012	GEP
6.2/038	M+E	M+E	PL13IEMABSD207A	Apple	APHIPO	PL	2013	GEP
6.2/039	M+E	M+E	PL13IEMABSD207B	Apple	APHIPO	PL	2013	GEP
6.2/040	M+E	M+E	PL13IEMABSD207C	Apple	APHIPO	PL	2013	GEP
6.2/041	M+E	M+E	PL13IEMABSD207D	Apple	APHIPO	PL	2013	GEP
6.2/042	M+E	M+E	PL14IEMABSD109A	Apple	APHIPO	PL	2014	GEP
6.2/043	M+E	E	PL14IEMABSD109B	Apple	APHIPO	PL	2014	GEP
6.2/044	M+E	M+E	PL14IEMABSD109C	Apple	APHIPO	PL	2014	GEP
6.2/047	M+E	E	PL15IEMABSD127A	Apple	APHIPO	PL	2015	GEP
6.2/048	M+E	M+E	PL15IEMABSD127B	Apple	APHIPO	PL	2015	GEP
South-East EPPO Zone (28 trials)								
6.2/052	M+E	-	HU13IEMABSD632A	Apple	APHIPO	HU	2013	GEP
6.2/177	E	-	HU14IEMABSD011B	Apple	APHIPO	HU	2014	GEP
6.2/054	E	-	MCW 2222 ERISLA 2012	Apple	ERISLA	RO	2012	GEP
6.2/055	E	E	MCW 2222 QUADPE 2012	Apple	QUADPE	RO	2012	GEP
6.2/180	M+E	M+E	RO13IEMABSD001A	Apple	QUADPE	RO	2013	GEP
6.2/056	M+E	M+E	RO13IEMABSD002A	Apple	ERISLA	RO	2013	GEP
6.2/060	E	-	RO14IEMABSD046A	Apple	APHIPO	RO	2014	GEP
6.2/061	M+E	-	RO14IEMABSD047A	Apple	ERISLA	RO	2014	GEP
6.2/062	M+E	-	RO14IEMABSD047B	Apple	ERISLA	RO	2014	GEP

Ref. no.	Trial type <sup>(1)</sup>		Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
	L/ha	L/ha LWA						
6.2/063	M+E	-	RO14IEMABSD048A	Apple	QUADPE	RO	2014	GEP
6.2/064	M+E	-	RO14IEMABSD048B	Apple	QUADPE	RO	2014	GEP
6.2/065	M+E	-	RO14IEMABSD048C	Apple	QUADPE	RO	2014	GEP
6.2/066	M+E	-	RO14IEMABSD048D	Apple	QUADPE	RO	2014	GEP
6.2/067	M+E	E	RO15IEYPOME013A	Apple	ERISLA	RO	2015	GEP
6.2/068	M+E	E	RO15IEYPOME013B	Apple	ERISLA	RO	2015	GEP
6.2/069	M+E	E	SK13IEMABSD001A	Apple	APHIPO	SK	2013	GEP
6.2/070	M+E	E	SK13IEMABSD001B	Apple	APHIPO	SK	2013	GEP
6.2/073	E	-	SK14IEMABSD001A	Apple	APHIPO	SK	2014	GEP
6.2/074	M+E	M+E	SK14IEMABSD002A	Apple	ERISLA	SK	2014	GEP
6.2/075	M+E	M+E	SK14IEMABSD002B	Apple	ERISLA	SK	2014	GEP
6.2/076	M+E	M+E	SK14IEMABSD002C	Apple	ERISLA	SK	2014	GEP
6.2/077	M+E	M+E	SK14IEMABSD003A	Apple	QUADPE	SK	2014	GEP
6.2/078	M+E	M+E	SK14IEMABSD003B	Apple	QUADPE	SK	2014	GEP
6.2/079	M+E	M+E	SK14IEMABSD003C	Apple	QUADPE	SK	2014	GEP
6.2/080	M+E	E	SK15IEMABSD001A	Apple	APHISP	SK	2015	GEP
6.2/081	M+E	E	SK15IEMABSD001B	Apple	APHISP	SK	2015	GEP
6.2/082	M+E	E	SK15IEMABSD005A	Apple	ERISLA	SK	2015	GEP
6.2/083	M+E	E	SK15IEMABSD005B	Apple	ERISLA	SK	2015	GEP

(1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, Y = trial with yield and/or quality assessment, M\* = MED data were the dose rate of MCW-2222 applied to the trials was L/ha LWA.

(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

### Dose rates

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), this section includes data from apple trials conducted in 2012-2015, the rates applied in these trials was based on L/ha and newer apple trials conducted in 2022, the rates of MCW-2222 applied in these trials was based on L/ha tLWA. The data from the older trials conducted using L/ha has been recalculated to L/ha tLWA based on the canopy height and the row distance in each trial. To allow grouping of the application rates, the calculated L/ha tLWA application rates are presented in ranges with a 10 % deviation from the minimum and maximum target rate.

The efficacy studies with the rates applied in L/ha have been recalculated to L/ha tLWA rates as far as possible. However, the necessary calculation parameters (e.g. treated crop height) were not available from all trials, therefore the number of trials with L/ha and L/ha tLWA rates are slightly different. Furthermore, after recalculation some of the trials didn't match the proposed GAP rates/ranges in L/ ha tLWA. Therefore, the number of trials with L/ha and L/ha tLWA rates matching the label claim are presented in separate tables in the following:

**Table 3.2-90: Summary of efficacy trials (aphids and scales in apple) based on application rates in L/ha**

Table 5.12: No. of primary trials (aphids and scales in apple) based on apprehension rates in 2012											
Pest	Crop	EPPO zone	Country	No. of trials					Total	Total by zone	Total by pest
				Year							
				2012	2013	2014	2015	2022			
APHIPO	Apple	MAR	CZ	-	2	5 7	2	1*	12	16	35
			DE	-	-	-	-	1*	1		
			NL	-	-	-	-	1*	1		
			UK	-	-	-	-	2*	2		
		N-E	PL	2	4	3	2	-	11	11	
		S-E	HU	-	1	1	-	-	2	8	
			RO	-	-	1	-	-	1		
			SK	-	3 2	- 1	2	-	5		
ERISLA	Apple	S-E	RO	1	1	2	2	-	6	11	11
			SK	-	-	3	2	-	5		
QUADPE	Apple	MAR	CZ	-	-	3	6	-	9	9	18
		S-E	RO	1	1	4	-	-	6	9	
			SK	-	-	3	-	-	3		

\* These trials used application rates in L/ha LWA, application rates in L/ha were calculated from the application rates in L/ha LWA.

**Table 3.2-91: Summary of efficacy trials (aphids and scales in apple) based on application rates in L/ha tLWA (leaf wall area)**

LEADER (leaf wall area)											
Pest	Crop	EPPO zone	Country	No. of trials							
				Year					Total	Total by zone	Total by pest
				2012	2013	2014	2015	2022			
APHIPO	Apple	MAR	CZ	-	1	-	1	1*	3	7	22
			DE	-	-	-	-	1*	1		
			NL	-	-	-	-	1*	1		
			UK	-	-	-	-	2*	2		
		N-E	PL	2	4	3	2	-	11	11	
		S-E	SK	-	2	-	2	-	4	4	
ERISLA	Apple	S-E	RO	-	1	-	2	-	3	6	6
			SK	-	-	3	2	-	5 3	8 6	8 6
QUADPE	Apple	MAR	CZ	-	-	3	3 2	-	6 5	6 5	11 10
		S-E	RO	1	1	-	-	-	2	5	
			SK	-	-	3	-	-	3		

\* These trials used original application rates in L/ha LWA, for the other trials the application rates in L/ha LWA were calculated from the application rates in L/ha.

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-92: Details on trial methodology (aphids and scales in apple)**

Guidelines	General guidelines	EPPO PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(1/2), 1/226(3)
	Specific guidelines	EPPO PP 1/7(3), 1/33(2), 1/131(3), 1/258(1), 1/174(2), 1/254(1), 1/255(1)
Experimental design	Plot design	RCBD (all trials)
	Plot size	12-180 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Varieties	Golden Delicious, Melrose, Idared, Early Gold, James Grieve, Ligol, Jonagold, Gala, Szampion, Lobo, Romus3, Jonared, Resista, Redprince Prima, Prima/M9, Starkrimson, Braeburn, Jonagored, Bramley, Florina, Pionier

<b>Application</b>	Crop stage (BBCH) at application	APHISP: from BBCH 67 to BBCH 78 ERISLA: from BBCH 69 to BBCH 78 QUADPE: from BBCH 59 to BBCH 79
	Timing Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate aphids)
	Number of applications Intervals between applications	1 (31 trials in APHISP, 11 trials in ERISLA, 16 trials in QUADPE) 2 (4 trials in APHISP, 2 trials in QUADPE) Intervals of 4-7-50 days
	Spray volumes	500 - 1500 L/ha
<b>Assessment</b>	Assessment types	- number of aphids per shoot based on 10 or 25 shoots - number of aphids per plot
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-4 DAA, 7-11 DAA, 14-16 DAA, 16-22 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-93: Overview of ha application rates against *Aphis pomi* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (11 trials)				
Test product	MCW-2222	1-2	0.09 L	18 g acetamiprid
		1-2	0.125 L	25 g acetamiprid
Reference product(s)	Mospilan 20 SP	1-2	0.125 kg	25 g acetamiprid
North-East (11 trials)				
Test product	MCW-2222	1	0.09-0.1 L	18-20 g acetamiprid
		1	0.125 L	25 g acetamiprid
Reference product	Mospilan 20 SP	1	0.125 kg	25 g acetamiprid
South-East (5 trials)				
Test product	MCW-2222	1	0.09 L	18 g acetamiprid
		1	0.125 L	25 g acetamiprid
Reference product(s)	Mospilan 20 SP	1	0.125 kg	25 g acetamiprid
South-East (3 trials)				
Test product	MCW-2222	1	0.125 L	25 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid

**Table 3.2-94: Overview of ha LWA application rates against *Aphis pomi* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha LWA <sup>(1-4)</sup>	active ingredient/ha
Maritime (2 trials)				
Test product	MCW-2222	1-2	0.05 <sup>(1)</sup> -0.0675 <sup>(3)</sup> L	10-14 g acetamiprid
		1-2	<b>0.0675<sup>(3)</sup>-0.086<sup>(2)</sup> L</b>	14-17 g acetamiprid
Reference product	Mospilan 20 SP	1-2	0.125 kg/ha	25 g acetamiprid
*Maritime (5 trials)				
Test product	MCW-2222	1-2	0.062 L	12 g acetamiprid
		1-2	<b>0.078 L</b>	16 g acetamiprid
Reference product	Teppeki	1	0.14 kg/ha	70 g flonicamid
North-East (11 trials)				
Test product	MCW-2222	1	0.05 <sup>(1)</sup> -0.0675 <sup>(3)</sup> L	10-14 g acetamiprid
		1	<b>0.0675<sup>(3)</sup>-0.086<sup>(2)</sup> L</b>	14-17 g acetamiprid
Reference product	Mospilan 20 SP	1	0.125 kg/ha	25 g acetamiprid

Product		No. of appl.	Rate per treatment	
			product/ha LWA <sup>(c, 4)</sup>	active ingredient/ha
South-East (4 trials)				
Test product	MCW-2222	1	0.0675 <sup>(3)</sup> -0.086 <sup>(2)</sup> L	14-17 g acetamiprid
Reference product	Mospilan 20 SP	1	0.125 kg/ha	25 g acetamiprid

(1) this value (0.05 L/ ha LWA) is the minimum target rate (0.056 L/ha LWA) minus 10 percent.

(2) this value (0.086 L/ ha LWA) is the maximum target rate (0.078 L/ha LWA) plus 10 percent.

(3) this cut off value (0.0675 L/ha LWA) is the mean value of the minimum and maximum target rate.

(4) Not every rate was tested in every trial. The application rate of the reference products were stated in L or kg/ha, not LWA.

\* trials with original L/ha LWA application rates

**Table 3.2-95: Overview of application rates against *Eriosoma lanigerum* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
South-East (1 trial)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid
South-East (6 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid
		1	0.45 kg *	90 g acetamiprid
South-East (4 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.35 L	60 g acetamiprid
		1	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid

\*only one trial with this rate of reference product

**Table 3.2-96: Overview of ha LWA application rates against *Eriosoma lanigerum* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha LWA <sup>(7, 6)</sup>	active ingredient/ha
South-East (4-6 trials)				
Test product	MCW-2222	1	0.1125 <sup>(4)</sup> -0.1875 <sup>(6)</sup> L	23-38 g acetamiprid
		1	0.1125 <sup>(4)</sup> -0.2063 <sup>(5)</sup> L	38-55 g acetamiprid
		1	0.1875 <sup>(6)</sup> -0.275 <sup>(5)</sup> L	38-55 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg/ha	50 g acetamiprid

(4) this value (0.1125 L/ha LWA) is the minimum target rate (0.125 L/ha LWA) minus 10 percent.

(5) this value (0.2063 L/ha LWA) is the maximum target rate (0.25 L/ha LWA) plus 10 percent.

(6) this cut off value (0.1875 L/ha LWA) is the mean value of the minimum and maximum target rate.

(7) Not every rate was tested in every trial. The application rate of the reference products were stated in L or kg/ha, not LWA.

\* trials with original L/ha LWA application rates

**Table 3.2-97: Overview of application rates against *Quadraspidiotus perniciosus* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (3 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid
Maritime (6 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid



Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
		1	0.3 L	60 g acetamiprid
		1	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid
<b>South-East (1 trials)</b>				
Test product	MCW-2222	2	0.2 L	40 g acetamiprid
Reference product	Mospilan 20 SG	2	0.25 kg	50 g acetamiprid
<b>South-East (8 trials)</b>				
Test product	MCW-2222	1-2	0.2 L	40 g acetamiprid
		1-2	0.25 L	50 g acetamiprid
		1-2	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg	50 g acetamiprid
		1	0.45 kg*	90 g acetamiprid

\*only one trial with this rate of reference product

**Table 3.2-98: Overview of ha LWA application rates against *Quadraspidiotus perniciosus* in apple (bold letters = target rate)**

Product		No. of appl.	Rate per treatment	
			product/ha LWA <sup>(7,6)</sup>	active ingredient/ha
QUADPE				
Maritime (5 trials)				
Test product	MCW-2222	1	0.1125 <sup>(4)</sup> -0.1875 <sup>(6)</sup> L 0.1125 <sup>(4)</sup> -0.2063 <sup>(5)</sup> L	23-38 g acetamiprid 41 g acetamiprid
Reference product	Mospilan 20 SG	1	0.25 kg/ha	50 g acetamiprid
South-East (5 trials)				
Test product	MCW-2222	1-2	0.1125 <sup>(4)</sup> -0.1875 <sup>(6)</sup> L 0.1125 <sup>(4)</sup> -0.2063 <sup>(5)</sup> L	23-38 g acetamiprid 41 g acetamiprid
Reference product	Mospilan 20 SG	1-2	0.25 kg/ha	50 g acetamiprid

(4) this value (0.1125 L/ha LWA) is the minimum target rate (0.125 L/ha LWA) minus 10 percent.

(5) this value (0.2063 L/ha LWA) is the maximum target rate (0.225 L/ha LWA) plus 10 percent.

(6) this cut-off value (0.1875 L/ha LWA) is the mean value of the minimum and maximum target rate.

(6) Not every rate was tested in every trial. The application rate of the reference products were stated in L or kg/ha, not LWA.

## Results

A total of 64 efficacy trials were conducted in apple and are summarised according to the pest, i.e., *Aphis pomi*, *Eriosoma lanigerum* and *Quadraspidiotus perniciosus* and the country or application scenario in the following tables.

**For control of *Aphis pomi* please refer to Table 3.2-99 (C-EU) and Table 3.2-100 (S-E EPPO zone) for ha rates and Table 3.2-100 for L/ha tLWA rates. Efficacy against *Eriosoma lanigerum* is presented in Table 3.2-101 for ha rates and Table 3.2-103 for L/ha tLWA rates. For control of *Quadraspidiotus perniciosus* please refer to Table 3.2-105 for ha rates and Table 3.2-103: Control (%) of QUADPE by MCW-2222 applied at target rate of 0.3 L/ha for Maritime EPPO zone and the target range for South-East EPPO zone of 0.2-0.3 L/ha (40-60 g a.i./ha) compared to Mospilan SG in apple regarding PESSEV (no. of larvae/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plot)		Untreated control larvae (no./ shoot)		% control								No. of trials where MCW-2222 at max. rate is >. <. = compared to standard(s). n.s.: significance not stated
		mean	min-max	mean	min-max	MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.25 L/ha (target rate for S-E)		MCW-2222 0.3 L/ha (target rate for MAR, S-E)		Mospilan 20 SG (0.25 kg/ha)		
						mean	min-max	mean	min-max	mean	min-max	mean	min-max	
13-15 DAA														
S-E	6	102.1	27.3-134	-	-	80	57-100	84	62-98	-	-	90	78-100	2 n.s., 3 =, 1 >
18-24 DAA														
MAR	9	-	-	180.6	11.3-309	65	41-97	89	75-100	93 (n=6)	80-100	89	73-100	6 n.s., 1 >, 2 =
S-E	3	-	-	45	25.4-63.6	74	71-78	89	88-91	-	-	89	87-91	3 =
C-EU	12	-	-	146.7	11.3-309	67	41-97	89	75-100	93 (n=6)	80-100	89	73-100	-
34-41 DAA														
MAR	9	-	-	157.3	10.3-267	72	42-95	92	79-100	95 (n=6)	85-100	91	68-100	6 n.s., 1 >, 2 =
S-E	3	-	-	63.3	50.8-74.3	76	73-82	90	88-91	-	-	90	88-92	3=
C-EU	12			133.8	10.3-267	73	42-95	91	79-100	95 (n=6)	85-100	91	68-100	-
96-127 DAA (fruits) <sup>(1)</sup>														
MAR	8			21.6 <sup>(1)</sup>	1.5-40.5	75	46-87	95	90-100	99 (n=6)	96-100	91	67-100	8 n.s.

(1) infestation/ damage (%)

~~Table 3.2-106~~ for L/ha tLWA rates. For detailed results please refer to Appendix 4 of the BAD.

### **Conclusion**

MCW-2222 applied according to the proposed GAP uses showed effective control of *Aphis pomi*, *Eriosoma lanigerum*, and *Quadraspidiotus perniciosus* in apples. Control levels of MCW-2222 were equivalent compared to reference standards Mospilan and Teppeki

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

**Table 3.2-99: Control (%) of APHIPO by MCW-2222 applied at target rate 0.125 L/ha for Maritime and North-East EPPO zone and the target range for South-East EPPO zone of 0.09-0.125 L/ha (18-25 g a.i./ha) compared to Mospilan SG/SP in apple regarding PESSEV (no. of aphids/ shoot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ shoot)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s), n.s.: significance not stated
				MCW-2222 0.09 L/ha (target rate for S-E)		MCW-2222 0.125 L/ha (target rate for MAR, N-E and S-E)		Mospilan SG/SP (0.125 kg/ha)		Mospilan 20 SG (0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
01-04 DAA												
MAR	1	806	806	56	-	70	-	68	-	-	-	1 =
MAR	5	651	120-1428	-	-	65	37-93	-	-	79	50-98	5 n.s.
N-E	9	43.8	12.1-139	68	25-92	90	83-100	90	83-99	-	-	1 >, 7 =, 1 <
S-E	5	114.2	9-333	93	86-96	96	95-98	96	94-97	-	-	4 =, 1 n.s.
S-E	3	82.7	51-116	-	-	74	47-92	-	-	96	93-100	1 =, 2 <
C-EU	23	229.3	9-1428	75 (n=15)	25-96	83 (n=23)	37-100	-	-	-	-	-
05 DAA												
N-E	5	76.4	26-135	61	31-84	93	86-100	95	91-100	-	-	5 =
07-11 DAA												
MAR	2	1586	716-2457	92	90-95	99	97-100	99	97-100	-	-	2 =
MAR	7	608	81-1509	-	-	92	80-100	-	-	96	83-100	2 =, 5 n.s.
N-E	11	62.9	12.3-153	77	28-95	92	82-100	93	82-100	-	-	11 =
S-E	5	139.4	17-335	92	83-97	97	96-98	97	96-98	-	-	5 =
S-E	3	112	64-141	-	-	75	41-96	-	-	99	97-100	1 =, 2 <
C-EU	28	326.8	12-2457	83 (n= 18)	28-97	91 (n=28)	41-100	-	-	-	-	-
14-16 DAA												
MAR	2	1649	675-2622	95	90-100	100	100	100	100	-	-	2 =
MAR	3	383	87-950	-	-	100	99-100	-	-	100	100	3 =
N-E	9	41.7	12.8-89.8	73	39-87	89	77-100	91	81-100	-	-	8 =, 1 <
S-E	3	124.4	76-210	-	-	67	29-96	-	-	94	85-100	1 =, 2 <
C-EU	17	305.7	13-2622	77 (n=11)	39-100	88 (n=17)	29-100	-	-	-	-	-

EPPO zone	No. of trials	Untreated control aphids (no./ shoot)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s), n.s.: significance not stated	
				MCW-2222 0.09 L/ha (target rate for S-E)		MCW-2222 0.125 L/ha (target rate for MAR, N-E and S-E)		Mospilan SG/SP (0.125 kg/ha)		Mospilan 20 SG (0.25 kg/ha)			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max		
16-22 DAA													
MAR	2	1620	450-2791	94	90-99	100	100	100	99-100	-	-	2 =	
MAR	4	283	235-335	-	-	97	94-100	-	-	100	100	2 =, 2 n.s.	
S-E	1	540.9	541	-	-	94	-	-	-	99	-	1 =	
C-EU	7	701.7	235-2791	94 (n=2)	90-99	98 (n=7)	94-100	-	-	-	-	-	
7-8 DAB													
MAR	2	81	55-107	94	93-96	100	100	100	100	-	-	2 =	
MAR	2	358	345-370	-	-	100	100	-	-	100	100	2 n.s.	
mean	4	219	55-370	94 (n=2)	93-96	100 (n=4)	100	-	-	-	-	-	
14 DAB													
MAR	2	74.1	42-106	95	93-96	100	100	100	100	-	-	2 =	
21 DAB													
MAR	2	54	34-74	95	94-96	100	100	100	100	-	-	2 =	

**Table 3.2-100: Control (%) of APHIPO by MCW-2222 applied at two different LWA rates (max. 10% deviation from the target rate of 0.078 L/ha LWA in the Maritime and North-East zone and 0.056-0.078 L/ha LWA in the South-East EPPO zone) compared to Mospilan SG/SP and Teppeki in apple regarding PESSEV (no. of aphids/ shoot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./shoot)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.056 L/ha LWA (0.05-0.0675 L/ha LWA) (target rate for S-E)		MCW-2222 0.078 L/ha LWA (0.0675-0.086 L/ha LWA) (target rate for MAR, N-E, S-E)		Mospilan SG/SP (0.125 kg/ha)		Teppeki* (0.14 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
01-04 DAA												
MAR	5*	38	4-113	63	38-82	54	0-94	-	-	48	4-86	1 >, 4 =
N-E	9	48.3	12.1-139	60 (n=6)	3-87	83 (n=9)	45-94	90	83-99	-	-	1>, 6 =, 2 <
S-E	4	59.6	9-113	-	-	64	51-74	96	95-97	-	-	4 <
C-EU	18	45.7	4-139	61 (n=11)	3-87	71 (n=18)	0-94	-	-	-	-	-
05 DAA												
N-E	5	76.4	26-135	48 (n=4)	8-84	87 (n=5)	66-98	95	91-100	-	-	4 =, 1 <
07-11 DAA												
MAR	1	2457	-	75	-	90	-	100	-	-	-	1 <
MAR	5*	31	5-105	84	56-97	85	50-99	-	-	88	74-99	5 =
N-E	11	62.9	12.3-153	70 (n=8)	17-93	89 (n=11)	77-98	93	82-100	-	-	9 =, 2<
S-E	4	90.6	17-170	-	-	66	56-76	97	96-98	-	-	3 <, 1 n.s.
C-EU	21	174.6	5-2457	76 (n=14)	17-97	84 (n=21)	50-99	-	-	-	-	-
14-16 DAA												
MAR	1	2622	-	77	-	90	-	100	-	-	-	1 <
MAR	1*	30	-	46	-	26	-	-	-	85	-	1 =
N-E	9	41.7	12.8-89.8	67 (n=7)	33-87	87 (n=9)	77-100	91	81-100	-	-	8 =, 1 <
C-EU	11	275.2	13-2622	66 (n=9)	33-87	82 (n=11)	26-100	-	-	-	-	-
16-22 DAA												
MAR	1	2791	-	77	-	90	-	100	-	-	-	1 <
MAR	1*	76	-	96	96	98	98	-	-	99	-	1 =
mean	2	1433	76-2791	87	77-96	94	90-98	-	-	-	-	-

EPPO zone	No. of trials	Untreated control aphids (no./shoot)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s) (n.s.: significance not stated)	
				MCW-2222 0.056 L/ha LWA (0.05-0.0675 L/ha LWA) (target rate for S-E)		MCW-2222 0.078 L/ha LWA (0.0675-0.086 L/ha LWA) (target rate for MAR, N-E, S-E)		Mospilan SG/SP (0.125 kg/ha)		Teppeki* (0.14 kg/ha)			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max		
8 DAB													
MAR	1	55	-	85	-	-	-	100	-	-	-	(min. rate 1 <)	
14 DAB													
MAR	1	42	-	86	-	-	-	100	-	-	-	(min. rate 1 <)	
21 DAB													
MAR	1	34	-	88	-	-	-	100	-	-	-	(min. rate 1 <)	

\* Trials were conducted with original L/ha LWA application rates (0.062 L & 0.078 L/ha LWA)

**Table 3.2-101: Control (%) of ERISLA by MCW-2222 applied at target range for South-East EPPO zone of 0.2-0.4 L/ha (40-80 g a.i./ha) compared to Mospilan SG in apple regarding PESSEV (no. of aphids/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ plot)		Untreated control aphids (no./ shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s), n.s.: significance not stated
						MCW-2222 0.2 L/ha		MCW-2222 0.4 L/ha		Mospilan 20 SG (0.2-0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
03-DAA												
S-E	1	33.7	-	-	-	85	-	91	-	91	-	1=
07-08 DAA												
S-E	6	44.9 (n=1)	-	101.9 (n=5)	74-125	76	60-91	91	88-97	91	88-96	6=
09-14 DAA												
S-E	11	78.7(n=5)	31.2-173	124.6 (n=6)	89.5-161	85	68-97	95	91-100	93	91-96	7=, 4 n.s.
20-21 DAA												
S-E	5	-	-	152	112-184	75	62-87	94	91-96	94	91-95	5=

**Table 3.2-102: Control (%) of ERISLA by MCW-2222 applied at target range for South-East EPPO zone of 0.2-0.3 L/ha (40-60 g a.i./ha) compared to Mospilan SG in apple regarding PESSEV (no. of aphids/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ plot)		Untreated control aphids (no./ shoot)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s). n.s.: significance not stated
						MCW-2222 0.2 L/ha		MCW-2222 0.25 L/ha		MCW-2222 0.3 L/ha		Mospilan 20 SG (0.2-0.25 kg/ha)		
		mean	min-max	mean	mean	min-max	min-max	mean	min-max	mean	min-max	mean	min-max	
03 DAA														
S-E	1	33.7	-	-	-	85	-	86	-	89	-	91	-	1 =
07-08 DAA														
S-E	6	44.9 (n=1)	-	101.9 (n=5)	74-125	76	60-91	85	74-93	93 (n=3)	92-94	91	88-96	6 =
09-14 DAA														
S-E	11	78.7(n=5)	31.2-173	124.6 (n=6)	89.5-161	85	68-97	92 (n=10)	83-100	94 (n=4)	93-95	93	91-96	7 =, 4 n.s.
20-21 DAA														
S-E	5	-	-	151.8	112-184	75	62-87	90	83-94	94 (n=2)	94-95	94	91-95	5 =



**Table 3.2-103: Control (%) of ERISLA by MCW-2222 applied at two different LWA rates with max. 10% deviation from the target range of 0.125-0.25 L/ha LWA (for South-East EPPO zone) compared to Mospilan SG in apple regarding PESSEV (no. of aphids/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./plot)		Untreated control aphids (no./shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s), n.s.: significance not stated
						MCW-2222 0.125 L/ha LWA (0.1125-0.1875 L/ha LWA)		MCW-2222 0.25 L/ha LWA (0.1875-0.275 L/ha LWA)		Mospilan 20 SG (0.2-0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
03-DAA												
S-E	1	33.7	-	-	-	-	-	86	-	91	-	1=
07-08-DAA												
S-E	6	44.9 (n=1)	-	101.9 (n=5)	74-125	66 (n=3)	65-67	77	60-93	91	88-96	2<, 4=
09-14-DAA												
S-E	8	56.2 (n=3)	31.2-100.8	129.5 (n=5)	89.5-161	73 (n=4)	64-90	83	68-97	93	91-96	4<, 3=, 1 n.s.
20-21-DAA												
S-E	5	-	-	152	112-184	63 (n=3)	56-71	75	62-87	94	91-95	5=

**Table 3.2-104: Control (%) of ERISLA by MCW-2222 applied at a LWA range with max. 10% deviation from the target range of 0.125-0.1875 L/ha LWA (for South-East EPPO zone) compared to Mospilan SG in apple regarding PESSEV (no. of aphids/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control aphids (no./ plot)		Untreated control aphids (no./ shoot)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s), n.s.: significance not stated
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10%)		Mospilan 20 SG (0.2-0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
03 DAA										
S-E	1	33.7	-	-	-	85	-	91	-	1 =
07-08 DAA										
S-E	4	44.9 (n=1)	-	90.8 (n=3)	74-110	73	65-91	90	88-96	3<, 1 =
09-14 DAA										
S-E	6	56.2 (n=3)	31.2-100.8	115.8 (n=3)	89.5-139	78	64-90	93	91-96	4<, 1=, 1 n.s.
20-21 DAA										
S-E	3	-	-	138.8	112-162	63	56-71	93	91-94	3<

**Table 3.2-105: Control (%) of QUADPE by MCW-2222 applied at target rate of 0.4 L/ha for Maritime EPPO zone and the target range for South-East EPPO zone of 0.2-0.4 L/ha (40-80 g a.i./ha) compared to Mospilan SG in apple regarding PESSEV (no. of larvae/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plot)		Untreated control larvae (no./ shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.4 L/ha (target rate for MAR, S-E)		Mospilan 20 SG (0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
13-15 DAA												
S-E	6	102.1	27.3-134	-	-	80 (n=6)	57-100	91 (n=5)	57-100	90 (n=6)	78-100	2 n.s., 3 =, 1 >
18-24 DAA												
MAR	9	-	-	180.6	11.3-309	65	41-97	96	87-100	89	73-100	6 n.s., 2 >, 1 =
S-E	3	-	-	45	25.4-63.6	74	71-78	90	88-91	89	87-91	3 =
C-EU	12	-	-	146.7	11.3-309	67	41-97	94	87-100	89	73-100	-
34-41 DAA												
MAR	9	-	-	157.3	10.3-267	72	42-95	97	90-100	91	68-100	6 n.s., 1 >, 2 =
S-E	3	-	-	63.3	50.8-74.3	76	73-82	91	89-92	90	88-92	3 =
C-EU	12			1333.8	10.3-267	73	42-95	96	89-100	-	-	-
96-127 DAA (fruits) <sup>(1)</sup>												
MAR	8			21.6 <sup>(1)</sup>	1.5-40.5	75	46-87	100	98-100	91	67-100	8 n.s.

(1) infestation/ damage (%)

**Table 3.2-103: Control (%) of QUADPE by MCW-2222 applied at target rate of 0.3 L/ha for Maritime EPPO zone and the target range for South-East EPPO zone of 0.2-0.3 L/ha (40-60 g a.i./ha) compared to Mospilan SG in apple regarding PESSEV (no. of larvae/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plot)		Untreated control larvae (no./ shoot)		% control								No. of trials where MCW-2222 at max. rate is >. <. = compared to standard(s). n.s.: significance not stated
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.25 L/ha (target rate for S-E)		MCW-2222 0.3 L/ha (target rate for MAR, S-E)		Mospilan 20 SG (0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
13-15 DAA														
S-E	6	102.1	27.3-134	-	-	80	57-100	84	62-98	-	-	90	78-100	2 n.s., 3 =, 1 >
18-24 DAA														
MAR	9	-	-	180.6	11.3-309	65	41-97	89	75-100	93 (n=6)	80-100	89	73-100	6 n.s., 1 >, 2 =
S-E	3	-	-	45	25.4-63.6	74	71-78	89	88-91	-	-	89	87-91	3 =
C-EU	12	-	-	146.7	11.3-309	67	41-97	89	75-100	93 (n=6)	80-100	89	73-100	-
34-41 DAA														
MAR	9	-	-	157.3	10.3-267	72	42-95	92	79-100	95 (n=6)	85-100	91	68-100	6 n.s., 1 >, 2 =
S-E	3	-	-	63.3	50.8-74.3	76	73-82	90	88-91	-	-	90	88-92	3=
C-EU	12			133.8	10.3-267	73	42-95	91	79-100	95 (n=6)	85-100	91	68-100	-
96-127 DAA (fruits) <sup>(1)</sup>														
MAR	8			21.6 <sup>(1)</sup>	1.5-40.5	75	46-87	95	90-100	99 (n=6)	96-100	91	67-100	8 n.s.

(1) infestation/ damage (%)

**Table 3.2-106: Control (%) of QUADPE by MCW-2222 applied at two different LWA rates (max. 10% deviation from the target range of 0.056-0.078 L/ha LWA in the South-East EPPO zone) compared to Mospilan SG in apple regarding PESSEV (no. of larvae/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plot)		Untreated control larvae (no./ shoot)		% control						No. of trials where MCW 2222 at max. rate is >, <, = compared to standard(s), n.s.: significance not stated
						MCW 2222 0.125 L/ha LWA (0.1125-0.1875 L/ha LWA) (target rate for S-E)		MCW 2222 0.25 L/ha LWA (0.1875-0.275 L/ha LWA) (target rate for MAR, S-E)		Mospilan 20 SG (0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
13-15 DAA												
S-E	2	80.5	27.3-134	-	-	78 (n=2)	57-100	57 (n=1)	57-57	89	78-100	2 n.s.
18-24 DAA												
MAR	6	-	-	197	51-309	66 (n=3)	44-97	81 (n=6)	53-100	89	73-100	4 n.s., 2 =
S-E	3	-	-	45	25.4-63.6	64	62-68	74	71-78	89	87-91	2 <, 1 =
C-EU	9	-	-	146.3	25.4-309	65 (n=6)	44-97	79 (n=9)	53-100	89	73-100	-
34-41 DAA												
MAR	6	-	-	165.8	53.8-267	72 (n=3)	50-95	87 (n=6)	77-100	90	68-100	4 n.s., 1 =, 1 <
S-E	3	-	-	63.3	50.8-74.3	66	62-70	76	73-82	90	88-92	2 <, 1 =
C-EU	9	-	-	131.6	50.8-267	69 (n=6)	50-95	83 (n=9)	73-100	90	68-100	-
96-127 DAA (fruits) <sup>(+)</sup>												
MAR	5	-	-	22.3 <sup>(+)</sup>	7.5-40.5	85 (n=2)	83-87	81 (n=5)	46-100	95	90-100	5 n.s.

(1) infestation/ damage (%)

**Table 3.2-107: Control (%) of QUADPE by MCW-2222 applied at a LWA range with max. 10% deviation from the target range of 0.125-0.1875 L/ha LWA (for South-East EPPO zone) and at a target rate of 0.1875 L/ha LWA in the Maritime Zone compared to Mospilan SG in apple regarding PESSEV (no. of larvae/ shoot or plot). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control larvae (no./ plot)		Untreated control larvae (no./ shoot)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s), n.s.: significance not stated
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10%)		Mospilan 20 SG (0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
13-15 DAA										
S-E	2	80.5	27.3-134	-	-	78	57-100	89	78-100	2 n.s.
18-24 DAA										
MAR	5	-	-	197	51-309	72	41-97	87	73-100	3 n.s., 2 <
S-E	3	-	-	45	25.4-63.6	64	62-68	89	87-91	3 <
C-EU	8	-	-	140	25.4-309	69	41-97	88	73-100	-
34-41 DAA										
MAR	5	-	-	156.7	53.8-267	76	42-95	88	68-100	3 n.s., 2 <
S-E	3	-	-	63.3	50.8-74.3	66	62-70	90	88-92	3<
C-EU	8	-	-	121.7	50.8-267	72	42-95	89	68-100	-
96-127 DAA (fruits) <sup>(1)</sup>										
MAR	4	-	-	17.7 <sup>(1)</sup>	7.5-22.8	79	70-87	96	92-100	4 n.s.

(1) infestation/ damage (%)

### 3.2.3.1.2 (1b) Aphids in potato

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Potato	MACSEU, MYZUPE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36

### Material and methods

An overview of trials against aphids in potato is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-108: Overview of efficacy and dose justification trials with MCW-2222 against aphids in potato (24 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (8 trials)</b>							
6.2/214	M+E	CZ22IESOLTU536A	Potato	MACSEU	CZ	2022	GEP
6.2/217	M+E	DE22IESOLTU536C	Potato	MACSEU	DE	2022	GEP
6.2/218	M+E	DE22IESOLTU536D	Potato	MACSEU	DE	2022	GEP
6.2/219	M+E	DE22IESOLTU536E	Potato	MACSEU	DE	2022	GEP
6.2/221	M+E	NL22IESOLTU036C	Potato	MACSEU/MYZUPE	NL	2022	GEP
6.2/220	M+E	NL22IESOLTU004B	Potato	MYZUPE	NL	2022	GEP
6.2/324	M+E	SE20IESOLTU259A	Potato	MYZUPE	SE	2020	GEP
6.2/222	M+E	UK22IESOLTU600A	Potato	MYZUPE	UK	2022	GEP
<b>North-East EPPO Zone (14 trials)</b>							
6.2/326	M+E	PL13IESOLTU205A	Potato	MYZUPE	PL	2013	GEP
6.2/117	M+E	PL13IESOLTU205B	Potato	MYZUPE	PL	2013	GEP
6.2/223	M+E	PL22IESOLTU108A	Potato	MYZUPE	PL	2022	GEP
6.2/224	M+E	PL22IESOLTU108B	Potato	MYZUPE	PL	2022	GEP
6.2/225	M+E	PL22IESOLTU108C	Potato	MYZUPE	PL	2022	GEP
6.2/226	M+E	PL22IESOLTU108D	Potato	MYZUPE	PL	2022	GEP
6.2/227	M+E	PL22IESOLTU109A	Potato	MACSEU	PL	2022	GEP
6.2/256	M+E	PL22IESOLTU109B	Potato	MACSEU	PL	2022	GEP
6.2/258	M+E	PL22IESOLTU109C	Potato	MACSEU	PL	2022	GEP
6.2/259	M+E	PL22IESOLTU109D	Potato	MACSEU	PL	2022	GEP
6.2/260	M+E	PL22IESOLTU109E	Potato	MACSEU	PL	2022	GEP
6.2/261	M+E	PL22IESOLTU109F	Potato	MACSEU	PL	2022	GEP
6.2/262	M+E	PL22IESOLTU109G	Potato	MACSEU	PL	2022	GEP
6.2/263	M+E	PL22IESOLTU109H	Potato	MACSEU	PL	2022	GEP
<b>South-East Zone (2 trials)</b>							
6.2/128	M+E	RO14IESOLTU044D	Potato	APHISP	RO	2014	GEP
6.2/129	M+E	RO14IESOLTU044E	Potato	APHISP	RO	2014	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

**Table 3.2-109: Summary of efficacy trials (aphids in potato)**

Pest	Crop	EPPO zone	Country	No. of trials						
				Year				Total	Total by zone	Total by pest
				2013	2014	2020	2022			
MACSEU	Potato	MAR	CZ	-	-		1	1	5	13
			DE	-	-		3	3		
			NL	-	-		1	1		
		N-E	PL	-	-		8	8	8	
MYZUPE	Potato	MAR	NL		-		2	2	4	10
			SE		-	1	1	1		
			UK		-		1	1		
		N-E	PL	2	-		4	6	6	
APHISP	Potato	S-E	RO	-	2		-	2	2	2
			Total:	2	2	1	20	25	-	-

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-110: Details on trial methodology (aphids on potato)**

Guidelines	General guidelines	EPPO PP 1/135(4), 1/152(4), 1/181(4), 1/225(2), 1/226(3)
	Specific guidelines	EPPO PP 1/230(1)
Experimental design	Plot design	RCB (all trials)
	Plot size	15-30 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per aphid	<i>Myzus persicae</i> (10 trials) <i>Macrosiphum euphorbiae</i> (13 trials) <i>Aphis</i> sp. (2 trials)
	Varieties per crop	Actrice, Kuras, Markies, Ricarda, Tajfun, Dominator, Kuba, <del>Pokusa</del> , Vineta, Albatros, Zuzanna, Bellarosa, Montekarlo, Goldmarie, Wega, Gala, Queen Anne, Bryza, Ignacy, Christian, Roclas, Innovator
	Sowing period	April - May
Application	Crop stage (BBCH) at application	from BBCH <del>23</del> 13 to BBCH 69
	Timing	May to July
	Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate and apterous aphids)
	Number of applications	1 (all trials)
	Spray volumes	200 – <del>300</del> 400 L/ha
Assessment	Assessment types	- number of aphids per leaf based on 20 or 25 plants - pest incidence in percent
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 2-3 DAA, 5-9 DAA, 12-14 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-111: Overview of application rates against *Myzus persicae* on potato**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (3 trials)				
Test product	MCW-2222	1	0.144 L	29 g acetamiprid
		1	<b>0.18 L</b>	<b>36 g acetamiprid</b>
Reference product(s)	Gazelle SG	1	0.25 kg	50 g acetamiprid
	Mospilan SG	1	0.25 kg	50 g acetamiprid
Maritime (1 trial)				
Test product	MCW-2222	1	0.12 L	24 g acetamiprid
		1	0.15 L	30 g acetamiprid
		1	<b>0.18 L</b>	<b>36 g acetamiprid</b>
Reference product	MCW-5023 = Mavrik	1	0.2 L	48 g tau-fluvalinate
North-East (2 trials)				
Test product	MCW-2222	1	0.12 L	24 g acetamiprid
		1	0.15 L	30 g acetamiprid
		1	<b>0.18 L</b>	<b>36 g acetamiprid</b>
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g lambda-cyhalothrin
North-East (4 trials)				
Test product	MCW-2222	1	0.144 L	29 g acetamiprid
		1	<b>0.18 L</b>	<b>36 g acetamiprid</b>
Reference product	Karate Zeon 050 CS	1	0.20 L	10 g lambda-cyhalothrin

**Table 3.2-112: Overview of application rates against *Macrosiphum euphorbiae* on potato**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (5 trials)				
Test product	MCW-2222	1	0.144 L	29 g acetamiprid
		1	0.18 L	36 g acetamiprid
Reference product	Mospilan SG	1	0.25 kg	50 g acetamiprid
North-East (8 trials)				
Test product	MCW-2222	1	0.144 L	29 g acetamiprid
		1	0.18 L	36 g acetamiprid
Reference product(s)	Karate Zeon 050 CS	1	0.20 L	7.5 g lambda-cyhalothrin

**Table 3.2-113: Overview of application rates against *Aphis* sp. on potato**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
South-East (2 trials)				
Test product	MCW-2222	1	0.12 L	24 g acetamiprid
		1	0.15 L	30 g acetamiprid
		1	0.18 L	36 g acetamiprid
Reference product(s)	Karate Zeon	1	0.075 L	7.5 g lambda-cyhalothrin

## Results

A total of 24 efficacy trials (one trial with two species) were conducted in potato and are summarised according to the pest, country, EPPO zone, application rate and/or reference product in the following tables. In Table 3.2-117 a summary of mean efficacy against all aphids in potato is presented. The efficacy of MCW-2222 was compared to Karate Zeon 050 CS, Mavrik, and Mospilan 20 SG/ Gazelle 20 SG and showed better or similar results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.



**Table 3.2-114: Control (%) of MYZUPE by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG/ Gazelle 20 SG, Mavrik Flo and Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. aphids/leaf)		% control								No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: statistical analysis not stated
				MCW-2222 0.18 L/ha		Karate Zeon 050 CS 0.15-0.20 L/ha		Mavrik Flo 0.20 L/ha		Mospilan SG 0.25 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-3 DAA												
MAR	3	1.4	0.6-2.1	88	81-93	-	-	-	-	79	58-95	1 >, 1 =, 1 n.s.
MAR	1	0.4	-	85	-	-	-	0	-	-	-	1 >
N-E	6	22.7	1.6-76.5	82	62-95	77	41-93	-	-	-	-	2 >, 2 =, 2 <
C-EU	10	14.1	0.4-76.5	84	62-95	-	-	-	-	-	-	-
6-9 DAA												
MAR	3	1.5	0.3-2.2	88	65-100	-	-	-	-	73	21-100	2 =, 1 n.s.
MAR	1	0.7	-	84	-	-	-	25	-	-	-	1 >
N-E	6	24.1	0.6-82.3	89	85-95	80	63-96	-	-	-	-	3 >, 3 =
C-EU	10	15.0	0.3-82.3	88	65-100	-	-	-	-	-	-	-
12-14 DAA												
MAR	2	1.8	1.6-2.0	99	99-100	-	-			99	98-100	1 =, 1 n.s.
MAR	1	0.7	-	93	-	-	-	43	-	-	-	1 >
N-E	6	24.4	0.6-86.4	84	77-96	67	46-97	-	-	-	-	4 >, 1 =, 1 <
C-EU	9	16.8	0.6-86.4	87	77-100	-	-	-	-	-	-	-

**Table 3.2-115: Control (%) of MACSEU by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan SG and Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. aphids/leaf)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s)
				MCW-2222 0.18 L/ha		Karate Zeon 0.20 L/ha		Mospilan SG 0.25 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-3 DAA										
MAR	5	5.6	2.4-12.0	75	26-100	-	-	81	37-100	5 =
N-E	8	11.6	2.9-59.8	82-83	63-93	82	42-94	-	-	2 >, 3 =, 3 <
C-EU	13	9.3	2.4-59.8	80	26-100	-	-	-	-	-
5-9 DAA										
MAR	5	5.9	0.1-14.5	81	50-100	-	-	78	41-100	5 =
N-E	8	13.9	3.5-67.5	90	84-99	87	62-98	-	-	2 >, 5 =, 1 <
C-EU	13	10.8	0.1-67.5	87	50-100	-	-	-	-	-
12-14 DAA										
MAR	3	4.2	3.2-4.8	92	75-100	-	-	89	66-100	3 =
N-E	8	14.9	3.5-73.3	84	75-95	74	37-89	-	-	4 >, 4 =
C-EU	11	12.0	3.2-73.3	86	75-100	-	-	-	-	-

**Table 3.2-116: Control (%) of APHISP by MCW-2222 applied at the target range 0.12 – 0.18 L/ha (24 - 36 g a.i./ha) compared to Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

Appendix 4 of the BAE.

EPPO zone	No. of trials	Untreated control (no. aphids/leaf)		% control								No. of trials where MCW-2222 is >, <, = compared to standard(s)
				MCW-2222 0.12 L/ha		MCW-2222 0.15 L/ha		MCW-2222 0.18 L/ha		Karate Zeon 0.075 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA												
S-E	2	7.3	7.0-7.5	86	83-89	94	91-96	97	94-100	86	83-89	2 =
3 DAA												
S-E	2	8.0	7.8-8.2	100	100	100	100	100	100	95	93-97	2 =
7 DAA												
S-E	2	9.3	9.3	100	100	100	100	100	100	100	100	2 =
14 DAA												
S-E	2	9.0	7.0-11.0	100	100	100	100	100	100	100	100	2 =

An overview of mean efficacy of MCW-2222 including the 24 efficacy trials (one trial with both aphids assessed) was calculated and summarised including all aphids (*Myzus persicae*, *Macrosiphum euphorbia*, *Aphis* sp. not further defined) per zone or application rate.

## Conclusion

MCW-2222 applied at the target dose of 0.18 L/ha showed excellent control of *Myzus persicae*, *Macrosiphum euphorbia* and *Aphis* sp. (species not further defined) on potato. Control levels of MCW-2222 were equivalent or superior compared to Mospilan and Karate Zeon and always superior compared to Mavrik.

Furthermore, extrapolation of efficacy data from the Maritime and North-East EPPO zone to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2. In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

**Table 3.2-117: Control (%) of aphids by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan SG, Karate Zeon and Mavrik Flo in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials per aphid species	Total no. of trials	Untreated control (no. of aphids/plant)		% control								No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: statistical analysis not stated
					MCW-2222 0.18 L/ha		Karate Zeon 0.20 L/ha		Mospilan SG 0.25 kg/ha		Mavrik Flo 0.20 L/ha		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-3 DAA													
MAR	MYZUPE (4 trials) MACSEU (5 trials)	9	3.6	0.4-12.0	81	26-100	-	-	84 (n=8)	37-100	0 (n=1)	-	2 >, 6 =, 1 n.s.
N-E	MYZUPE (6 trials) MACSEU (8 trials)	14	56.5	1.6-93.9	81	62-93	79	41-94	-	-	-	-	5 >, 4 =, 5 <
S-E	APHISP (2 trials)	2	8.0	7.8-8.2	100	100	95	93-97	-	-	-	-	2 =
C-EU	MYZUPE (10 trials) MACSEU (13 trials) APHISP (2 trials)	25	34.7	0.4-93.9	83	26-100	81 (n=16)	41-97	84 (n=8)	37-100	0 (n=1)	-	-
5-9 DAA													
MAR	MYZUPE (4 trials) MACSEU (5 trials)	9	3.9	0.1-14.5	84	50-100	-	-	76 (n=8)	21-100	25 (n=1)	-	1 >, 7 =, 1 n.s.
N-E	MYZUPE (6 trials) MACSEU (8 trials)	14	19.3	0.6-82.3	90	84-99	86	63-96	-	-	-	-	5 >, 8 =, 1 <
S-E	APHISP (2 trials)	2	9.3	9.3	100	100	100	100	-	-	-	-	2 =
C-EU	MYZUPE (10 trials) MACSEU (13 trials) APHISP (2 trials)	25	12.2	0.1-82.3	88	50-100	88 (n=16)	63-100	76 (n=8)	21-100	25 (n=1)	-	-
12-14 DAA													
MAR	MYZUPE (3 trials) MACSEU (3 trials)	6	2.8	0.7-4.8	95	75-100	-	-	93 (n=5)	66-100	43 (n=1)	-	1 >, 4 =, 1 n.s.
N-E	MYZUPE (6 trials) MACSEU (8 trials)	14	19.0	0.6-86.4	84	75-96	78	37-96	-	-	-	-	8 >, 5 =, 1 <
S-E	APHISP (2 trials)	2	9.0	9.0	100	100	100	100	-	-	-	-	2 =
C-EU	MYZUPE (9 trials) MACSEU (11 trials) APHISP (2 trials)	22	13.7	0.6-86.4	88	75-100	81 (n=16)	37-100	93 (n=5)	66-100	43 (n=1)	-	-

### 3.2.3.1.3 (1c) Aphids in winter cereals (spring application)

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter cereals (wheat, barley, triticale, rye, spelt)	1APHIF	Mar, N-E, <del>S-E</del>	May-Jul BBCH 40-69	1-2 (10)	0.18	36

#### Material and methods

An overview of trials against aphids in winter cereals is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-118: Overview of efficacy and dose justification trials with MCW-2222 against aphids in winter cereals, spring application (25 efficacy trials involving the target rate)**

Ref. no.	Trial type (1)	Report no.	Crop	Pest(s) (2)	Country	Year	Trial status
<b>Maritime EPPO Zone (10 trials)</b>							
6.2/137	M+E+Y	CZ14IEYCERE008A	w-wheat	MACSAV	CZ	2014	GEP
6.2/138	M+E+Y	CZ15IEYCERE001A	w-wheat	MACSAV	CZ	2015	GEP
6.2/357	M+E	CZ20IETRZAW508B	w-wheat	MACSAV	CZ	2020	GEP
6.2/139	M+E	FCS12-3111-E01-AT	w-wheat	MACSAV	DE	2012	GEP
6.2/140	M+E	DE13IEYCERE320B	w-wheat	MACSAV	DE	2013	GEP
6.2/141	M+E	DE13IEYCERE320D	w-wheat	MACSAV	DE	2013	GEP
6.2/142	M+E	DE14IEYCERE320L	w-wheat	MACSAV	DE	2014	GEP
6.2/143	M+E	DE15IENNNGW320B	w-wheat	MACSAV, METODR	DE	2015	GEP
6.2/049	M+E	DE15IENNNGW320C	w-wheat	MACSAV	DE	2015	GEP
6.2/358	M+E	FR14IEYCERE108A	w-wheat	MACSAV	FR	2014	GEP
<b>North-East EPPO Zone (4 trials)</b>							
6.2/151	M+E	PL15IETRZAW013A	w-wheat	MACSAV, RHOPPA	PL	2015	GEP
6.2/152	M+E	PL15IETRZAW013B	w-wheat	MACSAV, RHOPPA	PL	2015	GEP
6.2/153	M+E	PL15IETTTLSS014A	w-triticale	MACSAV	PL	2015	GEP
6.2/154	M+E	PL15IETTTLSS014B	w-triticale	MACSAV	PL	2015	GEP

Ref. no.	Trial type (1)	Report no.	Crop	Pest(s) (2)	Country	Year	Trial status
<b>South-East EPPO Zone (11 trials)</b>							
6.2/157	E*	ROCL013002012	w-wheat	1-APHIF	RO	2012	GEP
6.2/158	M+E	RO13IETRZAW003A	w-wheat	MACSAV, RHOPPA	RO	2013	GEP
6.2/159	M+E	RO14IETRZAW042A	w-wheat	MACSAV	RO	2014	GEP
6.2/160	M+E	RO14IETRZAW042B	w-wheat	MACSAV	RO	2014	GEP
6.2/161	M+E	RO14IETRZAW042C	w-wheat	MACSAV	RO	2014	GEP
6.2/162	M+E	RO14IETRZAW042D	w-wheat	MACSAV	RO	2014	GEP
6.2/163	M+E	RO14IETRZAW042E	w-wheat	MACSAV	RO	2014	GEP
6.2/164	M+E	RO14IETRZAW042F	w-wheat	MACSAV	RO	2014	GEP
6.2/165	M+E	RO14IETRZAW042G	w-wheat	MACSAV	RO	2014	GEP
6.2/166	M+E	RO14IETRZAW042H	w-wheat	MACSAV	RO	2014	GEP
6.2/167	M+E	RO15IEYCERE011A	w-wheat	MACSAV	RO	2015	GEP
6.2/168	M+E	RO15IEYCERE011B	w-wheat	MACSAV	RO	2015	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

**Table 3.2-119: Summary of efficacy trials (aphids in winter cereals, spring application)**

Table 5/2-137: Summary of efficacy trials (aphids in winter cereals, spring application)										
Pest	Winter cereal	EPPO zone	Country	No. of trials <sup>(1)</sup>						
				Year					Total	Total by zone
				2012	2013	2014	2015	2020		
MACSAV	Winter wheat	MAR	CZ	-	-	1	1	1	3	10
			DE	1	2	1	2	-	6	
			FR	-	-	1	-	-	1	
		N-E	PL	-	-	-	2	-	2	2
		S-E	RO	-	1	8	2	-	11	11
	Winter triticale	N-E	PL	-	-	-	2	-	2	2
RHOPPA	Winter wheat	N-E	PL	-	-	-	2	-	2	2
		S-E	RO	-	1	-	-	-	1	1
METODR	Winter wheat	MAR	DE	-	-	-	1	-	1	2
Total:				1	4	11	12	1	29	-

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-120: Details on trial methodology (aphids in winter cereals, spring application)**

Guidelines	General guidelines	EPPO PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(1/2)
	Specific guidelines	EPPO PP 1/20(3), 1/70(3), 1/126(2), 1/236(1), CEB 75
Experimental design	Plot design	RCBD (all trials)
	Plot size	15-18-60 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per crop	Winter wheat (23 trials) Winter triticale (2 trials)
	Varieties per crop	Winter wheat: Federer, Forhand, Akteur, Smaragd, Winnetou, Opal, Mulan, Julius, Izvor, Exotic, Dropia, Arlechin, Glossa, Altigo, Boema, Renesansa, Altigo, Illico, Quebon, Apache, Judita, Patras, unknown Winter triticale: Adverdo, Fredro
	Sowing period	Winter wheat: from September to October November Winter triticale: September
Application	Crop stage (BBCH) at application	Winter wheat: from BBCH 24 61 to BBCH 73 Winter triticale: from BBCH 69 to BBCH 71

	Timing	May to July
	Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate and apterous aphids)
	Number of applications	1 (all trials)
	Spray volumes	100 - 300 L/ha
Assessment	Assessment types	- number of aphids per plant based on 20 or 25 plants - number of aphids per tiller/ear based on 25 tillers/ears - pest incidence in percent
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-3 DAA, 6-10 DAA, 10-14 DAA, 21 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-121: Overview of application rates against aphids in winter cereals, spring application**

Crop (pests)	EPPO zones	Product	No. of appl.	Rate per treatment	
				product/ha	active ingredient/ha
Winter cereals (APHISP)	Maritime,	MCW-2222	1	0.18 L	36 g acetamiprid
	North-East,	Mospilan 20 SG	1	0.15 kg	30 g acetamiprid
	South-East	Mospilan 20 SP	1	0.18 kg	36 g acetamiprid
		Karate Zeon	1	0.0625 L	6.25 g lambda-cyhalothrin

## Results

A total of 25 efficacy trials (4 trials with more than one pest) were conducted in winter cereals and are summarised according to the pest, i.e., *Sitobion avenae*, *Metopolophium dirhodum* and *Rhopalosiphum padi* and the country or application scenario in the following tables. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-122: Control (%) of MACSAV by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG and Karate Zeon in winter cereals, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha <sup>(2)</sup>		Karate Zeon 0.0625 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA										
MAR	3	99.1	2.7-278	86	60-100	82	49-99	-	-	3 =
S-E	2	<del>20.1</del> 20.2	16.4-23.9	<del>71</del> 72	63-80	69	61-77	-	-	2 =
C-EU	5	67.5	2.7-278	80	60-100	77	49-99	-	-	-
2-3 DAA										
MAR	8	21.4	1.4-83.8	93	78-100	<del>88</del> 89	53-100	-	-	1 >, 7 =
MAR	1	6.7	-	96	-	-	-	94	-	1 =
N-E	4	<del>5.8</del>	<del>4.2-6.6</del>	94	<del>92-96</del>	89	<del>84-94</del>	-	-	<del>1 &gt;, 3 =</del>
NE (TRZAW)	2	5.1	4.2-6.0	94	93-94	90	86-94	-	-	2=
NE (TTLWI)	2	6.5	6.4-6.6	94	92-96	89	84-93	-	-	1>, 1=
S-E	9	16.2	2.6-21.4	76	60-100	71	58-100	-	-	4 >, 5 =
C-EU	22	15.8	1.4-83.8	87 (n=22)	60-100	81 (n=21)	53-100	94 (n=1)	-	-
5 DAA										
MAR	1	54.8	-	92	-	91	-	-	-	1 =
6-10 DAA										
MAR	9	23.4	1.1-98.0	92	76-100	88	66-100	-	-	1 >, 8 =
MAR	1	14.7	-	98	-	-	-	100	-	1 =
N-E	4	<del>5.3</del>	<del>2.0-7.3</del>	97	<del>88-100</del>	94	<del>81-99</del>	-	-	4=
NE (TRZAW)	2	3.6	2.0-5.1	94	88-99	90	81-98	-	-	2=
NE (TTLWI)	2	7.0	6.6-7.3	100	100	98	97-99	-	-	2=
S-E	11	19.3	2.8-30.3	94	88-100	91	84-100	-	-	8 >, 3 =
C-EU	25	18.3	1.1-98.0	94 (n=25)	76-100	90 (n=24)	66-100	100 (n=1)	-	-
10-14 DAA										
MAR	5	<del>11.6</del> 11.7	0.16-31.8	77	48-92	76	55-97	-	-	1 >, 4 =
MAR	1	<del>28.1</del> 28.3	-	<del>98</del> 97	-	-	-	99	-	1 =
S-E	1	4.4	-	100	-	100	-	-	-	1 n.s.
C-EU	7	13.0	0.16-31.8	<del>81</del> 83 (n=7)	48-100	80 (n=6)	55-100	99 (n=1)	-	-
21 DAA										
MAR	1	13.5	-	97	-	-	-	100	-	1 =

(1) irrespective of the growth stage present in each trial (larvae, adult, mixed growth stages); in some trials determined as aphids/ear but considered comparable

(2) Reference standard slightly different in one trial (Report no. CZ20IETRZAW508B) but considered comparable: 0.18 kg/ha Mospilan 20 SP instead of 0.15 kg/ha Mospilan 20 SG

**Table 3.2-123: Control (%) of RHOPPA by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG in winter ~~cereals~~ wheat, spring application. For single trial data please refer to Appendix 4 of the BAD.**

Refer to Appendix 4 for the DAA.								
EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
2-3 DAA								
N-E	2	3.7	3.2-4.1	98	97-99	96	95-97	2 =
S-E	1	11.0	-	100	-	100	-	1 =
C-EU	3	6.1	3.2-11.0	99	97-100	97	95-100	3 =
7-8 DAA								
N-E	2	2.2	1.6-2.8	96	92-100	92	85-98	2 =
S-E	1	5.7	-	100	-	100	-	1 =
C-EU	3	3.4	1.6-5.7	97	92-100	94	85-100	3 =
14 DAA								
S-E	1	1.8	-	100	-	100	-	1 =

(1) irrespective of the growth stage present in each trial (larvae, adult, mixed growth stages)

**Table 3.2-124: Control (%) of METODR by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG in winter ~~cereals~~ wheat, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
2 DAA								
MAR	1	67.5	-	91	-	82	-	1 =
7 DAA								
MAR	1	77.8	-	95	-	95	-	1 =
13 DAA								
MAR	1	82.0	-	80	-	75	-	1 =

(1) irrespective of the growth stage present in each trial (larvae, adult, mixed growth stages)

## Conclusion

The data from all three EPPO zones demonstrated excellent aphid control in winter cereals from MCW-2222 applied at the target dose of 0.18 L/ha in spring, the efficacy of MCW-2222 was also equivalent or superior to the efficacy of Mospilan 20 SG and equivalent to Karate Zeon.

Since a sufficient number of trials was carried out in the major crop winter wheat extrapolation is envisaged to winter barley, winter triticale, winter rye and spelt with similar growth characteristics and pests. As the growth characteristics, application timings and target pests also enable extrapolation between winter to spring cereals, the efficacy data on winter cereals is also considered to be appropriate to demonstrate for the control of aphids in spring cereals. A summary of efficacy data for *Sitobion avenae* in winter and spring cereals is presented in Table 3.2-131.

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.



### 3.2.3.1.4 (1d) Aphids in spring cereals (spring application)

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring cereals (wheat, durum wheat, barley, triticale, oat)	1APHIF	Mar, N-E, S-E	Mar-Jul BBCH 40-69	1-2 (10)	0.175	35

#### Material and methods

An overview of trials against aphids in spring cereals (spring application) is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-125: Overview of efficacy and dose justification trials with MCW-2222 against aphids in spring cereals, spring application (7 efficacy trials involving the target rate)**

Ref. no.	Trial type (1)	Report no.	Crop	Pest(s) (2)	Country	Year	Trial status
<b>Maritime EPPO Zone (5 trials)</b>							
6.2/146	M+E+Y	CZ14IEYCERE008B	s-wheat	RHOPPA	CZ	2014	GEP
6.2/147	M+E	CZ14IEYCERE008C	s-wheat	MACSAV	CZ	2014	GEP
6.2/148	M+E+Y	CZ15IEYCERE001B	s-wheat	MACSAV	CZ	2015	GEP
6.2/149	M+E	CZ14IEYCERE008D	s-barley	MACSAV	CZ	2014	GEP
6.2/150	M+E	DE14IENNGG320J	s-barley	MACSAV	DE	2014	GEP
<b>North-East EPPO Zone (2 trials)</b>							
6.2/155	M+E	PL15IEHORVS015A	s-barley	MACSAV	PL	2015	GEP
6.2/156	M+E	PL15IEHORVS015B	s-barley	MACSAV	PL	2015	GEP
6.2/336	E*	LV21HEYCERE421A	s-wheat	RHOPPA	LV	2021	GEP
6.2/337	E*	LV21HEYCERE421B	s-wheat	RHOPPA	LV	2021	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without exact target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

**Table 3.2-126: Summary of efficacy trials (aphids in spring cereals, spring application)**

Pest	Spring cereal	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone
				2014	2015		
MACSAV	Spring wheat	MAR	CZ	1	1	2	2
	Spring barley	MAR	CZ	1	-	1	2
		N-E	PL	-	2	2	
RHOPPA	Spring wheat	MAR	CZ	1	-	1	1
Total:				4	3	7	-

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-127: Details on trial methodology (aphids in spring cereals, spring application)**

Guidelines	General guidelines	EPPO PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(2)
	Specific guidelines	EPPO PP 1/20(3), 1/236(1)
Experimental design	Plot design	RCBD (all trials)
	Plot size	15-25 m <sup>2</sup>

	Number of replications	4 (all trials)
Crop	Trials per crop	Spring wheat (5 MED, 3 EFF trials) Spring barley (4 MED, 4 EFF trial)
	Varieties per crop	Spring wheat: Epos, Tercie, Dafne, <del>Licamero, Uffe</del> Spring barley: Bojos, Catamaran, Nadek, Stratus
	Sowing period	Spring wheat: <del>March to May</del> Spring barley: <del>February to March</del> <b>March to April</b>
Application	Crop stage (BBCH) at application	Spring wheat: from BBCH <del>43</del> <b>59</b> to BBCH 71 Spring barley: from BBCH <del>55</del> <b>53</b> to BBCH <del>75</del> <b>58</b>
	Timing	May to July
	Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate and apterous aphids)
	Number of applications	1 (all EFF trials)
	Intervals between applications	<del>2 (1 MED trial) with an interval of 10 days</del>
Assessment	Spray volumes	200 - 300 L/ha
	Assessment types	- number of aphids per plant based on 20 or 25 plants - pest incidence in percent
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-3 DAA, 6-10 DAA, 10-14 DAA, 21 DAA

Due to a late GAP change caused by the relevant risk assessments, the rate of MCW-2222 tested in the trials is slightly different (0.18 instead of 0.175 L/ha). But as the difference in rates is only 2.75%, the data from the trials conducted at 0.18 L/ha is valid to demonstrate the efficacy at 0.175 L/ha. Please refer to the following table for details on the application rates.

**Table 3.2-128: Overview of application rates against aphids in spring cereals, spring application**

Crop (pests)	EPPO zones	Product	No. of appl.	Rate per treatment	
				product/ha	active ingredient/ha
Spring cereals (APHISP)	Maritime, North-East	MCW-2222	1	0.18 L	36 g acetamiprid
		Mospilan 20 SG	1	0.15 kg	30 g acetamiprid

## Results

A total of 7 efficacy trials were conducted in spring cereals and are summarised according to the pest, i.e., *Sitobion avenae* and *Rhopalosiphum padi*, the EPPO zone and comparable reference standards. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-129: Control (%) of MACSAV by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG in spring cereals, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s)
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
1-3 DAA								
MAR	4	4.0	1.5-8.0	86	67-100	81	59-100	4=
MAR (TRZAS)	2	3.3	2.8-3.8	82	67-97	78	59-96	2=

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s)
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
MAR (HORVS)	2	4.8	1.5-8.0	91	81-100	88	76-100	2=
N-E (HORVS)	2	7.4	5.4-9.4	93	92-94	94	92-96	2 =
C-EU	6	5.2	1.5-9.4	89	67-100	87	59-100	6 =
7-9 DAA								
MAR	3	5.0	2.1-9.0	90	83-98	88	79-95	3=
MAR (TRZAS)	2	3.2	2.5-3.9	93	87-98	88	79-97	2=
MAR (HORVS)	1	9.0	-	83	-	88	-	1=
N-E (HORVS)	2	9.0	7.2-10.7	94 95	91-98	97	93-100	2 =
C-EU	5	6.6 6.7	2.1-10.7	91	83-98	91	79-100	5 =
14 DAA								
MAR (TRZAS)	1	1.7	-	97	-	85 95	-	1 =

(1) irrespective of the growth stage present in each trial (larvae, adult, mixed growth stages); in some trials determined as aphids/ear but considered comparable

**Table 3.2-130: Control (%) of RHOPPA by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) compared to Mospilan 20 SG in spring cereals wheat, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (aphids/plant) <sup>(1)</sup>		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s)
				MCW-2222 0.18 L/ha		Mospilan 20 SG 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
1 DAA								
MAR	1	3.5	-	100	-	100	-	1 =
8 DAA								
MAR	1	0.7	-	100	-	100	-	1 =

(1) irrespective of the growth stage present in each trial (larvae, adult, mixed growth stages)

## Conclusion

The data from both EPPO zones demonstrated excellent aphid control in spring cereals from MCW-2222 applied at 0.18 L/ha, the efficacy of MCW-2222 was also equivalent to Mospilan 20 SG. For a more extensive database please refer to winter cereals above, since similar growth characteristics, application timings and target pests enable to extrapolate from winter to spring cereals. A summary of efficacy data for *Sitobion avenae* in winter and spring cereals is presented in the following table. Extrapolation from the major pest *Sitobion avenae* to *Metopolophium dirhodum* and *Rhopalosiphum padi* is common<sup>5</sup>.

<sup>5</sup> Board for the Authorisation of Plant Protection Products and Biocides, The Netherlands (2014) Chapter 8 efficacy: Appendix E: Extrapolation possibilities

**Table 3.2-131: Summary table. Control (%) of aphids by MCW-2222 compared to reference products in winter and spring cereals, spring application**

Aphid	Crop	EPPO zones	No. of trials	% control					
				MCW-2222 0.175-0.18 L/ha		Mospilan 20 SG 0.15 kg/ha <sup>(1)</sup>		Karate Zeon 0.0625 L/ha	
				mean	min-max	mean	min-max	mean	min-max
			1-2 DAA						
MACSAV	Winter cereals	MAR, <del>N-E</del> , S-E	5	80	60-100	77	49-99	-	-
	Spring cereals	MAR, <del>N-E</del>	4	86	67-100	83	59-100	-	-
	Cereals	Total	9	83	60-100	79	49-100	-	-
			2-3 DAA						
MACSAV	Winter cereals	MAR, N-E, S-E	22	87 (n=22)	60-100	81 (n=21)	53-100	94 (n=1)	-
	Spring <del>cereals</del> barley	MAR, N-E	2	93	92-94	94	92-96	-	-
	Cereals	Total	24	87 (n=24)	60-100	82 (n=23)	53-100	94 (n=1)	-
			6-10 DAA						
MACSAV	Winter cereals	MAR, N-E, S-E	25	94 (n=25)	76-100	90 (n=24)	66-100	100 (n=1)	-
	Spring cereals	MAR, N-E	5	91	83-98	91	79-100	-	-
	Cereals	Total	30	94 (n=30)	76-100	90 (n=29)	66-100	100 (n=1)	-
			10-14 DAA						
MACSAV	Winter cereals	MAR, <del>N-E</del> , S-E	7	<del>81</del> 83 (n=7)	48-100	80 (n=6)	55-100	99 (n=1)	-
	Spring <del>cereals</del> wheat	MAR, <del>N-E</del>	1	97	-	95	-	-	-
	Cereals	Total	8	85 (n=8)	48-100	82 (n=7)	55-100	99 (n=1)	-

(1) Reference standard slightly different in one trial (Report no. CZ20IETRZAW508B) but considered comparable: 0.18 kg/ha Mospilan 20 SP instead of 0.15 kg/ha Mospilan 20 SG

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data. The proposed label rate of MCW-2222 is considered to be appropriate for the control of aphids in spring cereals.

### 3.2.3.1.5 (1e) Aphids in sugar beet

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Sugar beet	MYZUPE, APHIFA, MACSEU	Mar, N-E, S-E	Apr-Aug BBCH 12-39	1 (PL, SI) or 2 (7) (CZ, DE, NL)	0.25	25 or 50

### Material and methods

An overview of trials against aphids in sugar beet is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-132: Overview of efficacy and dose justification trials with MCW-2222 against aphids in sugar beet (31 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (11 trials)</b>							
6.2/267	M+E	CZ22IEBEAVA538B	Sugar beet	APHIFA	CZ	2022	GEP
6.2/268	M+E	CZ22IEBEAVA539A	Sugar beet	MYZUPE	CZ	2022	GEP
6.2/269	M+E	CZ22IEBEAVA539B	Sugar beet	APHIFA, MYZUPE	CZ	2022	GEP
6.2/482	E	DE21IEBEAVA530A	Sugar beet	APHIFA	DE	2021	GEP
6.2/270	M+E	DE22IEBEAVA538A	Sugar beet	APHIFA	DE	2022	GEP
6.2/271	E	DE22IEBEAVA701A	Sugar beet	APHIFA	DE	2022	GEP
6.2/272	E	DE22IEBEAVA701B	Sugar beet	APHIFA	DE	2022	GEP
6.2/273	E	DE22IEBEAVA702A	Sugar beet	APHIFA	DE	2022	GEP
6.2/274	E	DE22IEBEAVA702B	Sugar beet	APHIFA	DE	2022	GEP
6.2/275	M+E	NL20IEBEAVA023A	Sugar beet	MYZUPE	NL	2020	GEP
6.2/276	M+E	NL20IEBEAVA023B	Sugar beet	APHIFA	NL	2020	GEP
<b>North-East EPPO Zone (20 trials)</b>							
6.2/277	M+E	LT20IEBEAVA535A	Sugar beet	APHIFA	LT	2020	GEP
6.2/316	M+E	PL20IEBEAVA221B	Sugar beet	APHIFA	PL	2020	GEP
6.2/389	M+E	PL20IEBEAVA221C	Sugar beet	APHIFA	PL	2020	GEP
6.2/465	E	PL21IEBEAVA233B	Sugar beet	MYZUPE	PL	2021	GEP
6.2/466	E	PL21IEBEAVA233D	Sugar beet	APHIFA	PL	2021	GEP
6.2/467	E	PL21IEBEAVA233E	Sugar beet	APHIFA	PL	2021	GEP
6.2/468	E	PL21IEBEAVA233F	Sugar beet	APHIFA	PL	2021	GEP
6.2/469	M+E	PL21IEBEAVA238A	Sugar beet	APHIFA	PL	2021	GEP
6.2/470	M+E	PL21IEBEAVA238B	Sugar beet	MYZUPE	PL	2021	GEP
6.2/471	M+E	PL21IEBEAVA238C	Sugar beet	APHIFA	PL	2021	GEP
6.2/472	M+E	PL22IEBEAVA110A	Sugar beet	APHIFA	PL	2022	GEP
6.2/473	M+E	PL22IEBEAVA110B	Sugar beet	APHIFA	PL	2022	GEP
6.2/474	M+E	PL22IEBEAVA110C	Sugar beet	APHIFA	PL	2022	GEP
6.2/475	M+E	PL22IEBEAVA110D	Sugar beet	APHIFA	PL	2022	GEP
6.2/476	M+E	PL22IEBEAVA110E	Sugar beet	APHIFA	PL	2022	GEP
6.2/477	M+E	PL22IEBEAVA110F	Sugar beet	APHIFA	PL	2022	GEP
6.2/478	M+E	PL22IEBEAVA111A	Sugar beet	MYZUPE	PL	2022	GEP
6.2/479	M+E	PL22IEBEAVA111B	Sugar beet	MYZUPE	PL	2022	GEP
6.2/480	M+E	PL22IEBEAVA111C	Sugar beet	MYZUPE	PL	2022	GEP
6.2/481	M+E	PL22IEBEAVA111D	Sugar beet	MYZUPE	PL	2022	GEP

(1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment

(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

**Table 3.2-133: Summary of efficacy trials (aphids in sugar beet)**

Pest	Crop	EPPO zone	Country	No. of trials				
				Year			Total	Total by zone
				2020	2021	2022		
APHIFA	Sugar beet	MAR	CZ	-	-	2	2	9
			DE	-	1	5	6	
			NL	1			1	
		N-E	PL	2	5	6	13	14
			LT	1	-	-	1	
MYZUPE	Sugar beet	MAR	CZ	-	-	2	2	9
			NL	1	-	-	1	
		N-E	PL		2	4	6	6

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-134: Details on trial methodology (aphids on sugar beet)**

Guidelines	General guidelines	EPPO PP 1/226(3), 1/225(2), 1/135(3/4), 1/152(4), 1/181(4)
	Specific guidelines	EPPO PP 1/228(2)
Experimental design	Plot design	RCB (all trials)
	Plot size	15-30 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per aphid	<i>Aphis fabae</i> (23 trials), <i>Myzus persicae</i> (9 trials)
	Varieties per crop	Nerud-a, Kaplan, Kristallina KWS, Caprianna, BTS 6000 RHC, BTS 2045, Citrus/Fitis, Annemonica, Smart Gladiata, Ozon, Wojownik, Jagiellon, Kujavia, Hubertus, Jaromir, Vinnare, Davinci, Fronta, Toleranza, Eliska KWS, Everest, BTS Smart 9635, Annarosa, BTS 2345, August
	Sowing period	March – April May
Application	Crop stage (BBCH) at application	from BBCH 12 to BBCH 39
	Timing	May to September
	Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate and apterous aphids)
	Number of applications	1 application (22-20 trials) 2 applications (9-11 trials)
	Spray volumes	200 - 500 L/ha
Assessment	Assessment types	- number of larva or insect per plant or leaf based on 10, 20, or 25 plants - pest incidence in percent
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 2-3 DAA, 5-9 DAA, 12-14 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-135: Overview of application rates against *Aphis fabae* on sugar beet**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (3 trials)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product	Mospilan SG	1	0.25 kg	50 g acetamiprid
Maritime (5 trials)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product	TEPPEKI	1	0.14 L	70 g flonicamid
Maritime (1 trial)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product	PIRIMOR	1	0.4 kg	200 g pirimicarb
North-East (11 trials)				
Test product	MCW-2222	1-2	0.25 L	50 g acetamiprid
Reference product	DECIS MEGA 50 EW	1-2	0.2 L	50 g deltamethrin
North-East (1 trial)				

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product	FURY 100 EW	1	0.1 L	10 g deltamethrin

**Table 3.2-136: Overview of application rates against *Myzus persicae* on sugar beet**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (2 trials)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product(s)	Mospilan SG	1	0.25 kg	50 g acetamiprid
Maritime (1 trial)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
Reference product	PIRIMOR	1	0.4 kg	200 g pirimicarb
North-East (6 trials)				
Test product	MCW-2222	1-2	0.25 L	50 g acetamiprid
Reference product	PIRIMOR/ 500 WG	1-2	0.3 kg	150g pirimicarb

## Results

A total of 32 efficacy trials (one trial with two species) were conducted in sugar beet and are summarised according to the pest, country, EPPO zone, application rate and/or reference product in the following tables. The efficacy of MCW-2222 was compared to Mospilan 20 SG, Decis mega 50 EW, Teppeki, Pirimor, and Fury 100 EW, and showed better or similar results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.

[illegible]



[illegible]

**Table 3.2-138: Control (%) of MYZUPE by 1-2 applications of MCW-2222 at 0.25 L/ha (50 g a.i./ha) compared to Mospilan 20 SG and Pirimor in sugar beet. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of aphids/plant or leaf)		% control						No. of trials where MCW-2222 is >, <, =, or n.s. (not stated) compared to standard(s)
				MCW-2222 0.25 L/ha		Mospilan 20 SG 0.15 kg/ha		Pirimor 0.4 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1-2 DAA										
MAR	1	9	-	7	-	3	-	-	-	1 =
N-E	5	7.3	4.3-12.7	55 56	20 23-85	-	-	60	32-88 90	4 =, 1 <
C-EU	6	7.6	4.3-12.7	47 48	7-85	-	-	-	-	-
3 DAA										
MAR	1	5	-	60	-	57	-	-	-	1 =
MAR	1	19.2	-	84	-	-	-	41	-	1 >
N-E	2	6.2	4.8-7.6	54	49-59	-	-	63	59-67	1 =, 1 >
C-EU	4	9.2	4.8-19.2	63	49-84	-	-	-	-	-
7-9 DAA										
MAR	2	8.4	5.9-11.0	78 81	64 68-93	80	65-96	-	-	2 =
MAR	1	19.0	-	100	-	-	-	97	-	1 =
N-E	6	9.0	5.4-14.9	83	69-93	-	-	83	67-96	1 <, 4 =, 1 >
C-EU	9	10.0	5.4-19.0	84	64-100	-	-	-	-	
12-15 DAA										
MAR	2	9.7	6-13	84	73-95	88	78-97	-	-	2 =
MAR	1	7.4	-	100	-	-	-	87	-	1 =
N-E	3	5.8	5.5-6.1	69	24-95	-	-	73	34-93	3 =
C-EU	6	7.3	5.5-13.3	79	24-100	-	-	-	-	-
2-3 DAB										
N-E	3 4	12.4 11.5	9.3 8.5-16.5	90 91	78-98	-	-	91 92	83-98	3 4 =
7-8 DAB										
N-E	3 4	12.3 11.7	7.9-19.5	91 92	88-99	-	-	91 89	85 84-99	3 4 =
14 DAB										
N-E	3 4	13.6 12.5	9.0-21.7	92 91	87-94	-	-	89 84	82 68-93	3 =, 1 >

## Conclusion

MCW-2222 applied at the target dose of 0.25 L/ha showed excellent control of *Aphis fabae* and *Myzus persicae* on sugar beet. Control levels of MCW-2222 against *Aphis fabae* were equivalent compared to Mospilan 20 SG, Teppeki, and Fury 100 EW and superior or equivalent compared to Decis mega 50 EW.

Further, MCW-2222 showed equivalent control levels against *Myzus persicae* compared to Mospilan 20 SG and Pirimor.

Extrapolation of efficacy data from the Maritime and North-East EPPO zone to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.1.6 (1f) Aphids in ornamentals

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. And interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Flower bulbs and flower tubers	Aphids	Mar-Jul BBCH 12-91	Mar	1	0.23	46
			Mar, S-E	2*(7)	0.17	34
Floriculture crops, tree nursery crops, perennial nursery crops	Aphids	May-Aug BBCH 12-91	Mar	1	0.23	46
			Mar, S-E	2*(7)	0.17	34

\* Only 1 application for Slovenia

## Material and methods

An overview of trials against aphids in flower bulbs (*Lilium* sp.), in ornamentals/floriculture (*Hibiscus* sp., *Chrysanthemum* sp., *Rosa* sp.) and in nursery (*Fagus sylvatica* var. *sylvatica*) is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3. All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations in the following countries and years. Trials on ornamentals with the target pests *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae* and *Aphis fabae* are evaluated together as extrapolation from trials involving the respective pests and crops to the whole group of aphids (except PHYAFA) in ornamentals is not considered to be restricted in accordance with the Dutch guidance document for extrapolation in ornamental crops<sup>6</sup>.

**Table 3.2-139: Overview of efficacy and dose justification trials with MCW-2222 against aphids in ornamentals (22 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	Crop	Country	Year	Trial status
<b>Maritime EPPO Zone (22 17 field trials)</b>							
6-2/485	M+E	NL20IEYORNA027A	APHIFA	<i>Hibiscus</i> sp.	NL	2020	GEP
6-2/486	M+E	NL20IEYORNA027B	MYZUPE	<i>Chrysanthemum</i> sp.	NL	2020	GEP
6-2/487	M+E	NL20IEYORNA028A	APHIGO	<i>Chrysanthemum</i> sp.	NL	2020	GEP
6-2/488	M+E	NL20IEYORNA028B	APHIGO	<i>Hibiscus</i> sp.	NL	2020	GEP

<sup>6</sup> Netherlands Food and Consumer Product Safety Authority, Division Tactical Direction & Expertise, Department of Expertise 2018, updated 2020: Possibilities for extrapolation of efficacy and phytotoxicity of plant protection products for ornamental crops, Version 1.2.

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	Crop	Country	Year	Trial status
6.2/489	M+E	NL21IEYORNA031A	APHIGO	<i>Chrysanthemum</i> sp.	NL	2021	GEP
6.2/490	M+E	NL21IEYORNA031B	APHIGO, MYZUPE	<i>Hibiscus</i> sp.	NL	2021	GEP
6.2/491	M+E	NL21IEYORNA031D	APHIGO	<i>Hibiscus</i> sp.	NL	2021	GEP
6.2/492	M+E	NL21IEYORNA031E	APHIGO	<i>Hibiscus</i> sp.	NL	2021	GEP
6.2/493	M+E	NL21IEYORNA031F	APHIGO	<i>Hibiscus</i> sp.	NL	2021	GEP
6.2/494	M+E	NL21IEYORNA032A	MYZUPE	<i>Chrysanthemum</i> sp.	NL	2021	GEP
6.2/495	M+E	NL21IEYORNA032B	MACSEU	<i>Rosa</i> sp.	NL	2021	GEP
6.2/496	M+E	NL21IEYORNA033A	PHYAFA	Beech	NL	2021	GEP
6.2/497	M+E	NL21IEYORNA033B	PHYAFA	Beech	NL	2021	GEP
6.2/498	M+E	NL22IELILSS009A	APHIGO	Lily	NL	2022	GEP
6.2/499	M+E	NL22IELILSS009B	APHIGO	Lily	NL	2022	GEP
6.2/500	M+E	NL22IELILSS009C	APHIGO	Lily	NL	2022	GEP
6.2/501	M+E	NL22IEYORNA005A	APHIGO	<i>Hibiscus</i> sp.	NL	2022	GEP
6.2/502	M+E	NL22IEYORNA005B	APHIGO	<i>Chrysanthemum</i> sp.	NL	2022	GEP
6.2/503	M+E	NL22IEYORNA005C	APHIGO	<i>Chrysanthemum</i> sp.	NL	2022	GEP
6.2/504	M+E	NL22IEYORNA005D	APHIGO	<i>Chrysanthemum</i> sp.	NL	2022	GEP
6.2/505	M+E	NL22IEYORNA007A	MACSEU	<i>Rosa</i> sp.	NL	2022	GEP
6.2/506	M+E	NL22IEYORNA007B	MACSEU	<i>Rosa</i> sp.	NL	2022	GEP
<b>Maritime EPPO Zone (5 greenhouse trials)</b>							
6.2/485	M+E	NL20IEYORNA027A	APHIFA	<i>Hibiscus</i> sp.	NL	2020	GEP
6.2/486	M+E	NL20IEYORNA027B	MYZUPE	<i>Chrysanthemum</i> sp.	NL	2020	GEP
6.2/487	M+E	NL20IEYORNA028A	APHIGO	<i>Chrysanthemum</i> sp.	NL	2020	GEP
6.2/488	M+E	NL20IEYORNA028B	APHIGO	<i>Hibiscus</i> sp.	NL	2020	GEP
6.2/502	M+E	NL22IEYORNA005B	APHIGO	<i>Chrysanthemum</i> sp.	NL	2022	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

**Table 3.2-140: Summary of efficacy trials (aphids in ornamentals)**

EPPO Zone	Country	Pest	Crop	No. of trials <sup>(1)</sup>				
				Year			Total	Total by pest
				2020	2021	2022		
MAR	NL	APHIFA	Ornamentals <sup>(2)</sup>	1	-	-	1	1
		APHIGO		2	5	4	11	14
			Lily	-	-	3	3	
		MYZUPE	Ornamentals <sup>(2)</sup>	1	2	-	3	3
		MACSEU		-	-	3	3	3
		PHYAFA	Beech	-	2	-	2	2
			Total	4	9	10	23	-

- (1) Please note, that due to the separation by pest, tests with more than one pest are double counted.  
(2) *Chrysanthemum* sp. (7 trials), *Hibiscus* sp. (7 trials), *Rosa* sp. (3 trials), *Fagus sylvatica* (2 trials)

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-141: Details on trial methodology (aphids in ornamentals)**

Guidelines	General guidelines	PP 1/135(4), 1/152(4), 1/181(4), 1/225(2)
	Specific guidelines	EPPO PP 1/23(2)
Experimental design	Plot design	RCB (all trials)
	Plot size	0.5 - 6 m <sup>2</sup>
	Number of replications	4 (all trials)

Crop	Trials per crop	All trials were efficacy and dose justification trials: <i>Chrysanthemum</i> sp. (7 trials) <i>Hibiscus</i> sp. (7 trials) <i>Rosa</i> sp. (3 trials) <i>Fagus sylvatica</i> (2 trials) <i>Lilium</i> sp. (3 trials)
	Crop variety	Chrysanthemum: Chic (3x), Berry Sorbet, Calimero Minty, Barolo (2x) Hibiscus: Ardens, Marina (3x), Rosemallow/Koenig, Pink Giant, Seppe Rose: PatioHit`Regin, PatioHit`Isabe, Schneewittchen Fagus: Sylvatica (2x) Lily: Star Fighter, Labrador, Conca d`Or
	Sowing period	March to September
Application	Crop stage (BBCH) at application	from BBCH 19 to BBCH 65
	Timing Pest stage at application	May to September mixed
	Number of applications	1 application ( <del>17</del> 15 trials) 2 applications ( <del>5</del> 7 trials) (all trials were EFF and MED trials)
	Spray volumes	<del>200</del> 400 - 1000 L/ha
Assessment	Assessment types	Number of aphids per shoot based on 10 or 12 plants per plot
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-4 DAA, resp. 3 DAB, 6-8 DAA, resp. 6 DAB, 13- 15 DAA, resp. 13 DAB, 20- 22 DAA, 3 DAB, 6-7 DAB, 13-14 DAB, 21 DAB

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-142: Overview of application rates against aphids in ornamentals**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (22 trials)				
Test product	MCW-2222	1	0.125 L	25 g acetamiprid
		1-2	<b>0.17 L</b>	<b>34 g acetamiprid</b>
		1	<b>0.23 L</b>	<b>46 g acetamiprid</b>
Reference product	Gazelle	1	0.23 kg	46 g acetamiprid

## Results

A total of 22 efficacy trials were conducted (one trial with two pests) in ornamentals and are summarised according to the pest *Myzus persicae*, *Aphis fabae*, *Aphis gossypii*, and *Macrosiphum euphorbiae*. Control of *Phyllaphis fagi* on beech was reflected separately. As there was no efficacy in the reference product or in the test product after the first application in three trials, a second application was conducted (two trials with APHIGO and one trial with PHYAFA). Due to this, the results after the second application (from a total of three trials) were used for the calculation. For detailed results please refer to Appendix 4 of the BAD.

Eppo zone: MAR	Crop	No. of trials	Untreated control aphids (no./shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated
					MCW-2222 0.17 L/ha		MCW-2222 0.23 L/ha		Gazelle 0.23 Kg/ha		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
<b>1-4 DAA, resp. and 3 DAB<sup>1</sup></b>											
APHIGO prot. (DAA)	Ornamentals	3	80.9	10-147	<b>84</b>	66-98	<b>83</b>	66-99	<b>80</b>	58-100	3 =
APHIGO unprot. (DAA)	Ornamentals	6 <b>5</b>	53.6 60.9	8.8-245	67 <b>74</b>	28 53-98	78 <b>82</b>	57 69-100	76 <b>83</b>	46 63-99	6 <b>5</b> =
APHIGO unprot. (3 DAB)	Ornamentals	1	17.5	-	<b>64</b>	-	<b>61</b>	-	<b>62</b>	-	1 =
APHIGO unprot. (DAA)	Lily	3 <b>2</b>	71.8 79.5	41-118	<b>65</b>	48 50-79	<b>69</b>	50-88	83 <b>77</b>	65-96 88	3 <b>2</b> =
APHIGO unprot. (3 DAB)	Lily	1	55.7	-	<b>68</b>	-	<b>69</b>	-	<b>96</b>	-	1 <
APHIGO all		12	65.0	8.8-245	71 <b>74</b>	28 50-98	<b>77</b>	50-100	79 <b>81</b>	46 58-100	12 <b>11</b> =, 1 <
MYZUPE unprot. (DAA)	Ornamentals	2	64.7	3.3-126	58 <b>65</b>	25 39-90	49 <b>73</b>	11 58-88	77 <b>79</b>	66 68-89	2 =
MACSEU unprot. (DAA)	Ornamentals	3	31.6	13-51	<b>83</b>	62-94	<b>85</b>	64-97	<b>80</b>	51-95	3 =
APHIFA prot. (DAA)	Ornamentals	1	13.8	-	<b>62</b>	-	<b>52</b>	-	<b>54</b>	-	1 =
All aphids prot. (DAA)		5 <b>4</b>	51.3 64.1	0.1 10.4-147	73 <b>78</b>	50 62-98	64 <b>75</b>	20 52-99	<b>74</b>	54-100	5 <b>4</b> =
All aphids unprot. (DAA)		14 <b>12</b>	54.4 57.3	3.3-245	69 <b>73</b>	25 39-98	73 <b>79</b>	11 50-100	78 <b>80</b>	46 51-99	14 <b>12</b> =
All aphids unprot. (3 DAB)		2	36.6	17.5-55.7	<b>66</b>	64-68	<b>65</b>	61-69	<b>79</b>	62-96	1 =, 1 <
All aphids		19 <b>18</b>	53.6 56.6	0.1 3.3-245	70 <b>74</b>	25 39-98	71 <b>77</b>	11 50-100	77 <b>79</b>	33 51-100	19 <b>17</b> =, 1 <
<b>6-8 DAA, resp. and 6-7 DAB<sup>1</sup></b>											
APHIGO prot. (DAA)	Ornamentals	3	44.6	8.1-103	<b>93</b>	84-99	<b>94</b>	84-99	<b>93</b>	86-97	3 =
APHIGO unprot. (DAA)	Ornamentals	8 <b>7</b>	59.4 65.5	9.7-324	84 <b>85</b>	39 56-100	88 <b>90</b>	59 72-100	87 <b>88</b>	52 68-100	8 <b>7</b> =
APHIGO unprot. (DAB)	Ornamentals	1	16.3	-	<b>26</b>	-	<b>56</b>	-	<b>58</b>	-	1 =
APHIGO unprot. (DAA)	Lily	3 <b>2</b>	66.4 48.4	12- 84.7 102	91 <b>87</b>	80- 94 98	88 <b>84</b>	69- 98 99	95 <b>93</b>	88- 98 99	3 <b>2</b> =
APHIGO unprot. (DAB)	Lily	1	102.4	-	<b>98</b>	-	<b>99</b>	-	<b>99</b>	-	1 =
APHIGO all		14	57.7	8.1-324	87 <b>84</b>	39 26-100	89 <b>88</b>	59 56-100	90 <b>89</b>	52 58-100	14 =

EPPO zone: MAR	Crop	No. of trials	Untreated control aphids (no./shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated
			mean	min-max	MCW-2222 0.17 L/ha		MCW-2222 0.23 L/ha		Gazelle 0.23 Kg/ha		
					mean	min-max	mean	min-max	mean	min-max	
MYZUPE prot. (DAA)	Ornamentals	1	28.2	-	72	-	88	-	68	-	1 =
MYZUPE unprot. (DAA)	Ornamentals	2	54.1	6.9-101	89	79-99	95	89-100	89	79-99	2 =
MYZUPE all		3	45.5	6.9-101	83	72-99	92	88-100	82	68-99	3 =
MACSEU unprot. (DAA)	Ornamentals	3	30.4	13-41	86	76-94	92	80-98	82	59-95	3 =
APHIFA prot. (DAA)	Ornamentals	1	25.1	-	91	-	97	-	96	-	1 =
All aphids prot (DAA)		5	37.4	8.1-103	88	72-99	93	84-99	88	68-97	5 =
All aphids unprot. (DAA)		14	54.6 53.9	6.9-324	86	39 56-100	90	59 69-100	88	52 59-100	14 =
All aphids unprot. (DAB)		2	59	16.3-102.4	62	26-98	78	56-99	79	58-99	2 =
All aphids		21	50.5	6.9-324	87 84	39 26-100	91 90	59 56-100	88 87	52 58-100	21 =
13-15 DAA, resp. and 13 DAB <sup>1</sup>											
APHIGO prot. (DAA)	Ornamentals	2	3.8	0.3-7.3 765	51	25-76	59	25-92	46	25-67	2 =
APHIGO unprot. (DAA)	Ornamentals	6	135.1 153.7	13.2-765	77	23-100	86 89	72 73-100	87 88	69-100	6 =
APHIGO unprot. (DAB)	Ornamentals	1	23.6	-	77	-	72	-	82	-	1 =
APHIGO unprot. (DAA)	Lily	2	86.2 48	23.5-72.5 163	95 92	87-97 100	96 95	90-99 100	97	95-98 100	2 =
APHIGO unprot. (DAB)	Lily	1	162.6	-	100	-	100	-	100	-	1 =
APHIGO all		12	101.0	0.3-765	77	23-100	84	25-100	83	25-100	12 =
MYZUPE unprot. (DAA)	Ornamentals	2	35.1	10.1-60	81 82	79-84	91	88-93	81 82	75-88	2 =
MACSEU unprot. (DAA)	Ornamentals	2	43.1	43-43.1	81	80-81	96	94-98	92	86-97	2 =
APHIFA prot. (DAA)	Ornamentals	1	18.6	-	97	-	100	-	100	-	1 =
All aphids prot. (DAA)		3	8.7	0.3—19	66	25-99	72	25-100	64	25-100	3 =
All aphids unprot. (DAA)		12	97.2 97.9	10.1-765	82 81	23-100	90 91	72 73-100	89	69-100	14 =
All aphids unprot. (DAB)		2	93.1	23.6-162.6	89	77-100	86	72-100	91	82-100	2 =

<sup>1</sup>For this assessment timing, results were partially replaced by assessment results after the second application (one trial).

**Table 3.2-144: Control (%) of PHYAFA by MCW-2222 applied at target rates of 0.17 L/ha and 0.23 L/ha (34 and 46 g a.i./ha) compared to Gazelle (0.23 kg/ha) in ornamentals regarding PESSEV (no. of aphids/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone: MAR	Crop	No. of trials	Untreated control aphids (no./shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated
					MCW-2222 0.17 L/ha		MCW-2222 0.23 L/ha		Gazelle 0.23 kg/ha		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
<b>1 DAA</b>											
PHYAFA	Beech	1	26.8	-	41-46	-	26-35	-	33	-	1 =
<b>6 DAA, resp. and 7 DAB<sup>(1)</sup></b>											



EPPO zone: MAR	Crop	No. of trials	Untreated control aphids (no./shoot)		% control						No. of trials where MCW-2222 at max. rate is >, <, = compared to stand-ard(s); n.s.: signifi-cance not stated
					MCW-2222 0.17 L/ha		MCW-2222 0.23 L/ha		Gazelle 0.23 kg/ha		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
PHYAFA (DAA)	Beech	2 1	15 17	13-17	53 86	20-86	62 74	50-74	56 78	33-78	2 1 =
PHYAFA (DAB)	Beech	1	13	-	21	-	50	-	33	-	1 =
14 DAA											
PHYAFA	Beech	1	17.2	-	57	-	68	-	65	-	1 =

(1) For this assessment timing, results were replaced by assessment results after the second application.

## Conclusion

The data from Maritime EPPO zone demonstrated good up to excellent control of aphids on ornamentals (i.e. flower bulbs and tubers, floriculture and nursery) by MCW-2222 applied at 0.17 and 0.23 L/ha. The efficacy of MCW-2222 was always equivalent to Gazelle (0.23 kg/ha). Sufficient trials are available to cover the GAP uses on aphids in ornamentals as trials on Chrysanthemum, Hibiscus or Rose with the target pests *Aphis gossypii*, *Myzus persicae*, *Macrosiphum euphorbiae*, *Aphis fabae* can be extrapolated to the whole group of aphids (except PHYAFA) on the whole group of ornamental crops in accordance with the Dutch guidance document for extrapolation in ornamental crops. (The whole group of ‘ornamental crops’ includes flower bulb and flower tuber crops, floriculture crops, tree nursery crops, perennial plant cultivation, flower seed cultivation, swamp and aquatic plants and plant breeding crops and seed production acc. to the guidance).

The efficacy of MCW-2222 regarding *Phyllaphis fagi* on beech was considered separately and showed good control of this pest. The efficacy was comparable to the use of Gazelle. The somewhat lower efficacy to this species compared to the efficacy against other aphid species mentioned above, is due to the characteristics of the beech woolly aphid. The most notable feature of the woolly beech aphid is the dense wax covering of the aphids. This is secreted afresh after each moult, so newly moulted individuals have little or no wax, whilst adults often have long tendrils of accumulated wax. This wax wool covering the body is leading to a practical issue during trial conduction, as the aphids are difficult to reach with the spray liquid: With an early application (younger individuals with less wax wool but also a still lower number of aphids present) the individuals are better to reach, but in that case the trials are not supportive due the low number of aphids. With a later application (more aphids present and trials valid, but also more woolly wax material) the aphids are more difficult to reach, which leads to a lower efficacy. However, as the use involves only minor crops, any further trials are not considered to be required. Efficacy in practice can be increased by correct application timing (early in pest development), and therefore, the proposed label rate is considered to be appropriate for the control of *Phyllaphis fagi*.

Furthermore, extrapolation of efficacy data from the Maritime EPPO zone to the South-East EPPO zone is possible according to the ‘General information about trial grouping’ presented in Chapter 3.2.

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data. The proposed label rate of MCW-2222 is considered to be appropriate for the control of aphids on ornamental plants, i.e., flower bulbs, flower tubers, floriculture and nursery.

### 3.2.3.2 (2) Beetles and weevils (biting)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	DIABVI	Jun-Aug BBCH 51-75	S-E	1	0.20-0.30	40-60
Potato	LPTNDE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36
Winter oilseed rape	CEUTAS, CEUTNA, CEUTQU	Mar-Jun BBCH 31-59-71	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60
	CEUTPI	Oct-Nov BBCH 13-17	Mar	1	0.30 0.24	60 48
	PHYESP	Aug-Nov BBCH 11-19	Mar	1	0.30 0.24	60 48
	PSYICH	Aug-Nov BBCH 11-19	Mar, N-E, S-E	1	0.30 0.24	60 48
Spring oilseed rape	CEUTAS, CEUTNA, CEUTQU	Mar-Jul BBCH 31-69	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60

### Conclusion (beetles and weevils)

The effectiveness of MCW-2222 against beetles and weevils was tested in 250 efficacy trials in maize, potato and winter and spring oilseed rape conducted in between 2011 and 2022 in various countries of the Maritime, North-East and South-East EPPO climatic zone. The results determined in the different target crops are presented under subheading (2a) for maize, (2b) for potato, (2c) for winter oilseed rape, (2d) for spring oilseed rape.

Data demonstrated that the efficacy of MCW-2222 at the proposed label rates was equivalent to the efficacy of the relevant reference products against beetles and weevils in the different target crops.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 were proven by the data. MCW-2222 is considered to be appropriate for the control of beetles and weevils in maize, potato and winter and spring oilseed rape.

#### 3.2.3.2.1 (2a) Beetles in maize

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	DIABVI	Jun-Aug	S-E	1	0.20-0.30	40-60

		BBCH 51-75				
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## Material and methods

An overview of trials against beetles in maize is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-145: Overview of efficacy and dose justification trials with MCW-2222 against Western corn rootworm in maize (11 8 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	Crop	Country	Year	Trial status
<b>South-East EPPO Zone (11 trials)</b>							
<del>6.2/085</del>	<del>M+E</del>	<del>HU13IEZEAMX131A</del>	<del>DIABVI</del>	<del>ZEAMX</del>	<del>HU</del>	<del>2013</del>	<del>GEP</del>
<del>6.2/086</del>	<del>M+E</del>	<del>HU13IEZEAMX131B</del>	<del>DIABVI</del>	<del>ZEAMX</del>	<del>HU</del>	<del>2013</del>	<del>GEP</del>
<del>6.2/087</del>	<del>M+E</del>	<del>HU13IEZEAMX131C</del>	<del>DIABVI</del>	<del>ZEAMX</del>	<del>HU</del>	<del>2013</del>	<del>GEP</del>
6.2/088	M+E	HU14IEZEAMX001A	DIABVI	ZEAMX	HU	2014	GEP
6.2/089	M+E	HU14IEZEAMX001B	DIABVI	ZEAMX	HU	2014	GEP
6.2/092	M+E	RO14IEZEAMX043A	DIABVI	ZEAMX	RO	2014	GEP
6.2/093	M+E	RO14IEZEAMX043B	DIABVI	ZEAMX	RO	2014	GEP
6.2/094	M+E	RO14IEZEAMX043C	DIABVI	ZEAMX	RO	2014	GEP
6.2/098	M+E	SK14IEZEAMX001A	DIABVI	ZEAMX	SK	2014	GEP
6.2/099	M+E	SK14IEZEAMX001B	DIABVI	ZEAMX	SK	2014	GEP
6.2/100	M+E	SK14IEZEAMX001C	DIABVI	ZEAMX	SK	2014	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, ~~E\*~~ = ~~supportive efficacy trials without target rate~~, Y = trial with yield and/or quality assessment  
(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

**Table 3.2-146: Summary of efficacy trials (Western corn rootworm in maize)**

Pest	Crop	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone/pest
				2013	2014		
<b>DIABVI</b>	Maize	S-E	HU	<del>3</del>	2	<del>5</del> 2	11 8
			RO	-	3	3	
			SK	-	3	3	

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-147: Details on trial methodology (Western corn rootworm in maize)**

Guidelines	General guidelines	EPPO PP 1/135(3), 1/152(4), 1/181(4)
	Specific guidelines	EPPO PP 1/274(1)
Experimental design	Plot design	RCB (all trials)
	Plot size	30 – 59,976 m <sup>2</sup> *
	Number of replications	4 (all trials)
Crop	Trials per crop	Maize (11 8 efficacy trials, 11 8 dose justification trials)
	Crop variety	<del>PR37N01, NK Lucius, Pioneer 38A79</del> , DKC 3811, Dorane, PO412, DKC5276, Florenta, Monalisa, Sunagra, NK-Siltop
	Sowing period	<del>April to May</del>
Application	Crop stage (BBCH) at application	from BBCH 51 to BBCH 67
	Timing	<del>July to August</del>
	Pest stage at application	adult or not stated

Assessment	Number of applications	1 (all EFF trials);1 (all MED trial)
	Spray volumes	250 – 400 <del>600</del> L/ha
	Assessment types	- number of adults per plant based on 10, 20, or 30 plants
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$
	Assessment dates	usually 2-3 DAA, 7-8 DAA, 14-16 DAA

\*stated in report as treated plot area

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-148: Overview of application rates against *Diabrotica virgifera virgifera* in maize**

Product		No. of appl.	Rate per treatment <sup>(1)</sup>	
			product/ha	active ingredient/ha
South-East (8 trials)				
Test product	MCW-2222	1	0.20 L	40 g acetamiprid
		1	0.30 L	60 g acetamiprid
Reference product(s)	Biscaya	1	0.30 L	72 g thiacloprid
South-East (3 trials)				
Test product	MCW-2222	1	0.20 L	40 g acetamiprid
		1	0.30 L	60 g acetamiprid
Reference product(s)	Steward	1	0.125 kg	37.5 g indoxacarb

(1) Not every rate of the test product was tested in every trial

## Results

A total of 11 efficacy trials were conducted in maize and are summarised according to the pest, country, EPPO zone, application rate and/or reference product. The efficacy of MCW-2222 was compared to Steward and Biscaya and showed better or similar results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-149: Control (%) of DIABVI by MCW-2222 applied at 0.20 and 0.30 L/ha (40 and 60 g a.i./ha) target rate for S-E zone compared to Steward and Biscaya in maize. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. adults/plant)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated		
				MCW-2222 0.20 L/ha		MCW-2222 0.30 L/ha		Steward 0.125 kg/ha		Biscaya 0.30 L/ha				
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max			
2-3 DAA														
S-E	3	1.5	0.7-2.1	96	88-100	96	89-100	94	88-99	-	-	3 =		
S-E	5	2.4	2.1	86	70-95	92	90	84-97	-	-	91	89	70-97	1 >, 3 =, 4 = n.s.
				(n=5)		(n=8)					(n=8)			
mean	8	1.9	0.7-3.8	90	70-100	93	84-100	-	-	-	-	-	-	-
7-8 DAA														
S-E	3	1.9	0.6-2.7	94	90-99	97	91-100	92	88-97	-	-	3 =		
S-E	5	1.8	1.7	72	26-98	86	79	16-99	-	-	80	71	28-99	1 >, 3 =, 4 = n.s.
				(n=5)		(n=8)								
mean	8	1.7	0.6-2.7	80	26-99	89	86	16-100	-	-	-	-	-	-

14-16 DAA												
S-E	3	1.5	0.3-2.3	96	91-100	97	92-100	89	86-91	-	-	1 >, (2 =)
S-E	5	1.4	1.0-2.1	33	19-45	40	8-87	-	-	41	4-72	2 =, 3 n.s.
			1.7	(n=5)		(n=6)	7-65					
mean	8	1.4	0.3-2.3	56	19-100	62	7-100	-	-	-	-	-

## Conclusion

The data from the South-East EPPO zone demonstrated excellent control of *Diabrotica virgifera virgifera* by MCW-2222 applied at 0.20 and 0.30 L/ha in maize except for the last assessment timing (14-16 DAA) with good control of *Diabrotica virgifera virgifera* but still equivalent control levels compared to Steward and Biscaya. Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.2.2 (2b) Beetles in potato

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Potato	LPTNDE	May-Sep BBCH 12-79	Mar, N-E	1	0.18	36
			S-E	1	0.12-0.18	24-36

## Material and methods

An overview of trials against beetles in potato is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-150: Overview of efficacy and dose justification trials with MCW-2222 against beetles in potato (48 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (15 trials)</b>							
6.2/101	M+E+Y	CZ13IESOLTU026A	Potato	LPTNDE	CZ	2013	GEP
6.2/102	M+E	CZ13IESOLTU026B	Potato	LPTNDE	CZ	2013	GEP
6.2/103	M+E	CZ13IESOLTU026C	Potato	LPTNDE	CZ	2013	GEP
6.2/104	M+E+Y	CZ14IESOLTU009A	Potato	LPTNDE	CZ	2014	GEP
6.2/105	M+E	CZ14IESOLTU009B	Potato	LPTNDE	CZ	2014	GEP
6.2/106	M+E	CZ14IESOLTU009C	Potato	LPTNDE	CZ	2014	GEP
6.2/321	E	CZ21IESOLTU175A	Potato	LPTNDE	CZ	2021	GEP
6.2/322	E	CZ21IESOLTU175B	Potato	LPTNDE	CZ	2021	GEP
6.2/323	E	CZ21IESOLTU175D	Potato	LPTNDE	CZ	2021	GEP
6.2/107	M+E	DE14IESOLTU320M	Potato	LPTNDE	DE	2014	GEP
6.2/215	M+E	DE14IESOLTU320N	Potato	LPTNDE	DE	2014	GEP
6.2/216	M+E	DE14IESOLTU320O	Potato	LPTNDE	DE	2014	GEP
6.2/108	M+E+Y	DE15IESOLTU320A	Potato	LPTNDE	DE	2015	GEP
6.2/109	M+E+Y	DE15IESOLTU320B	Potato	LPTNDE	DE	2015	GEP
6.2/110	M+E+Y	DE15IESOLTU320C	Potato	LPTNDE	DE	2015	GEP
<b>North-East EPPO Zone (16 trials)</b>							
6.2/325	M+E	LV20IESOLTU534A	Potato	LPTNDE	LV	2020	GEP
6.2/113	M+E+Y	PL13IESOLTU204A	Potato	LPTNDE	PL	2013	GEP
6.2/114	M+E+Y	PL13IESOLTU204B	Potato	LPTNDE	PL	2013	GEP

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
6.2/115	M+E	PL13IESOLTU204C	Potato	LPTNDE	PL	2013	GEP
6.2/116	M+E	PL13IESOLTU204D	Potato	LPTNDE	PL	2013	GEP
6.2/118	M+E	PL14IESOLTU108A	Potato	LPTNDE	PL	2014	GEP
6.2/119	M+E	PL14IESOLTU108B	Potato	LPTNDE	PL	2014	GEP
6.2/120	M+E	PL14IESOLTU108C	Potato	LPTNDE	PL	2014	GEP
6.2/121	M+E	PL14IESOLTU108D	Potato	LPTNDE	PL	2014	GEP
6.2/122	M+E	PL14IESOLTU108E	Potato	LPTNDE	PL	2014	GEP
6.2/123	M+E	PL14IESOLTU108F	Potato	LPTNDE	PL	2014	GEP
6.2/124	M+E	PL14IESOLTU108G	Potato	LPTNDE	PL	2014	GEP
6.2/327	E	PL21IESOLTU245A	Potato	LPTNDE	PL	2021	GEP
6.2/328	E	PL21IESOLTU245B	Potato	LPTNDE	PL	2021	GEP
6.2/329	E	PL21IESOLTU245C	Potato	LPTNDE	PL	2021	GEP
6.2/330	E	PL21IESOLTU245D	Potato	LPTNDE	PL	2021	GEP
<b>South-East EPPO Zone (17 trials)</b>							
6.2/331	E	HU21IESOLTU175A	Potato	LPTNDE	HU	2021	GEP
6.2/332	E	HU21IESOLTU175B	Potato	LPTNDE	HU	2021	GEP
6.2/333	E	HU21IESOLTU175D	Potato	LPTNDE	HU	2021	GEP
6.2/125	M+E	RO14IESOLTU044A	Potato	LPTNDE	RO	2014	GEP
6.2/126	M+E	RO14IESOLTU044B	Potato	LPTNDE	RO	2014	GEP
6.2/127	M+E	RO14IESOLTU044C	Potato	LPTNDE	RO	2014	GEP
6.2/128	M+E	RO14IESOLTU044D	Potato	LPTNDE	RO	2014	GEP
6.2/129	M+E	RO14IESOLTU044E	Potato	LPTNDE	RO	2014	GEP
6.2/130	M+E	RO15IESOLTU012A	Potato	LPTNDE	RO	2015	GEP
6.2/131	M+E	RO15IESOLTU012B	Potato	LPTNDE	RO	2015	GEP
6.2/334	E	RO21IESOLTU234A	Potato	LPTNDE	RO	2021	GEP
6.2/335	M+E	RO21IESOLTU234B	Potato	LPTNDE	RO	2021	GEP
6.2/132	M+E	SK13IESOLTU001A	Potato	LPTNDE	SK	2013	GEP
6.2/133	M+E	SK13IESOLTU001B	Potato	LPTNDE	SK	2013	GEP
6.2/134	M+E	SK14IESOLTU001A	Potato	LPTNDE	SK	2014	GEP
6.2/135	M+E	SK14IESOLTU001B	Potato	LPTNDE	SK	2014	GEP
6.2/136	M+E	SK14IESOLTU001C	Potato	LPTNDE	SK	2014	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

**Table 3.2-151: Summary of efficacy trials (Colorado potato beetle in potato)**

Pest	Crop	EPPO zone	Country	No. of trials						
				Year					Total	Total by zone
				2013	2014	2015	2020	2021		
<b>LPTNDE</b>	Potato	MAR	CZ	3	3	-	-	3	<b>9</b>	<b>15</b>
			DE	-	3	3	-	-	<b>6</b>	
		N-E	PL	4	7	-	-	4	<b>15</b>	<b>16</b>
			LV	-	-	-	1	-	<b>1</b>	
		S-E	RO	-	5	2	-	2	<b>9</b>	<b>17</b>
			SK	2	3	-	-	-	<b>5</b>	
			HU	-	-	-	-	3	<b>3</b>	
				9	21	5	1	12	<b>48</b>	-

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-152: Details on trial methodology (beetles in potato)**

<b>Guidelines</b>	General guidelines	EPPO PP 1/225(1), 1/135(3), 1/152(3), 1/181(3)
	Specific guidelines	EPPO PP 1/12(4)
<b>Experimental design</b>	Plot design	RCB
	Plot size	Potato: <del>46</del> 18-37.5 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Potato (48)
	Varieties per crop	Marabel, Dali, Adela, Taifun, Wineta, Lord, Pokusa, Syrena, Albatros, Owacja, Bella Rosa, Denar, Carrera, Aladin, Roclas, Magda, Anuschka, Volumia, Viola, Adora, Adretta, Allouette, Antonie, Christian, Fabiola, Fontane, Gala, Kuba, Laura, Red Lady, Red Scarlet, Toscana
	Sowing period	March to May
<b>Application</b>	Crop stage (BBCH) at application	from BBCH <del>19</del> 16 to BBCH <del>73</del> 91
	Timing	May to July
	Pest stage at application	Mixed growth stages of beetles
	Number of applications	Potato: 1 (48 trials)
	Intervals between applications	
	Spray volumes	200 - <del>400</del> 500 L/ha
	Assessment types	- No. of larvae (at stage L1-L3, L4, and all larvae) per plant
	Efficacy calculation	<p>Efficacy calculation according to Henderson-Tilton:</p> $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ <p>Efficacy calculation according to Abbott:</p> $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1 DAA, 2-4 DAA, 6-12 DAA, 11-14 DAA, 16-21 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-153: Overview of application rates against *Leptinotarsa decemlineata* in potato**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (12 trials), North-East (11 trials), South-East (12 trials)				
Test product	MCW-2222	1	0.12 L	24 g acetamiprid
		1	0.15 L	30 g acetamiprid
		1	0.18 L	36 g acetamiprid
Reference product(s)	Karate Zeon	1	0.075 kg	7.5 g lambda-cyhalothrin
	Karate Zeon 050 CS	1	0.15 kg	7.5 g lambda-cyhalothrin
Maritime (3 trials), North-East (5 trials), South-East (5 trials)				
Test product	MCW-2222	1	0.18 L	36 g acetamiprid
Reference product	MCW-5023 = Mavrik	1	0.2	48 g tau-fluvalinate

## Results

A total of 48 efficacy trials were conducted on potato and are summarised according to the pest, country, EPPO zone, application rate and/or reference product in the following tables. The efficacy of MCW-2222 was compared to Mavrik and Karate Zeon and showed equivalent or better results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-154: Control (%) of LPTNDE at the larval stages L1-L3 by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) target rate for all zones compared to Mavrik and Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control L1-L3 (no./ plant)		% control						No. of trials where MCW-2222 is >, <, = compared to stand- ard(s) (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Mavrik 0.2 L/ha		Karate Zeon 50 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA										
MAR	6	7.2	0.7-18.8	<del>83</del> 87	59-100	-	-	<del>72</del> 79	47-92	2 >, 2 =, 2 n.s.
MAR	1	43.3	-	97	-	24	-	-	-	1 >
N-E	1	10.9	-	99	-	-	-	96	-	1 n.s.
C-EU	8	12.2	0.7-43.3	<del>87</del> 90	59-100	-	-	-	-	
2-3 DAA										
MAR	7	35.1	0.7-118	99	96-100	-	-	95	90-100	1 >, 4 =, 2 n.s.
MAR	3	49.2	23.7-66.5	91	86-96	57	28-100	-	-	2 >, 1 =
N-E	4	21.5	12.5-37.2	99	98-100	-	-	<del>98</del> 80	<del>96-99</del> 63-92	(4 n.s.)
N-E	5	15.7	9.4-27.0	92	86-99	84	75-100	-	-	3 >, 1 =, 1 n.s.
S-E	5	11.8	6.2-28.9	80	43-90	66	22-94	-	-	3 =, 2 n.s.
C-EU	24	25.7	0.7-118	93	43-100	-	-	-	-	-
6-12 DAA										
MAR	9	24.3	0.2-61.3	<del>98</del> 96	<del>89</del> 87-100	-	-	<del>81</del> 89	<del>34</del> 45-100	1 >, 7 =, 1 n.s.
MAR	3	28.1	7.5-56.3	80	58-91	39	0-100	-	-	1 >, 2 =
N-E	4	8.6	4.9-12.0	100	98-100	-	-	<del>99</del> 86	<del>98-100</del> 81-93	4 n.s.
N-E	5	21.3	8.2-57.3	93	81-100	86	60-95	-	-	4 >, 1 =
S-E	2	34.3	27.0-41.5	100	100	-	-	100	100	2 =
S-E	5	9.4	2.6-26.9	80	29-100	64	41-91	-	-	3 =, 2 n.s.
C-EU	28	20.0	0.2-61.3	92	29-100	-	-	-	-	-
11-14 DAA										
MAR	5	9.3	0.1-19.8	95	77-100	-	-	<del>90</del> 92	68-100	2 =, 3 n.s.
MAR	1	9.0	-	75	-	30	-	-	-	1 n.s.
N-E	1	10.6	-	99	-	-	-	<del>99</del> 87	-	1 n.s.
N-E	1	4.7	-	<del>98</del> 70	-	<del>93</del> 0	-	-	-	1 >
C-EU	8	8.9	0.1-19.8	90	70-100	-	-	-	-	-

**Table 3.2-155: Control (%) of LPTNDE at the larval stage L4 by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) target rate for all zones compared to Mavrik and Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

trial data please refer to Appendix 4 of the DAA.										
EPPO zone	No. of trials	Untreated control L4 (no./ plant)		% control						No. of trials where MCW-2222 is >, <, = compared to stand- ard(s)  (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Mavrik 0.2 L/ha		Karate Zeon 50 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA										
MAR	5	3.4	1.3-5.8	<del>74</del> <b>84</b>	<del>50</del> <b>55</b> - 100	-	-	<del>66</del> <b>76</b>	<del>25-91</del> <b>44-100</b>	3 =, 2 n.s.
MAR	1	8.2	-	<b>96</b>	-	<b>4</b>	-	-	-	1 =



**Table 3.2-156: Control (%) of LPTNDE at all larval stages (larval stages were not defined and stated as all larvae) by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) target rate for all zones compared to Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPO zone	No. of trials	Untreated control all stages (no./ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Karate Zeon 50 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	
<b>2-3 DAA</b>								
MAR	2	125.1	53.3-197	<del>99</del> <b>100</b>	<del>99</del> <b>100</b>	<b>81</b>	78-85	2 >
N-E	7	48.3	3.9-247	<del>96</del> <b>97</b>	<del>87</del> <b>91</b> -100	<del>94</del> <b>86</b>	<del>76</del> <b>75</b> -100	4 >, 3 =
S-E	8	6.9	6.0-8.9	<b>91</b>	72-100	<b>67</b>	21-94	5 >, 2 =, 1 n.s.
C-EU	17	37.8	3.9-247	<b>94</b>	72-100	<del>75</del> <b>76</b>	21-100	11 >, 5 =, 1 n.s.
<b>6-12 DAA</b>								
MAR	2	187	<b>59.8-314</b>	<del>100</del> <b>98</b>	<del>97</del> <b>100</b>	<b>70</b>	57-82	1 >, 1 =
N-E	5	61.2	9.5-224	<b>96</b>	92-100	<del>94</del> <b>92</b>	<del>90</del> <b>84</b> -99	1 >, 4 =
S-E	10	8.2	6.3-11.4	<b>96</b>	88-100	<b>78</b>	44-94	5 >, 2 =, 3 n.s.
C-EU	17	44.8	6.3-314	<b>96</b>	88-100	<b>81</b>	44-99	7 >, 7 =, 3 n.s.
<b>11-14 DAA</b>								

N-E	4	17.3	4.2-35.5	<b>99</b>	95-100	<del>97</del> <b>90</b>	<del>93</del> <b>82-98</b>	2 >, 2 =
S-E	7	7.1	3.0-8.2	<b>82</b>	71-100	<b>51</b>	33-77	3 >, 4 n.s.
C-EU	11	10.8	3.0-35.5	<b>88</b>	71-100	<b>65</b>	33-98	5 >, 2 =, 4 n.s.

**Table 3.2-157: Control (%) of LPTNDE at all larval stages (larval stages were not defined and stated as all larvae) by MCW-2222 applied at the target range 0.12 - 0.18 L/ha (24-36 g a.i./ha) for S-E compared to Karate Zeon in potato. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control all larvae (no./ plant)		% control								No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.12 L/ha		MCW-2222 0.15 L/ha		MCW-2222 0.18 L/ha		Karate Zeon/ 50 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA												
S-E	2	5.6	5.2-6.1	67	64-70	75	73-78	83	82-83	57	51-62	2 n.s.
2-3 DAA												
S-E	8	6.1	4.5-9.0	84	65-100	89	70-100	91	72-100	67	21-94	6 >, 1 =, 1 n.s.
6-12 DAA												
S-E	10	8.2	6.3-11.4	88	77-100	94	85-100	96	88-100	78	44-94	7 >, 3 n.s.
11-14 DAA												
S-E	7	7.1	3.0-8.2	67	57-100	81	70-100	82	71-100	51	33-77	3 >, 4 n.s.

**Table 3.2-158: Control (%) of LPTNDE (adults) by MCW-2222 applied at 0.18 L/ha (36 g a.i./ha) target rate for all zones compared to Mavrik and Karate Zeon in potato.**

EPPO zone	No. of trials	Untreated control adult (no./ plant)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.18 L/ha		Mavrik 0.2 L/ha		Karate Zeon 50 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1 DAA										
MAR	2	1.8	1.0-3.0	90	80-100	-	-	75	62-87	2 =
N-E	1	0.8	-	98	-	-	-	86	-	1 =
S-E	2	5.8	5.2-6.5	71	70-72			54	51-57	2 n.s.
C-EU	5	3.2	1.0-6.5	84	70-100	-	-	-	-	
2-3 DAA										
MAR	5	3.3	0.3-9.0	87	33-100	-	-	74	24-100	2 >, 1 =, 2 n.s.
MAR	1	0.3	-	100	-	100	-	-	-	1 n.s.
N-E	6	2.2	0.1-9.0	89	58-100	-	-	81	30-100	6 =

S-E	8	3.1	0.1-7.3	<b>89</b>	67-100	-	-	<b>54</b>	0-86	3 >, 3 =, 2 n.s.
C-EU	20	2.7	0.1-9	<b>89</b>	33-100	-	-	-	-	-
<b>6-12 DAA</b>										
MAR	5	0.8	0.1-1.5	<b>72</b>	31-100	-	-	<b>44</b>	0-81	3 =, 2 n.s.
N-E	8	1.6	0.03-6.3	<b>89</b>	60-100	-	-	<b>73</b>	25-95	2 >, 5 =, 1 n.s.
N-E	4	9.6	0.03-36.3	<b>70</b>	0-100	<b>44</b>	0-92	-	-	1 <, 2 =, 1 n.s.
S-E	10	4.4	0.1-8.1	<b>93</b>	80-100	-	-	<b>64</b>	0-100	4 >, 2 =, 4 n.s.
S-E	2	0.1	0.1-0.18	<b>86</b>	72-100	<b>66</b>	60-72	-	-	2 n.s.
C-EU	29	3.4	0.1-36.3	<b>85</b>	0-100	-	-	-	-	-
<b>11-14 DAA</b>										
MAR	2	0.4	0.1-0.8	<b>42</b>	35-50	-	-	<b>25</b>	0-50	2 =
N-E	5	1.6	0.6-3.8	<b>98</b>	95-100	-	-	<b>86</b>	79-93	1 >, 4 =
S-E	7	6.3	0.9-8.5	<b>79</b>	65-100	-	-	<b>33</b>	0-53	4 >, 3 n.s.
C-EU	14	3.8	0.1-8.5	<b>81</b>	35-100	-	-	-	-	-

## Conclusion

The data over all EPPO zones demonstrated excellent control of *Leptinotarsa decemlineata* in potato from MCW-2222 applied at 0.18 L/ha, the efficacy of MCW-2222 was higher or equivalent compared to Mavrik or Karate Zeon/ 050 CS.

The data from the South-East EPPO zone demonstrated excellent control of *Leptinotarsa decemlineata* in potato from MCW-2222 applied at the whole target range of 0.15 to 0.18 L/ha, the efficacy of MCW-2222 was also better compared to Karate Zeon/ 050 CS. Only the lowest rate showed good control at the first and last assessment timepoint. The dose range to be registered in the South-East EPPO zone enables the professional user to adjust the rate to different infestation levels and environmental circumstances to efficiently control *Leptinotarsa decemlineata* in potato in the South-East EPPO zone.

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data. The proposed label rate of MCW-2222 is considered to be appropriate for the control of *Leptinotarsa decemlineata* on potato.

### 3.2.3.2.3 (2c) Beetles and weevils in winter oilseed rape

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter oilseed rape (spring application)	CEUTAS, CEUTNA, CEUTQU	Mar-Jun BBCH 34-61-71	Mar, N-E	1-2 (7)	0.30	60
		BBCH 31-59-74	S-E	1-2 (7)	0.15-0.30	30-60
(autumn application)	MELIAE	Mar-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60
	CEUTPI	Oct-Nov BBCH 13-17	Mar	1	0.30 0.24	60 48
	PHYESP	Aug-Nov BBCH 11-19	Mar	1	0.30 0.24	60 48
	PSYICH	Aug-Nov BBCH 11-19	Mar, N-E, S-E	1	0.30 0.24	60 48

## Material and methods

An overview of trials against beetles and weevils in winter oilseed rape is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-159: Overview of efficacy and dose justification trials with MCW-2222 against beetles and weevils in winter oilseed rape (191 186 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (90 trials)</b>							
6.2/182	M+E+Y	CZ14IEBRSNW005A	w-osr	CEUTNA	CZ	2014	GEP
6.2/183	M+E	CZ14IEBRSNW005B	w-osr	CEUTNA, CEUTQU	CZ	2014	GEP
6.2/184	M+E+Y	CZ14IEBRSNW006A	w-osr	MELIAE	CZ	2014	GEP
6.2/185	M+E	CZ14IEBRSNW006B	w-osr	MELIAE	CZ	2014	GEP
6.2/360	M+E	CZ14IEBRSNW005D	w-osr	CEUTQU	CZ	2015	GEP
6.2/186	E+Y	CZ14IEBRSNW007A	w-osr	CEUTAS, DASYBR	CZ	2014	GEP
6.2/187	E	CZ14IEBRSNW007B	w-osr	CEUTAS, DASYBR	CZ	2014	GEP
6.2/188	M+E	CZ15IEBRSNW001A	w-osr	CEUTNA, CEUTQU	CZ	2015	GEP
6.2/189	M+E	CZ15IEBRSNW001B	w-osr	CEUTNA	CZ	2015	GEP
6.2/190	M+E	CZ15IEBRSNW001D	w-osr	CEUTNA, CEUTQU	CZ	2015	GEP
6.2/191	M+E	CZ15IEBRSNW001E	w-osr	CEUTQU	CZ	2015	GEP
6.2/361	M+E	CZ15IEBRSNW001F	w-osr	CEUTQU	CZ	2015	GEP
6.2/192	E	CZ15IEBRSNW001G	w-osr	CEUTAS, DASYBR	CZ	2015	GEP
6.2/193	E	CZ15IEBRSNW001H	w-osr	CEUTAS, DASYBR	CZ	2015	GEP
6.2/194	E	CZ15IEBRSNW001I	w-osr	CEUTAS, DASYBR	CZ	2015	GEP
6.2/295	E	CZ16IEBRSNW005A	w-osr	MELIAE	CZ	2016	GEP
6.2/297	E	CZ16IEBRSNW005B	w-osr	MELIAE	CZ	2016	GEP
6.2/298	E	CZ16IEBRSNW005C	w-osr	MELIAE	CZ	2016	GEP
6.2/299	E	CZ17IEBRSNW001A	w-osr	MELIAE	CZ	2016	GEP
6.2/318	M+E	CZ20IEBRSNW511B	w-osr	MELIAE	CZ	2020	GEP

6.2/362	M+E	CZ20IEBRSNW534B	w-osr	PHYESP	CZ	2020	GEP
6.2/363	M+E	CZ21IEBRSNW567B	w-osr	PSYICH	CZ	2021	GEP
6.2/366	M+E	CZ21IEBRSNW570A	w-osr	PHYESP	CZ	2020	GEP
6.2/367	M+E	CZ21IEBRSNW570B	w-osr	PHYESP	CZ	2020	GEP
6.2/370	E	CZ22IEBRSNW506B	w-osr	MELIAE	CZ	2022	GEP
6.2/371	E	CZ22IEBRSNW506C	w-osr	MELIAE	CZ	2022	GEP
6.2/372	E	CZ22IEBRSNW506D	w-osr	MELIAE	CZ	2022	GEP
6.2/368	M+E	CZ22IEBRSNW503B	w-osr	CEUTQU	CZ	2022	GEP
6.2/369	M+E	CZ22IEBRSNW503C	w-osr	CEUTQU	CZ	2022	GEP
6.2/197	M+E	DE14IEBRSNW320A	w-osr	CEUTNA	DE	2014	GEP
6.2/198	M+E	DE14IEBRSNW320C	w-osr	MELIAE	DE	2014	GEP
<del>6.2/199</del>	<del>M+E</del>	<del>DE14IEBRSNW320H</del>	<del>w-osr</del>	<del>DASYBR</del>	<del>DE</del>	<del>2014</del>	<del>GEP</del>
6.2/200	E	DE15IEBRSNW320A	w-osr	CEUTNA	DE	2015	GEP
6.2/201	M+E	DE15IEBRSNW320E	w-osr	MELIAE	DE	2015	GEP
6.2/202	M+E	DE15IEBRSNW320G	w-osr	MELIAE	DE	2015	GEP
6.2/203	M+E	DE15IEBRSNW320H	w-osr	MELIAE	DE	2015	GEP
6.2/204	M+E	DE15IEBRSNW320K	w-osr	CEUTAS, MELIAE	DE	2015	GEP
6.2/315	M+E	DE14IEBRSNW320I	w-osr	PSYICH	DE	2014	GEP
6.2/373	M+E	DE15IEBRSNW320O	w-osr	PSYICH	DE	2020	GEP
6.2/374	M+E	DE15IEBRSNW320P	w-osr	PSYICH	DE	2020	GEP
6.2/317	M+E	DE15IEBRSNW320Q	w-osr	PSYICH	DE	2020	GEP
6.2/375	E	DE16IEBRSNW310C	w-osr	MELIAE	DE	2016	GEP
6.2/376	M+E	DE16IEBRSNW312E	w-osr	PSYICH	DE	2015	GEP
6.2/377	E	DE17IEBRSNW310A	w-osr	MELIAE	DE	2016	GEP
6.2/378	E	DE17IEBRSNW310B	w-osr	MELIAE	DE	2017	GEP
6.2/379	E	DE17IEBRSNW310D	w-osr	MELIAE	DE	2017	GEP
6.2/415	M+E	DE20IEBRSNW509B	w-osr	PSYICH	DE	2020	GEP
6.2/380	M+E	DE20IEBRSNW511A	w-osr	MELIAE	DE	2017	GEP
6.2/381	M+E	DE20IEBRSNW511B	w-osr	MELIAE	DE	2017	GEP
6.2/382	M+E	DE20IEBRSNW526A	w-osr	CEUTPI	DE	2020	GEP
6.2/383	M+E	DE21IEBRSNW533A	w-osr	MELIAE	DE	2022	GEP
6.2/384	M+E	DE21IEBRSNW533B	w-osr	MELIAE	DE	2022	GEP
6.2/386	M+E	DE21IEBRSNW569A	w-osr	CEUTPI	DE	2020	GEP
6.2/387	M+E	DE21IEBRSNW569B	w-osr	CEUTPI	DE	2020	GEP
6.2/388	M+E	DE21IEBRSNW569C	w-osr	CEUTPI	DE	2020	GEP
6.2/390	M+E	DE21IEBRSNW570A	w-osr	PHYESP	DE	2020	GEP
6.2/391	<del>M+E</del>	DE21IEBRSNW571A	w-osr	CEUTPI	DE	2020	GEP
6.2/392	<del>M+E</del>	DE21IEBRSNW571B	w-osr	CEUTPI	DE	2020	GEP
6.2/393	<del>M+E</del>	DE21IEBRSNW572B	w-osr	PSYICH	DE	2021	GEP
6.2/394	M+E	DE22IEBRSNW503B	w-osr	CEUTQU	DE	2022	GEP
6.2/395	M+E	DE22IEBRSNW505B	w-osr	MELIAE	DE	2022	GEP
6.2/396	M+E	DE22IEBRSNW505C	w-osr	MELIAE	DE	2022	GEP
6.2/397	M+E	FR14IEBRSNW101D	w-osr	MELIAE	FR	2014	GEP
6.2/398	M+E	FR14IEBRSNW102B	w-osr	MELIAE	FR	2014	GEP
6.2/399	M+E	FR14IEBRSNW107C	w-osr	PSYICH	FR	2014	GEP
6.2/400	M+E	FR14IEBRSNW107D	w-osr	PSYICH	FR	2014	GEP
6.2/401	M+E	FR14IEBRSNW108A	w-osr	PHYESP	FR	2014	GEP
6.2/402	M+E	FR14IEBRSNW108B	w-osr	PHYESP	FR	2014	GEP
6.2/403	M+E	FR14IEBRSNW108E	w-osr	PHYESP	FR	2014	GEP
6.2/404	M+E	FR14IEBRSNW108F	w-osr	PHYESP	FR	2014	GEP
6.2/405	M+E	FR14IEBRSNW113A	w-osr	PSYICH, CEUTPI	FR	2014	GEP
6.2/406	M+E	FR15IEBRSNW101C	w-osr	MELIAE	FR	2015	GEP
6.2/407	M+E	FR15IEBRSNW101D	w-osr	MELIAE	FR	2015	GEP

6.2/408	M+E	FR15IEBRSSNN101E	w-osr	MELIAE	FR	2015	GEP
6.2/409	M+E	FR15IEBRSSNN101F	w-osr	MELIAE	FR	2015	GEP
6.2/410	M+E	FR15IEBRSSNN103C	w-osr	CEUTNA	FR	2015	GEP
6.2/411	M+E	FR15IEBRSSNN103D	w-osr	CEUTNA	FR	2015	GEP
6.2/412	M+E	FR16IEBRSSNN103D	w-osr	MELIAE	FR	2016	GEP
6.2/413	M+E	FR18IEBRSSNN101A	w-osr	MELIAE	FR	2018	GEP
6.2/414	M+E	SE20IEBRSSNW258A	w-osr	DASYBR	SE	2020	GEP
6.2/319	M+E	UK15IEBRSSNW239A	w-osr	PSYICH	UK	2015	GEP
6.2/320	M+E	UK15IEBRSSNW239B	w-osr	PSYICH	UK	2015	GEP
6.2/416	M+E	UK16IEBRSSNW254C	w-osr	PSYICH	UK	2016	GEP
6.2/417	M+E	UK17IEBRSSNN272B	w-osr	MELIAE	UK	2017	GEP
6.2/418	M+E	UK20IEBRSSNW206A	w-osr	PSYICH	UK	2020	GEP
6.2/419	M+E	UK21IEBRSSNW218A	w-osr	MELIAE	UK	2021	GEP
6.2/420	M+E	UK21IEBRSSNW219A	w-osr	MELIAE	UK	2021	GEP
6.2/421	M+E	UK21IEBRSSNW234B	w-osr	PSYICH	UK	2021	GEP
6.2/422	M+E	UK21IEBRSSNW234C	w-osr	PSYICH	UK	2021	GEP
6.2/423	M+E	UK22IEBRSSNN602B	w-osr	MELIAE	UK	2022	GEP
<b>North-East EPPO Zone 47 trials)</b>							
6.2/424	M+E	LV20IEBRSSNN527A_2	w-osr	DASYBR	LV	2020	GEP
6.2/425	M+E	LV20IEBRSSNN527B	w-osr	DASYBR	LV	2020	GEP
6.2/228	M+E	PL14IEBRSSNW301A	w-osr	CEUTNA, CEUTQU	PL	2013	GEP
6.2/229	M+E	PL14IEBRSSNW301B	w-osr	CEUTNA, CEUTQU	PL	2013	GEP
6.2/230	M+E	PL14IEBRSSNW301C	w-osr	CEUTNA	PL	2014	GEP
6.2/231	M+E	PL14IEBRSSNW301D	w-osr	CEUTNA, CEUTQU	PL	2014	GEP
6.2/232	M+E	PL14IEBRSSNW302A	w-osr	MELIAE	PL	2014	GEP
6.2/233	M+E	PL14IEBRSSNW302B	w-osr	MELIAE	PL	2014	GEP
6.2/234	M+E	PL14IEBRSSNW302C	w-osr	MELIAE	PL	2014	GEP
6.2/235	M+E	PL14IEBRSSNW302D	w-osr	MELIAE	PL	2014	GEP
6.2/236	M+E	PL14IEBRSSNW302E	w-osr	MELIAE	PL	2014	GEP
6.2/237	M+E	PL14IEBRSSNW302F	w-osr	MELIAE	PL	2014	GEP
6.2/238	M+E	PL14IEBRSSNW303A	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/239	M+E	PL14IEBRSSNW303B	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/240	M+E	PL14IEBRSSNW303C	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/241	M+E	PL14IEBRSSNW303D	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/242	M+E	PL15IEBRSSNW301A	w-osr	CEUTNA, CEUTQU	PL	2015	GEP
6.2/243	M+E	PL15IEBRSSNW301B	w-osr	CEUTNA, CEUTQU	PL	2015	GEP
6.2/244	M+E	PL15IEBRSSNW301C	w-osr	CEUTNA, CEUTQU	PL	2015	GEP
6.2/245	M+E	PL15IEBRSSNW301D	w-osr	CEUTNA	PL	2015	GEP
6.2/246	M+E	PL15IEBRSSNW301E	w-osr	CEUTNA	PL	2015	GEP
6.2/247	M+E	PL15IEBRSSNW302A	w-osr	CEUTNA, CEUTQU	PL	2015	GEP
6.2/248	M+E	PL15IEBRSSNW302B	w-osr	CEUTQU	PL	2015	GEP
6.2/249	M+E	PL15IEBRSSNW302C	w-osr	CEUTQU	PL	2015	GEP
6.2/250	E	PL15IEBRSSNW303A	w-osr	CEUTAS	PL	2015	GEP
6.2/251	M+E	PL15IEBRSSNW303B	w-osr	CEUTAS, DASYBR	PL	2015	GEP
6.2/252	M+E	PL15IEBRSSNW304A	w-osr	CEUTAS, DASYBR	PL	2015	GEP
6.2/253	M+E	PL15IEBRSSNW304B	w-osr	CEUTAS, DASYBR	PL	2015	GEP
<del>6.2/426</del>	<del>E</del>	<del>PL16IEBRSSNW309A</del>	<del>w-osr</del>	<del>MELIAE</del>	<del>PL</del>	<del>2016</del>	<del>GEP</del>
6.2/427	E	PL16IEBRSSNW309B	w-osr	MELIAE	PL	2016	GEP
6.2/428	E	PL16IEBRSSNW309C	w-osr	MELIAE	PL	2016	GEP
6.2/429	E	PL17IEBRSSNW047B	w-osr	MELIAE	PL	2017	GEP
6.2/430	E	PL17IEBRSSNW047C	w-osr	MELIAE	PL	2017	GEP
6.2/431	M+E	PL20IEBRSSNW219B	w-osr	PHYESP	PL	2020	GEP
6.2/432	M+E	PL20IEBRSSNW220A	w-osr	MELIAE	PL	2020	GEP

6.2/433	M+E	PL20IEBRSNW225B	w-osr	MELIAE	PL	2020	GEP
6.2/434	M+E	PL21IEBRSNW237A	w-osr	MELIAE	PL	2021	GEP
6.2/435	M+E	PL21IEBRSNW239A	w-osr	MELIAE	PL	2021	GEP
6.2/436	M+E	PL21IEBRSNW239B	w-osr	MELIAE	PL	2021	GEP
6.2/437	M+E	PL21IEBRSNW241A	w-osr	PSYICH	PL	2021	GEP
6.2/438	M+E	PL21IEBRSNW241B	w-osr	PSYICH	PL	2021	GEP
6.2/439	M+E	PL21IEBRSNW241C	w-osr	PSYICH	PL	2021	GEP
6.2/440	M+E	PL21IEBRSNW241D	w-osr	PSYICH	PL	2021	GEP
6.2/441	M+E	PL22IEBRSNW113A	w-osr	MELIAE	PL	2022	GEP
6.2/442	M+E	PL22IEBRSNW113B	w-osr	MELIAE	PL	2022	GEP
6.2/443	M+E	PL22IEBRSNW113C	w-osr	MELIAE	PL	2022	GEP
6.2/444	M+E	PL22IEBRSNW113D	w-osr	MELIAE	PL	2022	GEP
<b>South-East EPPO Zone (54 trials)</b>							
6.2/254	M+E	Z 11/1/2011	w-osr	CEUTAS, MELIAE	HU	2011	GEP
6.2/255	M+E	Z 11/2/2011	w-osr	CEUTAS, MELIAE	HU	2011	GEP
6.2/257	M+E	SRHU11-098-135IE	w-osr	CEUTAS, MELIAE	HU	2011	GEP
6.2/264	M+E	HU13IEBRSNW431A	w-osr	CEUTQU	HU	2013	GEP
6.2/266	M+E	HU13IEBRSNW431C	w-osr	MELIAE, CEUTQU	HU	2013	GEP
6.2/278	M+E	HU14IEBRSNW011A	w-osr	CEUTNA, MELIAE	HU	2014	GEP
6.2/279	M+E	HU14IEBRSNW011B	w-osr	CEUTNA, MELIAE	HU	2014	GEP
6.2/280	M+E	HU14IEBRSNW012A	w-osr	MELIAE	HU	2014	GEP
6.2/281	M+E	HU14IEBRSNW012B	w-osr	MELIAE	HU	2014	GEP
6.2/282	M+E	HU14IEBRSNW013A	w-osr	CEUTAS	HU	2014	GEP
6.2/283	M+E	HU14IEBRSNW013B	w-osr	CEUTAS	HU	2014	GEP
6.2/284	M+E	HU15IEBRSNW101A	w-osr	CEUTNA	HU	2015	GEP
6.2/285	M+E	HU15IEBRSNW101B	w-osr	CEUTNA, MELIAE	HU	2015	GEP
6.2/286	M+E	HU15IEBRSNW102A	w-osr	CEUTQU	HU	2015	GEP
6.2/445	M+E	HU15IEBRSNW102B	w-osr	CEUTQU, MELIAE	HU	2015	GEP
<del>6.2/287</del>	<del>M+E</del>	<del>HU15IEBRSNW103A</del>	<del>w-osr</del>	<del>DASYBR</del>	<del>HU</del>	<del>2015</del>	<del>GEP</del>
6.2/288	M+E	HU15IEBRSNW103B	w-osr	MELIAE, DASYBR	HU	2015	GEP
6.2/289	M+E	HU15IEBRSNW103C	w-osr	MELIAE, DASYBR	HU	2015	GEP
<del>6.2/290</del>	<del>M+E</del>	<del>HU15IEBRSNW103D</del>	<del>w-osr</del>	<del>DASYBR</del>	<del>HU</del>	<del>2015</del>	<del>GEP</del>
6.2/291	M+E	HU15IEBRSNW104A	w-osr	CEUTAS	HU	2015	GEP
6.2/292	M+E	HU15IEBRSNW104B	w-osr	CEUTAS	HU	2015	GEP
6.2/293	M+E	HU15IEBRSNW104C	w-osr	CEUTAS	HU	2015	GEP
6.2/294	M+E	HU15IEBRSNW104D	w-osr	CEUTAS, MELIAE, DASYBR	HU	2015	GEP
6.2/446	M+E	HU15IEBRSNW104E	w-osr	CEUTAS	HU	2015	GEP
6.2/447	M+E	HU16IEBRSNW002A	w-osr	MELIAE	HU	2016	GEP
6.2/448	M+E	HU16IEBRSNW002B	w-osr	MELIAE	HU	2016	GEP
6.2/449	M+E	HU16IEBRSNW002D	w-osr	MELIAE	HU	2016	GEP
6.2/450	M+E	HU16IEBRSNW002E	w-osr	MELIAE	HU	2016	GEP
6.2/451	E	HU17IEBRSNW101A	w-osr	MELIAE	HU	2017	GEP
6.2/452	E	HU17IEBRSNW101B	w-osr	MELIAE	HU	2017	GEP
6.2/453	E	HU17IEBRSNW101C	w-osr	MELIAE	HU	2017	GEP
6.2/454	E	HU17IEBRSNW101D	w-osr	MELIAE	HU	2017	GEP
6.2/455	E	HU17IEBRSNW101E	w-osr	MELIAE	HU	2017	GEP
6.2/296	M+E	SK13IEBRSNW001B	w-osr	CEUTQU	SK	2013	GEP
6.2/300	M+E	SK14IEBRSNW001A	w-osr	CEUTNA	SK	2014	GEP
6.2/301	M+E	SK14IEBRSNW001B	w-osr	CEUTNA, CEUTQU	SK	2014	GEP
6.2/302	M+E	SK14IEBRSNW001C	w-osr	CEUTNA, CEUTQU	SK	2014	GEP
6.2/303	M+E	SK14IEBRSNW001D	w-osr	CEUTNA	SK	2014	GEP
6.2/304	M+E	SK14IEBRSNW002A	w-osr	MELIAE	SK	2014	GEP



6.2/305	M+E+Y	SK14IEBRSNW002B	w-osr	MELIAE	SK	2014	GEP
6.2/456	M+E	SK14IEBRSNW003A	w-osr	DASYBR	SK	2014	GEP
6.2/457	M+E	SK14IEBRSNW003B	w-osr	DASYBR	SK	2014	GEP
6.2/306	M+E	SK15IEBRSNW001A	w-osr	CEUTNA	SK	2015	GEP
6.2/307	M+E	SK15IEBRSNW001B	w-osr	CEUTNA	SK	2015	GEP
6.2/507	M+E	SK15IEBRSNW001C	w-osr	CEUTNA	SK	2015	GEP
6.2/308	M+E	SK15IEBRSNW001D	w-osr	CEUTAS, DASYBR	SK	2015	GEP
6.2/458	M+E	SK15IEBRSNW001E	w-osr	CEUTQU	SK	2015	GEP
6.2/459	M+E	SK15IEBRSNW001F	w-osr	CEUTQU	SK	2015	GEP
6.2/460	M+E	SK15IEBRSNW001G	w-osr	CEUTQU	SK	2015	GEP
6.2/461	M+E	SK15IEBRSNW001H	w-osr	CEUTQU	SK	2015	GEP
6.2/309	M+E	SK15IEBRSNW001I	w-osr	CEUTNA	SK	2015	GEP
<del>6.2/462</del>	<del>M+E</del>	<del>SK15IEBRSNW001J</del>	<del>w-osr</del>	<del>DASYBR</del>	<del>SK</del>	<del>2015</del>	<del>GEP</del>
6.2/463	M+E	SK22IEBRSNW505A	w-osr	MELIAE	SK	2022	GEP
6.2/464	M+E	SK22IEBRSNW505B	w-osr	MELIAE	SK	2022	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without exact target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

#### Comments of zRMS to the Table 3.2-155:

Trials:

KCP 6.2/199, KCP 6.2/287, KCP 6.2/290 and KCP 6.2/462

do not deliver any data on beetles nor weevils, but on DASYBR alone.

Trial:

KCP 6.2/426

does not include test item MCW-2222.

**Table 3.2-160: Summary of efficacy trials per zone (beetles and weevils in oilseed rape).**

Pest	Crop	EPPO zone	Total by zone	Total by pest	Country	No. of trials <sup>(1)</sup>										Total
						Year										
						2011	2013	2014	2015	2016	2017	2018	2020	2021	2022	
CEUTAS	Winter oilseed rape	MAR	6	23	DE				1							1
					CZ			2	3						5	
		N-E	8		PL			4	4						8	
		S-E	9		HU	3		2	5						7	
					SK			1	1						2	
CEUTNA	Winter oilseed rape	MAR	10	33	CZ			2	3							5
					DE			1	1						2	
					FR			1	2						3	
		N-E	10		PL			4	6						10	
		S-E	13		HU			2	2						4	
				SK			4	5						9		
CEUTQU	Winter oilseed rape	MAR	7	27	CZ			2	4						2	6
					DE									1	1	
		N-E	9		PL			4	5						9	
		S-E	11		HU		2		2						4	
				SK		1	2	4						7		
MELIAE	Winter oilseed rape	MAR	36	78	CZ			2		3	1		1		3	10
					DE			1	4	1	3		2	2	2	15
					FR			1	4	1		1				7
					UK						1			2	1	4
		N-E	20		PL			6		3	2		2	3	4	20
		S-E	22	HU			4	5	4	5					18	
				SK			2							2	4	
CEUTPI	Winter oilseed rape	MAR	75	75	FR			1						1	3	4
					DE											
PHYESP	Winter oilseed rape	MAR	8	9	CZ								1	2		3
					DE								1		1	
					FR			4							4	
		N-E	1		PL								1			1

Pest	Crop	EPPO zone	Total by zone	Total by pest	Country	No. of trials <sup>(1)</sup>										Total
						Year										
						2011	2013	2014	2015	2016	2017	2018	2020	2021	2022	
PSYICH	Winter oilseed rape	MAR	17 16	21 20	FR	3										3
					CZ	1										1
					DE	1 3 1 1 1										7 6
		UK	2 1										6			
		N-E	4		PL	4										4

(1) Please note, that due to the separation by pest, tests with more than one pest are double counted.

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-161: Details on trial methodology (*Ceutorhynchus napi*, *Ceutorhynchus obstrictus*, and *Ceutorhynchus pallidactylus*) in winter oilseed rape)**

<b>Guidelines</b>	General guidelines	PP 1/135(3), 1/152(3/4), 1/181(3/4), 1/225(2), CEB 72, CEB 146, CEB 188
	Specific guidelines	EPPO PP 1/107(3), 1/219(1), 1/73(3), 1/73(4), 178(3), 218(1), 1/294(1)
<b>Experimental design</b>	Plot design	RCBD
	Plot size	Winter oilseed rape: 25 21-51.15 (stated as plot area:500) m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter oilseed rape (492 184)
	Varieties per crop	Rohan, DaVinci, PR045D03, Rescator, <del>Vispy</del> Visby, SY Hamas <del>Harnas</del> , Allison, Basalti, DK Exstorm, Ludger, PT303, Heiner, Aganos, PT271, Exlibres, NK Extorm, DK Expertise, ES Mambo, <del>Tasillo</del> , <del>Extend</del> , <del>Vi-sion</del> , Monolit, Californium, As Astrid, Sy Alister, Alessio F1, SY Kolumb, DK Exquisite, Goya, Abakus, Marcopolo, Exclusive, Quartz, Taszilò, PR46W14, Rally, Olano, MG Sitro OSR, NK Tores-OSR, DK Explicit, D-03, Exocet, KWS Hybrirock, Avatar, <del>Labrador</del> , Kodiak, Ontario, Manitoba, NK Morse, Cantate, SY Marten, SK Artoga, <del>Cantate</del>
	Sowing period	Winter oilseed rape: from August to September
<b>Application</b>	Crop stage (BBCH) at application	<del>from BBCH 29 to BBCH 65</del> BBCH 21-61 (CEUTNA, CEUTQU) BBCH 51-75 (CEUTAS)
	Timing	March to May
	Pest stage at application	Mixed adult
	Number of applications Intervals between applications	1 ( <del>all</del> 182 trials) 2 (2 trials)
<b>Assessment</b>	Spray volumes	200 - 400 L/ha (150 L/ha in KCP 6.2/418, single UK trial)
	Pre-treatment	- No. of beetles per trap - No. of beetles per plant or shoot
	Assessment types	- No. of adults per trap/ net - No. of living larvae per stem based on 20 plants - Infestation in % damaged plants - No. of holes per stem based on 20 plants
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$  Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-3 DAA, 4-7 DAA, 7-15 DAA, 21-28 DAA (CEUTAS); 1-6 DAA, 15-95 DAA (CEUTNA); 2-4 DAA, 6-10 DAA, 20-35 DAA, <del>12-89</del> 12-69 DAA (CEUTQU)

**Table 3.2-162: Details on trial methodology (*Brassicoglyphus aeneus* in winter oilseed rape)**

<b>Guidelines</b>	General guidelines	PP 1/135(3), 1/152(3/4), 1/181(3/4), 1/239(2)
	Specific guidelines	EPPO PP 1/178(3)
<b>Experimental design</b>	Plot design	RCB
	Plot size	21 - 60 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	78 EFF trials, 56 MED trials
	Varieties per crop	DaVinci, PR045D03, Rescator, DK Sensei, Allison, Arabella, Umberto, Visby, PR46W20, Sherpa, Adriana, DK Exstorm, Avatar, Penn, SY Saveo, Hattrick, Exlibres, Architect, Exception, LG Aurelia, <del>Lohana</del> , PR44W29, DK Explicit, DK Exprit, Extrasol, Monolit, Sy Alister, DK Exquisite F1, <del>Trinity</del> , Harry, Technik, SY Kolumb, Chrobry, Sy Florida, INV 1165 (M), Gemini, Sherlock, Markus, Aurelia, Tasziló, Rally, Olano, MG-Sitro OSR, NK Tores, D-03, GK Gabriela, Remy, Exocet, Hybrirock, Sherpa, KWS Alvaro, Dribbler, Nicola F1, Kodiak, Ontario, KWS Umberto, DK Imagine, Aspire, Advark
	Sowing period	from April to September
<b>75Application</b>	Crop stage (BBCH) at application	from BBCH <del>32</del> <b>33</b> to BBCH <del>65</del> <b>75</b>
	Timing	March to May
	Pest stage at application	adult
	Number of applications	1 (all trials)
	Intervals between applications	
<b>Assessment</b>	Spray volumes	<del>150 – 300 L/ha</del> 200-300 L/ha (no single trial with MELIAE used 150 L/ha)
	Pre-treatment	No. of beetles per plant, shoot, or flower
	Assessment types	- No. of adults per plant or shoot - Pest incidence in (%)
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 1-2 DAA, 2-5 DAA, 5-10 DAA, 9-15 DAA

**Table 3.2-163: Details on trial methodology (*Ceutorhynchus picitarsis* in winter oilseed rape)**

<b>Guidelines</b>	General guidelines	PP 1/135(3), 1/152(3), 1/181(4), 1/225(2), CEB 146
	Specific guidelines	EPPO PP 1/294(1)
<b>Experimental design</b>	Plot design	RCB
	Plot size	24 - 50 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	2 EFF trials; 5 MED trials
	Varieties per crop	Ludger, PT303, Heiner; Aganos, PT271, NK Extorm,
	Sowing period	August
<b>Application</b>	Crop stage (BBCH) at application	from BBCH <b>12</b> <del>14</del> to BBCH 18
	Timing	<del>September to November</del> 13th Oct. – 29th Oct.;
	Pest stage at application	2014 (1 trial), 2020 (1 trial), 2021 (5 trials) adult
	Number of applications	1 (all trials)
	Intervals between applications	
<b>Assessment</b>	Spray volumes	200 – 300 L/ha
	Pre-treatment	No. of adult per trap

	Assessment types	- No. of larvae per plant - Pest incidence (% attacked plants per plot)
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 118- 166 DAA, 168 DAA

**Table 3.2-164: Details on trial methodology (*Phyllotreta sp. in winter oilseed rape*)**

<b>Guidelines</b>	General guidelines	PP 1/225(2), 1/135(4), 1/152(4), 1/181(4)
	Specific guidelines	EPPO PP 1/218(1/2)
<b>Experimental design</b>	Plot design	RCB
	Plot size	23.3 – 48.0375 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	All trials MED and EFF
	Varieties per crop	Trezzor, Allison, SY Alibaba, SY Matteo, Explicit, Alessio, Adrienna <del>de ferme non traitée</del> , Zakari CS
	Sowing period	August to September
<b>Application</b>	Crop stage (BBCH) at application	from BBCH 10 to BBCH 14
	Timing	September to October
	Pest stage at application	adult
	Number of applications	1 (all trials)
	Intervals between applications	
<b>Assessment</b>	Spray volumes	200 – 300 L/ha
	Pre-treatment	No. of bites/ plant No. of damaged plants per 50 plants Pest incidence (%) Damaged plant material/ leaf area (%)
	Assessment types	- Damaged plant material/ leaf area (%) - No. of bites per plant - No. of larvae per plant
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 4-5 DAA, 6-10 DAA, 14-16 DAA, 36 DAA, 170-202 DAA

**Table 3.2-165: Details on trial methodology (*Psylliodes chrysocephala* in winter oilseed rape)**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135(3), 1/152(3), 1/181(4), CEB 72
	Specific guidelines	EPPO PP 1/73
<b>Experimental design</b>	Plot design	RCB
	Plot size	21 - 60 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	20 trials for MED, 21 trials for EFF
	Varieties per crop	Antigua, Avatar, Nk Extorm, Catalina, Architect, KWS Roberto, Rohan, V316OL. DK Exalte, DK Expedient, DK Expectation, Django, Basalti, Ludger, Dominator, Elektra, Rescator
	Sowing period	<del>September to October</del> August to September
<b>Application</b>	Crop stage (BBCH) at application	from BBCH 11 to BBCH 19
	Timing	<del>August to September</del> September to November

	Pest stage at application	Mixed growth stages larva-adult
	Number of applications	1 (all trials)
	Intervals between applications	
	Spray volumes	100 – 300 L/ha (100 L/ha only in KCP 6.2/319, single UK trial)
<b>Assessment</b>	Pre-treatment	No. of damaged plants per plot Damaged plant area per plot (%) No. of bites per plant
	Assessment types	No. of damaged plants per plot Damaged plant area per plot (%) No. of bites per plant
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 3 DAA, 5-7 DAA, 7-10 DAA, 11-18 DAA, 19-65 DAA, 37-59 DAA, 126-189 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-166: Overview of application rates against *Ceutorhynchus species* in winter oilseed rape.**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (CEUTAS: 6 trials; CEUTNA: 10 trials; CEUTQU: 9 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
		1	0.20 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.30 L	60 g acetamiprid
Reference product	Karate Zeon	1	0.075 L	7.5 g lambda-cyhalothrin
	Karate Zeon 050 CS	1	0.15 L	7.5 g lambda-cyhalothrin
North-East (CEUTAS: 8 trials; CEUTNA: 10 trials; CEUTQU: 9 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
		1	0.20 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.30 L	60 g acetamiprid
Reference product	Karate Zeon 050 CS	1	0.125 L	6.25 g lambda-cyhalothrin
	Karate Zeon 050 CS	1	0.15 L	7.5 g lambda-cyhalothrin
	Karate Zeon 100 CS	1	0.075 L	7.5 g lambda-cyhalothrin
South-East (CEUTAS: 9 trials; CEUTNA: 12 trials; CEUTQU: 9 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
		1	0.20 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.30 L	60 g acetamiprid
Reference product	Karate Zeon 050 CS	1	0.125 L	6.25 g lambda-cyhalothrin
	Karate Zeon 050 CS	1	0.15 L	7.5 g lambda-cyhalothrin
South-East (CEUTAS: 3 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
		1	0.20 L	40 g acetamiprid
Reference product	Mospilan 20 SP	1	0.20 kg	40 g acetamiprid

**Table 3.2-167: Overview of application rates against *Brassicogethes aeneus* in winter oilseed rape**

Product		No. of appl.	Rate per treatment <sup>(1)</sup>		
			product/ha	active ingredient/ha	
Maritime (7 trials)					
Test product	MCW-2222	1	0.15 L	30 g	acetamiprid
		1	0.20 L	40 g	acetamiprid
		1	0.25 L	50 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.075 L	7.5 g	lambda-cyhalothrin
	Karate Zeon 5 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
Maritime (17 trials)					
Test product	MCW-2222	1	0.20 L	40 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon	1	0.05 L	5.0 g	lambda-cyhalothrin
	Karate Zeon 100 CS	1	0.075 L	7.5 g	lambda-cyhalothrin
Maritime (12 trials)					
Test product	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 100 CS	1	0.075 L	7.5 g	lambda-cyhalothrin
North-East (6 trials)					
Test product	MCW-2222	1	0.15 L	30 g	acetamiprid
		1	0.20 L	40 g	acetamiprid
		1	0.25 L	50 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
North-East (9 trials)					
Test product	MCW-2222	1	0.20 L	40 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon	1	0.075 L	7.5 g	lambda-cyhalothrin
North-East (5 trials)					
Test product	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.12 L	6 g	lambda-cyhalothrin
South-East (11 trials)					
Test product	MCW-2222	1	0.20 L	40 g	acetamiprid
		1	0.25 L	50 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
South-East (6 trials)					
Test product	MCW-2222	1	0.20 L	40 g	acetamiprid
		1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
South-East (5 trials)					
Test product	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin

(1) Not every rate of the test product was tested in every trial



**Table 3.2-168: Overview of application rates against *Ceutorhynchus pectus* in winter oilseed rape**

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
Maritime (7 trials)					
Test product	MCW 2222	1	0.3 L	60 g	acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g	tau-fluvalinate

**Table 3.2-169: Overview of application rates against *Ceutorhynchus pectus* in winter oilseed rape**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (7 trials)				
Test product	MCW-2222	1	0.225 L	45 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product				
Maritime (1 trial)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g tau-fluvalinate

**Table 3.2-170: Overview of application rates against *Phyllotreta* sp. in winter oilseed rape**

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
Maritime (8 trials)					
Test product	MCW 2222	1	0.3 L	60 g	acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g	tau-fluvalinate

**Table 3.2-171: Overview of application rates against *Phyllotreta* sp. in winter oilseed rape**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (8 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.225 L	45 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g tau-fluvalinate
North-East (1 trial)				
Test product	MCW-2222	1	0.225 L	45 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g tau-fluvalinate

**Table 3.2-172: Overview of application rates against *Psylliodes chrysocephala* in winter oilseed rape**

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
Maritime (15 trials)					
Test-product	MCW 2222	1	0.3 L	60 g	acetamiprid
Reference-product	Mavrik/Mavrik Flo	1	0.2 L	48 g	tau-fluvalinate
Maritime (5 trials)					
Test-product	MCW 2222	1	0.3 L	60 g	acetamiprid
Reference-product	Karate Zeon/ Hallmark Zeon	1	0.05 L	5 g	lambda-cyhalothrin
Maritime (7 trials)					
Test-product	MCW 2222	1	0.30 L	60 g	acetamiprid
Reference-product	Hallmark Zeon	1	0.05 L	5 g	lambda-cyhalothrin

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
Maritime (15 trials)					
	Karate Zeon	1	0.05-0.075 L	2.5-3.75 g	lambda-cyhalothrin
North-East (4 trials)					
Test product	MCW-2222	1	0.3 L	60 g	acetamiprid
Reference product	Mavrik	1	0.2 L	48 g	tau-fluvalinate

**Table 3.2-173: Overview of application rates against *Psylliodes chrysocephala* in winter oilseed rape**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (3 trials)				
Test product	MCW-2222	1	0.225 L	45 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Mavrik/Mavrik Flo	1	0.2 L	48 g tau-fluvalinate
Maritime (4 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.25 L	50 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Mavrik/Mavrik Flo	1	0.2 L	48 g tau-fluvalinate
Maritime (7 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Karate Zeon/ Hallmark Zeon	1	0.05-0.075 L	2.5-3.75 g lambda-cyhalothrin
Maritime (1 trial)				
Test product	MCW-2222	1	0.25 L	50 g acetamiprid
		1	0.3 L	40 g acetamiprid
Reference product	Hallmark Zeon	1	0.05 L	2.5 g lambda-cyhalothrin
Maritime (1 trial)				
Test product	MCW-2222	1	0.225 L	45 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Hallmark Zeon	1	0.2 L	48 g tau-fluvalinate
North-East (4 trials)				
Test product	MCW-2222	1	0.225 L	45 g acetamiprid
		1	0.3 L	60 g acetamiprid
Reference product	Mavrik/Mavrik Flo	1	0.2 L	48 g tau-fluvalinate

## Results

A total of 191 186 efficacy trials testing efficacy of the MCW-2222 in control of beetles and weevils were conducted in oilseed rape. These trials are summarised according to the pests *Ceutorhynchus assimilis*, *Ceutorhynchus napi*, *Ceutorhynchus quadridens*, *Brassicogethes aeneus*, *Ceutorhynchus picitarsis*, *Phyllotreta* spp., and *Psylliodes chrysocephala* and the country or application scenario in the following tables.

For results after spring application please refer to Table 3.2-174 and Table 3.2-175 for control of *Ceutorhynchus obstrictus*, Table 3.2-176, Table 3.2-177 and Table 3.2-178 for *Ceutorhynchus napi*, Table 3.2-179 and Table 3.2-180 for *Ceutorhynchus pallidactylus*, Table 3.2-181 *Ceutorhynchus quadridens* and Table 3.2-182 and Table 3.2-183 for *Brassicogethes aeneus*.

The results after autumn application are presented in Table 3.2-184 for *Ceutorhynchus picitarsis*, in Table 3.2-186 for *Phyllotreta* spp. and in Table 3.2-188 for *Psylliodes chrysocephala*.

For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-174: Control (%) of CEUTAS by MCW-2222 applied in spring at 0.3 L/ha (60 g a.i./ha) target rate for all zones compared to Karate Zeon 050 CS in oilseed rape. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (adult no./ plant <sup>1</sup> or shoot <sup>2</sup> )		Untreated control insects (no./ net)		Untreated control larvae (no./ plant <sup>3</sup> , shoot <sup>4</sup> , or pod <sup>5</sup> )		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
		mean	min-max	mean	min-max	mean	min-max	MCW-2222 0.3 L/ha		Karate Zeon 050 CS 0.15 L/ha		
								mean	min-max	mean	min-max	
1-3 DAA												
MAR	4	5.3 <sup>(2)</sup>	2.0-11.5	-	-	-	-	100	100	95	89-100	2 =, 2 n.s.
N-E	8	5.7 <sup>(1)</sup>	0.7-21.3	-	-	-	-	91	77-97	84	60-96	1 >, 7 =
S-E	8	12.8	1.5-51.8	-	-	-	-	77	47-96	65	47-96	3 >, 3 =, 2 n.s.
C-EU	20	8.5	0.7-51.8	-	-	-	-	87	47-100	87	47-100	4 >, 12 =, 4 n.s.
4-7 DAA												
MAR	6	5.0 <sup>(2)</sup>	0.5-17.8	-	-	-	-	90	50-100	82	50-100	2 =, 4 n.s.
N-E	7	5.5 <sup>(1)</sup>	0.7-19.5	-	-	-	-	97	91-100	85	67-100	2 >, 5 =
S-E	7	12.3	3.2-54.5					78	68-95	53	34-79	4 >, 2 =, 1 n.s.
C-EU	20	7.7	0.5-54.5	-	-	-	-	88	50-100	73	34-100	6 >, 9 =, 5 n.s.
7-15 DAA												
N-E	1	0.8 <sup>(1)</sup>	-	-	-	-	-	83	-	83	-	1 =
S-E	1	-	-	21.8	-	-	-	83	-	88	-	1 =
C-EU	1	0.8 <sup>(1)</sup>	-	21.8	-	-	-	83	-	86	83-88	2 =
21-28 DAA												
MAR	5	-	-	-	-	13.7 <sup>(4)</sup>	1.0-21.2	99	96-100	79	38-100	1 =, 4 n.s.
N-E	8	-	-	-	-	6.3 <sup>(5)</sup>	1.6-15.0	97	92-100	84	73-95	4 >, 4 =
S-E	8					15.6 <sup>(5)</sup> (n=5) 16.4 <sup>(3,4)</sup> (n=3)	1.8-20.0 6.0-27.5	77	62-92	64	52-79	2 >, 5 =, 1 n.s.
C-EU	21			-	-	11.4 <sup>(5)</sup> (n=9) 13.4 <sup>(3,4)</sup> (n=12)	1.6-15.0 1.0-27.5	90	62-100	75	38-100	6 >, 10 =, 5 n.s.

<sup>(1-5)</sup> The assessment parameter differs. Some trials differentiate between adults per plant<sup>(1)</sup> or shoot<sup>(2)</sup> and larvae per plant<sup>(3)</sup>, shoot<sup>(4)</sup>, or pod<sup>(5)</sup>, whereas others assessed insects per net.

**Table 3.2-175: Control (%) of CEUTAS by MCW-2222 applied in spring at target range on oilseed rape (no. of adult insects, or larvae/ plant, shoot, or net) for S-E zone. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (adult no./ plant <sup>1</sup> )		Untreated control (insects no./ net)		Untreated control all larvae (no./pod)		% control										No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
		mean	min-max	mean	min-max	mean	min-max	MCW-2222 0.15 L/ha		MCW-2222 0.20 L/ha		MCW-2222 0.25 L/ha		Mospilan 20 SP 0.20 kg/ha		Karate Zeon 50 CS 0.15 L/ha		
								mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1-3 DAA																		
S-E	3	6.3 (n=1)	-	69.8 (n=2)	41.0-98.5	-	-	89	82-94	94	92-95	-	-	92 (n=3)	91-94	-	-	1 =, (2 n.s.)
S-E	8	12.8	1.5-51.8	-	-	-	-	63	50-84	67	25-88	75	50-94	-	-	65	47-98	3 >, 3 =, (2 n.s.)
Mean over-all	11	12.1 (n=9)	1.5-51.8	69.8 (n=2)	41.0-98.5	-	-	72	51-94	79	66-95	79	73-94	92 (n=3)	91-94	65 (n=8)	47-98	3 >, 4 =, (4 n.s.)
4-7 DAA																		
S-E	3	6.0 (n=1)	-	94.3 (n=2)	48.5-140	-	-	81	60-97	85	65-95	-	-	85	72-95	-	-	1 =, (2 n.s.)
S-E	7	12.3	3.2-54.5	-	-	-	-	58	38-78	68	53-85	73	58-89	-	-	53	34-79	4 >, 2 =, (1 n.s.)
Mean over-all	10	11.5	3.2-54.5	94.3 (n=2)	48.5-140	-	-	65	38-95	73	53-97	73	58-89	85	72-95	53	34-79	5 >, 3 =, (3 n.s.)
7-15 DAA																		
S-E	1	-	-	47.5	-	-	-	49	-	54	-	-	-	57	-	-	-	(1 n.s.)
S-E	1	21.8	-	-	-	-	-	68	-	73	-	69	-	-	-	88	-	1 =
Mean over-all	2	21.8 (n=1)	-	47.5 (n=1)	-	-	-	58 (n=2)	49-68	64 (n=2)	54-73	69 (n=1)	-	57 (n=1)	-	88 (n=1)	-	1 =, (1 n.s.)
21-28 DAA																		
S-E	8	14.2 (n=5)	1.8-27.5	-	-	18.7 <sup>(7)</sup> (n=3)	17.5-19.8	59	25-79	68	47-92	73	44-92	-	-	64	52-79	2 >, 5 =, (1 n.s.)

**Table 3.2-176: Control (%) of CEUTNA by MCW-2222 applied in spring at 0.3 L/ha (60 g a.i./ha) compared to Karate Zeon 050 CS in oilseed rape, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. larvae/ plant, stem, or pod)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.3 L/ha		Karate Zeon 050 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	
2-6 DAA								
S-E	4	69.9 <sup>1</sup>	12.1-142.5	85	73-91	85	81-89	4 n.s.
15-95 DAA								
MAR	10	12.0	1.5-32.3	91	72-100	82	48-100	2 >, 3 =, 5 n.s.
N-E	10	13.4	0.7-27.3	95	87-100	82	69-89	10 >
S-E	13	29.5	1.7-91.0	88	72-100	75	34-100	4 >, 7 =, 2 n.s.
C-EU	33	19.8	0.7-91.0	91	72-100	79	34-100	16 >, 10 =, 7 n.s.

<sup>1</sup> For the first assessment the no. of insects per net was counted.

**Table 3.2-177: Control (%) of CEUTNA by MCW-2222 applied in spring at 0.15-0.3 L/ha (30-60 g a.i./ha) compared to Karate Zeon 050 CS in oilseed rape in the South-East EPPO zone, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. larvae/ plant, stem, or pod)		% control										No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.15 L/ha		MCW-2222 0.20 L/ha		MCW-2222 0.25 L/ha		MCW-2222 0.3 L/ha		Karate Zeon 050 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-6 DAA														
S-E	4	69.9 <sup>1</sup>	12.1-143	68	51-80	79	65-89	81	73-90	85	73-91	85	81-89	4 n.s.
15-95 DAA														
S-E	13	29.5	1.7-91.0	75	64-100	83	67-100	87	76-100	89	72-100	75	34-100	4 >, 7 =, 2 n.s.

<sup>1</sup> For the first assessment the no. of insects per net was counted.

**Table 3.2-178: Control (%) of CEUTNA by MCW-2222 applied in spring at lower rates 0.15-0.18 L/ha (30-36 g a.i./ha) relevant for the South-East EPPO zone compared to Karate Zeon 050 CS in oilseed rape, spring application. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. larvae/ plant, stem, or pod)		% control						No. of trials where MCW-2222 is >, <, = compared to stand ard(s); n.s.: significance not stated
				MCW-2222 0.15 L/ha		MCW-2222 0.18 L/ha		Karate Zeon 050 CS 0.15 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-6 DAA										
S-E	2	21.2 <sup>1</sup>	21.0-21.3	74	67-82	78	73-84	81	78-84	2 n.s.
6 DAA										
S-E	1	3.3	-	75	-	61	-	71	-	n.s.
15-95 DAA										
S-E	5	26.6	1.0-55.8	79	58-91	82	61-95	71	43-91	2 >, 1 =, 2 n.s.

<sup>1</sup> For the first assessment the no. of insects per trap was counted.

**Table 3.2-179: Control (%) of CEUTQU by MCW-2222 applied in spring at 0.3 L/ha (60 g a.i./ha) compared to Karate Zeon in oilseed rape regarding PESINC (pest incidence (%)). For single trial data please refer to Appendix 4 of the BAD.**

trial data please refer to Appendix 1 for the DAD.								
EPPO zone	No. of trials	Untreated control (pest incidence (%))		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.3 L/ha		Karate Zeon 050 CS 5.0-7.5 g lambda-cyhalothrin/ha		
		mean	min-max	mean	min-max	mean	min-max	
12-89 DAA								
MAR	7	44.1	4.8-88.8	84	63-100	70	28-100	1 >, (6 n.s.)
N-E	7	7.39	1.3-8.8	95	89-100	79	69-100	(7 n.s.)
S-E	8	47.2	17.3-100	85	38-100	72	28-100	(8 n.s.)
C-EU	22	33.5	1.3-100	88	38-100	74	28-100	1 >, (21 n.s.)

**Table 3.2-180: Control (%) of CEUTQU by MCW-2222 applied in spring at 0.3 L/ha (60 g a.i./ha) compared to Karate Zeon in oilseed rape regarding PESSEV (no. of larvae/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.3 L/ha		Karate Zeon 5.0-7.5 g lambda-cyhaloth- rin/ha		
		mean	min-max	mean	min-max	mean	min-max	
12-89 DAA								
MAR	9	11.4	1.3-25.3	87	66-100	73	23-100	2 >, 2 =, 5 n.s.
N-E	9	13.4	0.5-23.3	97	90-100	85	81-87	8 >, 1 =
S-E	7	29.7	5.2-89.9	93	66-100	83	44-100	2 >, 5 =
C-EU	25	17.2	0.5-89.9	92	66-100	80	23-100	12 >, 8 =, 5 n.s.

**Table 3.2-181: Control (%) of CEUTQU by MCW-2222 applied at target range 0.15, 0.18, 0.2, 0.25, 0.3 L/ha (30, 36, 40, 50, 60 g a.i./ha) compared to Karate Zeon 050 CS (0.15 kg/ha) in S-E zone in oilseed rape regarding PESSEV (larvae no./plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (pest incidence (%))		% control												No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
				MCW-2222 0.15 L/ha		MCW-2222 0.18 L/ha		MCW-2222 0.20 L/ha		MCW-2222 0.25 L/ha		MCW-2222 0.3 L/ha		Karate Zeon 5 CS/ 050 CS 0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
12-89 DAA																
S-E	7	29.7	5.2-89.9	75	54-100	-	-	89	58-100	92	63-100	93	66-100	83	44-100	2 >, 5 =
S-E	3	40.4	13.3-55.5	76	58-88	81	61-95	-	-	-	-	-	-	66	43-83	2 =, 1 n.s.
Mean overall	10	32.9	5.2-89.9	75 (n=10)	54-100	81 (n=3)	61-95	89 (n=7)	58-100	92 (n=7)	63-100	93 (n=7)	66-100	78 (n=10)	43-100	2 >, 7 =, 1 n.s.

**Table 3.2-182: Control (%) of MELIAE by MCW-2222 applied in spring at 0.3 L/ha (60 g a.i./ha) compared to Karate Zeon/ Hallmark Zeon 5 CS/ 050 CS in oilseed rape regarding PESSEV (no. of adults/ plant). For single trial data please refer to Appendix 4 of the BAD.**

(no. of adults/ plant). For single trial data please refer to Appendix 4 of the DAA.								
EPPO zone	No. of trials	Untreated control (no. of adults/ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.3 L/ha		Karate / Hallmark Zeon 5.0-7.5 g lambda-cyhaloth- rin/ha		
		mean	min-max	mean	min-max	mean	min-max	
1-2 DAA								
MAR	36	63.5	1.1-461	85	44-100	61	12-100	25 >, 10 =, 1 n.s.
N-E	20	3.6	1.6-9.9	88	37-100	84	26-99	8 >, 10 =, 2 n.s.
S-E	20	15.3	1.7-107	83	64-95	74	40-100	8 >, 11 =, 1 n.s.
C-EU	76	35.1	1.1-461	85	37-100	70	12-100	41 >, 31 =, 4 n.s.
2-5 DAA								
MAR	36	54.3	0.8-488	79	16-99	55	7-94	26 >, 8 =, 2 n.s.
N-E	20	3.3	1.4-11.2	93	75-100	88	60-100	13 >, 6 =, 1 n.s.
S-E	21	24.0	0.9-133	79	40-98	65	35-100	10 >, 1 <, 9 =, 1 n.s.
C-EU	77	32.8	0.8-488	83	16-100	66	7-100	49 >, 1 <, 23 =, 4 n.s.
5-10 DAA								
MAR	35	42.5	0.3-381	64	0-95	41	0-95	17 >, 1 <, 17 =
N-E	20	2.5	0.2-12.9	80	7-100	71	6-100	9 >, 0 <, 9 =, 2 n.s.
S-E	20	17.2	0.9-114	63	25-98	45	3-93	8 >, 0 <, 11 =, 1 n.s.
C-EU	75	25.8	0.2-381	68	0-100	50	0-100	34 >, 1 <, 37 =, 3 n.s.

**Table 3.2-183: Control (%) of MELIAE by MCW-2222 applied in spring at target range 0.20-0.30 L/ha (40-60 g a.i./ha) compared to Karate Zeon/ Karate Zeon 050 CS in oilseed rape in South-East regarding PESSEV (no. of adults/ plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of adults/ plant)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to stand- ard(s); n.s.: significance not stated
				MCW-2222 0.20 L/ha		MCW-2222 0.25 L/ha		MCW-2222 0.30 L/ha		Karate Zeon/ 050 CS (7.5 g a.i./ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1-2 DAA												
S-E	9	16.5	1-9-82	79	66-94	80	68-94	85	77-95	79	61-90	3 >, 5 =, 1 n.s.
S-E	6	21.3	1.7-107	73	35-88	-	-	80	64-93	73	59-83	3 >, 3 =
S-E	5	5.8	1.9-15.8	-	-	-	-	84	76-94	66	40-100	3 >, 2 =
Sum of S-E	20	15.3	1.7-108	77 (n=15)	35-94	80 (n=9)	68-94	83 (n=20)	64-95	74 (n=20)	40-100	9 >, 10 =, 1 n.s.
2-5 DAA												
S-E	11	29.5	2.0-87.	72	62-97	76	60-98	80	67-98	62	43-95	5 >, 5 =, 1 n.s.
S-E	6	25.6	0.9-133	78	55-94	-	-	82	64-96	73	60-95	3 >, 3 =
S-E	4	6.3	1.6-15.4	-	-	-	-	74	40-95	56	35-100	2 >, 2 =
Sum of S-E	21	19.9	0.9-133	74 (n=16)	55-97	76 (n=10)	60-98	79 (n=20)	40-98	65 (n=20)	35-100	10 >, 10 =, 1 n.s.
5-10 DAA												
S-E	10	30.1	2.1-114	51	12-96	57	20-97	61	26-98	38	3-92	4 >, 5 =, 1 n.s.
S-E	6	3.4	0.9-6.9	61	22-94	-	-	64	22-95	60	31-93	2 >, 4 =



S-E	4	5.7	1.2-15.3	-	-	-	-	62	25-95	37	20-49	3 >, 1 =
Sum of S-E	20	17.2	0.9-114	55 (n=16)	12-96	57 (n=10)	20-97	62 (n=20)	22-98	45 (n=20)	3-93	9 >, 10 =, 1 n.s.

**Table 3.2-184:** ~~Control (%) of CEUTPI by MCW-2222 applied in autumn at 0.3 L/ha (60 g a.i./ha) compared to Mavrik Flo (MCW-5023) in oilseed rape. For single trial data please refer to Appendix 4 of the BAD.~~

Eppo zone	No. of trials	Untreated control (% damaged plants)		Untreated control (no. larvae/ plant)		% control				No. of trials where MCW-2222 is >, < or = compared to standard(s) (n.s.: significance not stated)
		mean	min-max	mean	min-max	MCW-2222 0.3 L/ha		Mavrik Flo (MCW-5023) 0.2 L/ha		
						mean	min-max	mean	min-max	
118-166 DAA										
MAR	7	-	-	3.2	0.2-12.3	88	72-100	75	13-99	7>
168 DAA										
MAR	1	37	-	-	-	84	-	92	-	1 n.s.

**Table 3.2-185:** Control (%) of CEUTPI by MCW-2222 applied in autumn at 0.2 – 0.25 L/ha (40 - 50 g a.i./ha) compared to Mavrik Flo (MCW-5023) in oilseed rape. For single trial data please refer to Appendix 4 of the BAD.

EPPO* zone	No. of trials	Untreated control (no. larvae/ plant)		% control with MCW-2222										No. of trials where MCW-2222 is >, <, = compared to standard(s)  (n.s.: significance not stated)		
				0.20 L/ha (83 % rate)		0.225 L/ha (94 % rate)		0.25 L/ha (104 % rate)		Mavrik Flo (MCW-5023) 0.2 L/ha						
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max					
														MCW- 2222 0.20 L/ha	MCW- 2222 0.225 L/ha	MCW- 2222 0.25 L/ha
118-166 DAA																
MAR	1	12.3	-	67.9	-	-	-	75.3	-	-	93.1	-	1=	-	1=	
MAR	4	1.7	0-3.0	-	-	63.7	25-94	-	-	64.4	13-99	-	4=	-	-	

**\*Comments of zRMS:**

The yellow background of the Table 3.2-177, marking the applicant's updated content (April 2024) but elsewhere replaced by zRMS with the grey background, could not be removed here.

**Table 3.2-186: Control (%) of PHYESP by MCW-2222 applied in autumn at 0.3 L/ha (60 g a.i./ha) compared to Mavrik Flo (MCW-5023) in oilseed rape. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of bites or larvae/plant)		Untreated control (% damaged plant area)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.3 L/ha		Mavrik (MCW-5023) 0.2 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	
3-5 DAA										
MAR	3	-	-	15.0	10-23	57	16-87	63	31-85	3=
6-10 DAA										
MAR	7	5.9 (n=3)	2.8-11.6	17.1 (n=4)	6.1-29	64	45-93	55	27-93	6=, 1 n.s.
N-E	1	-	-	6.4	-	86	-	63	-	1>
C-EU	8	5.9	2.8-11.6	13.3	6.1-29	63	29-93	54	27-93	1>, 6=, 1 n.s.
14-16 DAA										
MAR	7	4.8 (n=2)	2.9-6.7	16.5 (n=5)	4.9-31	59	30-91	64	38-84	6=, 1<
N-E	1	-	-	13	-	75	-	46	-	1>
C-EU	8	4.8 (n=2)	2.9-6.7	16.0 (n=6)	2.3-31	61	30-91	62	38-84	1>, 6=, 1<
36 DAA										
MAR	1	11.8	-	11.3	-	63	-	59	-	1=
170-202 DAA										
MAR	2	6.5 (n=1)	-	33.8 (n=1)	-	94	91-97	82	79-85	2=

**Table 3.2-18778: Control (%) of PHYESP by MCW-2222 applied in autumn at 0.2 – 0.25 L/ha (40 - 50 g a.i./ha) compared to Mavrik Flo (MCW-5023) in oilseed rape. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of bites or larvae/ plant)		Untreated control (% damaged plant area)		% control								No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)		
						MCW-2222 0.2 L/ha		MCW-2222 0.225 L/ha		MCW-2222 0.25 L/ha		Mavrik (MCW-5023) 0.2 L/ha				
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	MCW-2222 0.2 L/ha	MCW-2222 0.225 L/ha	MCW-2222 0.25 L/ha
4-5 DAA																
MAR	2	-	-	17.5	12.5-22.5	-	-	64	47-82	-	-	79	74-85	-	1<; 1=	-
6-10 DAA																
MAR	4	5.9 (n=3)	2.8-11.6	6.1 (n=1)	-	47	43-56	-	-	51	37-61	37	27-47	4=	-	4=
MAR	3	-	-	20.8	13.6-28.8	-	-	73	45-90	-	-	78	53-93	-	3=	-
N-E	1	-	-	6.4	-	-	-	63	-	-	-	63	-	-	1=	-
C-EU	4	-	-	17.2	6.4-28.8			70	45-90	-	-	80	49-93	-	4=	-
14-16 DAA																
MAR	4	4.8	2.9-6.7	8.4	4.9-11.9	52	22-87	-	-	55	27-86	57	38-71	1<; 3=	-	4=
MAR	3	-	-	21.9	13.1-31.3	-	-	59	22-85	-	-	73	53-84	-	1<; 2=	-
N-E	1	-	-	13.25	-	-	-	39	-	-	-	46	-	-	1=	-
C-EU	4	-	-	19.7	13.1-31.3	-	-	54	22-85	-	-	72	46-84	-	1<; 3=	-
36 DAA																
MAR	1	11.8	-	-	-	-	-	89	-	-	-	88	-	-	1=	-
170-202 DAA																
MAR	2	6.5	-	33.8	-	-	-	88	88	-	-	82	79-85	-	2=	-

**Table 3.2-188: Control (%) of PSYCH by MCW-2222 applied in autumn at 0.3 L/ha (60 g a.i./ha) compared to Karate or Hallmark Zeon, Mavrik Flo (MCW-5023) in oilseed rape (PESSEV; total larvae (no./plant) or damaged plant area/plot in %). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of larvae/plant)		Untreated control (damaged plant area/ plot in %)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
						MCW-2222 0.3 L/ha		Karate / Hallmark Zeon 7.5 g lambda-cyhalothrin/ha		Mavrik Flo (MCW-5023) 0.2 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
3 DAA												
MAR	3	-	-	22	9.4-31.3	51	19-74	58	24-77	-	-	1=, 2 n.s.
7-10 DAA												
MAR	4	-	-	22.2	11.3-42.1	55	30-82	57	22-82	-	-	2=, 2 n.s.
MAR	4	-	-	15.3	3.8-42.6	64	48-80	-	-	63	44-78	3=
N-E	3	-	-	2.6	1.8-3.1	56	33-86	-	-	56	33-83	1=, 2 n.s.
C-EU	11			14.4	1.8-42.6	58	-	-	-	-	-	-
11-18 DAA												
MAR	7	14.3 (n=1)	-	20.8 (n=6)	8.0-50.5	61	34-100	64	44-100	-	-	1>, 2=, 4 n.s.
MAR	5	3.2 (n=1)	-	13.5 (n=4)	3.0-37.0	71	54-85	-	-	70	51-81	1>, 3=, 1 n.s.
N-E	4	-	-	10.1	1.3-33.0	61	33-88	-	-	61	33-85	4=
C-EU	16	8.2 (n=2)	3.2-14.3	15.7 (n=14)	1.3-50.5	64	33-100	-	-	-	-	-
19-65 DAA												
MAR	5	10.5	2.3-21.5	-	-	64	43-80	70	56-89	-	-	1<, 1=, 3 n.s.
MAR	3	3.1	0.7-5.2	-	-	70	50-83	-	-	74	69-78	2=, 1 n.s.
N-E	4	4.3	0.2-8.0	-	-	91	68-100	-	-	89	73-100	4=
C-EU	12	6.6	0.2-21.5	-	-	75	43-100	-	-	-	-	-

EPPO zone	No. of trials	Untreated control (no. of larvae/plant)		Untreated control (dam- aged plant area/ plot in %)		% control						No. of trials where MCW 2222 is >, <, = compared to standard(s); n.s.: significance not stated
						MCW 2222 0.3 L/ha		Karate / Hallmark Zeon 7.5 g lambda-cyhaloth- rin/ha		Mavrik Flo (MCW 5023) 0.2 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
126-189 DAA												
MAR	7	16.5	1.4-79.3	-	-	75	51-99	69	25-100	-	-	1>, 4=, 2 n.s.
MAR	5	7.6	1.0-16.0	-	-	66	36-87	-	-	59	33-77	1>, 4=
N-E	3	4.7	1.0-12.0	-	-	98	96-100	-	-	93	84-100	1>, 1=, 1 n.s.
C-EU	15	11.2	1.0-79.3	-	-	76	36-100	-	-	-	-	-

Karate Zeon (CS, 100 g/L lambda-cyhalothrin) applied at 0.075 L/ha or 0.05 L/ha (DE20IEBRSNN509B)

Hallmark Zeon (CS, 100 g/L lambda-cyhalothrin) applied at 0.075 L/ha

Mavrik Flo / MCW 5023 (EW, 240 g/L tau-fluvalinate) applied at 0.2 L/ha

**Table 3.2-18979:** Control (%) of PSYICH by MCW-2222 applied in autumn at 0.2 – 0.25 L/ha (40 - 50 g a.i./ha) compared to Karate or Hallmark Zeon, Mavrik Flo (MCW-5023) in oilseed rape (PESSEV; total larvae (no./plant) or damaged plant area/plot in %). For single trial data please refer to Appendix 4 of the BAD.

[illegible]

EPPO zone	No. of trials	Untreated control (no. of lar- vae/plant)		Untreated control (damaged plant area/ plot in %)		% control										No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated			
						MCW-2222 0.2 L/ha		MCW-2222 0.225 L/ha		MCW-2222 0.25 L/ha		Karate / Hallmark Zeon 7.5 g lambda- cyhaloth- rin/ha		Mavrik Flo (MCW-5023) 0.2 L/ha					
		mean	min- max	mean	min-max	mean	min- max	mean	min- max	mean	min- max	mean	min- max	mean	min- max	MCW-2222 0.2 L/ha	MCW-2222 0.225 L/ha	MCW-2222 0.25 L/ha	
19-65 DAA																			
MAR	3	7.7	2.3-13.0	-	-	58	50-67	-	-	-	-	65	56-78	-	-	3n.s.	-	-	
MAR	1	0.7	-	-	-	-	-	62	-	-	-	-	-	69	-	-	1=	-	
MAR	2	4.3	3.5-5.2	-	-	61	59-63	-	-	62	62	-	-	77	77-78	1=; 1n.s.	-	1=; 1n.s.	
MAR	1	7.8	-	-	-	-	-	39	-	-	-	56	-	-	-	-	1=	-	
N-E	4	4.3	0.2-8.0	-	-	-	-	81	67-100	-	-	89	73-100	-	-	1<; 3=	1<; 3=	-	
C-EU	6	4.3	0.2-8.0	-	-	-	-	71	39-100	-	-	-	-	-	-	-	-	-	
C-EU	5	6.3	2.3-13.0	-	-	59	50-67	-	-	-	-	-	-	-	-	-	-	-	
126-189 DAA																			
MAR	5	3.1	1.4-8.3	-	-	56	35-94	-	-	-	-	65	25-100	-	-	3=; 2n.s.	-	-	
MAR	3	10.8	3.6-16.0	-	-	60	49-69	-	-	61	54-71	-	-	59	55-62	3=	3=	-	
MAR	2	2.7	1.0-4.4	-	-	-	-	37	18-55	-	-	-	-	55	33-77	-	1>; 1=	-	
MAR	1	79.3	-	-	-	-	-	43	-	-	-	25	-	-	-	-	1=	-	
N-E	3	4.7	1.0-12.0	-	-	-	-	89	82-100	-	-	-	-	93	84-100	-	1<; 1=; 1n.s.	-	
C-EU	6	16.5	1.0-79.3	-	-	-	-	64	18-10	-	-	-	-	-	-	-	-	-	
C-EU	8	6.0	1.4-16.0	-	-	58	35-94	-	-	-	-	-	-	-	-	-	-	-	

Karate Zeon (CS, 100 g/L lambda-cyhalothrin) applied at 0.075 L/ha or 0.05 L/ha (DE20IEBRNN509B)

Hallmark Zeon (CS, 100 g/L lambda-cyhalothrin) applied at 0.075 L/ha

Mavrik Flo / MCW-5023 (EW, 240 g/L tau-fluvalinate) applied at 0.2 L/ha

## Conclusion

### Efficacy against beetles and weevils in winter oilseed rape after spring application of MCW-2222:

The data over all EPPO zones demonstrated excellent control of *Ceutorhynchus obstrictus* and the efficacy was equivalent compared to Karate Zeon. For the South-East EPPO zone the efficacy showed excellent control of the beetle by the target range (0.2 to 0.3 L/ha). The dose rate of 0.15 L/ha showed good control of *C. obstrictus*. The efficacy of MCW-2222 compared to Mospilan and Karate Zeon was equivalent.

Regarding the pest *Ceutorhynchus napi* in the South-East zone, MCW-2222 demonstrated excellent control for the rates 0.2-03 L/ha and good control for 0.15 L/ha. The efficacy showed equivalent results compared to the reference product Karate Zeon 050 CS. For Central-EU the efficacy was excellent, and superior compared to the reference product.

The efficacy of MCW-2222 was excellent against *Ceutorhynchus pallidactylus* and was equivalent or even superior compared to Karate Zeon 5 CS/050 CS.

Overall EPPO zones, the efficacy of MCW-2222 against *Brassicogethes aeneus* demonstrated excellent control of the pest and was superior compared to Karate Zeon/ Hallmark Zeon. For South-East zone, the efficacy was good or excellent against *B. aeneus* and was equivalent or superior compared to the reference product.

### Efficacy against beetles and weevils in winter oilseed rape after autumn application of MCW-2222:

The efficacy data of MCW-2222 against the pest *Ceutorhynchus picipitarsis* was excellent and showed superior control of the pest compared to Mavrik Flo.

Regarding the *Phyllotreta* species, the efficacy of MCW-2222 showed good and equivalent control compared to Mavrik Flo.

Further, the efficacy of MCW-2222 against *Psylliodes chrysocephala* demonstrated excellent control of the pest. Compared to Karate Zeon/ Hallmark Zeon or Mavrik Flo the efficacy of MCW-2222 was equivalent. To ensure a sufficient data package for control of PSYICH in Poland extrapolation of efficacy data from the Maritime to the North-East EPPO zone is possible according to the 'General information about trial grouping' presented in Chapter 3.2.

Thus, the GAP uses as summarised above and stated in Part B, Section 0 were proven by the data. The proposed label rates of MCW-2222 are considered to be appropriate for the control of beetles and weevils in oilseed rape.

### 3.2.3.2.4 (2d) Beetles and weevils in spring oilseed rape

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring oilseed rape (spring application)	CEUTAS, CEUTNA, CEUTQU	Mar-Jul BBCH 31-71 BBCH 61-71 BBCH 31-59 BBCH 31-59	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.15-0.30	30-60
	MELIAE	Apr-Jun BBCH 50-60	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60



## Conclusion

A sufficient number of trials was carried out in the major crop winter oilseed rape (please refer to 2c above). As the growth characteristics, application timings and target pests enable extrapolation from winter to spring oilseed rape, the proposed label rate of MCW-2222 is also considered to be appropriate for the control of aphids in spring oilseed rape.

For results after spring application in winter oilseed rape please refer to Table 3.2-174 and Table 3.2-175 for control of *Ceutorhynchus obstrictus*, Table 3.2-176, Table 3.2-177 and Table 3.2-178 for *Ceutorhynchus napi*, Table 3.2-179 and Table 3.2-180 for *Ceutorhynchus pallidactylus* and Table 3.2-182 and Table 3.2-183 for *Brassicoglyphus aeneus*.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.3 (3) Codling moth (biting) in apple

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)		
					L product /ha	g ai/ha	L/ha LWA
Apple	CARPPO ( <i>Cydia pomonella</i> )	Jun-Aug BBCH 71-PHI	Mar, N-E	1	0.2-0.4 0.3	80-60 60	0.25-0.1875 0.1875
			S-E	1	0.2-0.4 0.3	40-80 60	0.125-0.25 0.1875

## Material and methods

An overview of trials against *Cydia pomonella* in apple is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-190: Overview of efficacy and dose justification trials with MCW-2222 against *Cydia pomonella* in apple (38 (26 valid) efficacy trials))**

Ref. no.	Trial type <sup>(1)</sup>		Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
	L/ha	L/ha LWA						
Maritime EPPO Zone (17 trials)								
6.2/008	M+E+Y	E+Y	CZ14IEMABSD011A	Apple	CARPPO	CZ	2014	GEP
6.2/009	M+E+Y	M+E+Y	CZ14IEMABSD011B	Apple	CARPPO	CZ	2014	GEP
6.2/010	M+E+Y	M+E+Y	CZ14IEMABSD011C	Apple	CARPPO	CZ	2014	GEP
6.2/011	M+E+Y	M+E+Y	CZ14IEMABSD011D	Apple	APHIPO, CARPPO	CZ	2014	GEP
6.2/012	M+E+Y	M+E+Y	CZ14IEMABSD011E	Apple	APHIPO, CARPPO	CZ	2014	GEP
6.2/013	M+E+Y	M+E+Y	CZ14IEMABSD011F	Apple	CARPPO	CZ	2014	GEP
6.2/014	M+E+Y	E+Y	CZ14IEMABSD011G	Apple	CARPPO	CZ	2014	GEP
6.2/026	E+Y	-	CZ21IEMABSD173A	Apple	CARPPO	CZ	2021	GEP
6.2/027	E+Y	-	CZ21IEMABSD173B	Apple	CARPPO	CZ	2021	GEP
6.2/045	E+Y	-	CZ21IEMABSD173C	Apple	CARPPO	CZ	2021	GEP
6.2/046	E+Y	-	CZ21IEMABSD173D	Apple	CARPPO	CZ	2021	GEP
6.2/058	M+E+Y	E+Y	CZ21IEMABSD538A	Apple	CARPPO	CZ	2021	GEP
6.2/059	M+E+Y	E+Y	CZ21IEMABSD538B	Apple	CARPPO	CZ	2021	GEP
6.2/084	E+Y	M*+E+Y	CZ22IEMABSD500A	Apple	CARPPO	CZ	2022	GEP
6.2/111	E+Y	M*+E+Y	CZ22IEMABSD500B	Apple	CARPPO	CZ	2022	GEP
6.2/169	E+Y	M*+E+Y	DE22IEMABSD500A	Apple	CARPPO	DE	2022	GEP

Ref. no.	Trial type <sup>(1)</sup>		Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
	L/ha	L/ha LWA						
6.2/170	E+Y	M*+E+Y	DE22IEMABSD500B	Apple	CARPPPO	DE	2022	GEP
<b>North-East EPPO Zone (10 trials)</b>								
6.2/028	E+Y	-	11MAP0004-1	Apple	CARPPPO	PL	2011	GEP
6.2/029	E+Y	-	11MAP0004-2	Apple	CARPPPO	PL	2011	GEP
6.2/030	E+Y	-	11MAP0005-1	Apple	CARPPPO	PL	2011	GEP
6.2/031	E+Y	-	11MAP0005-2	Apple	CARPPPO	PL	2011	GEP
6.2/034	M+E+Y	M+E+Y	PL13IEMABSD206A	Apple	CARPPPO	PL	2013	GEP
6.2/035	M+E+Y	M+E+Y	PL13IEMABSD206B	Apple	CARPPPO	PL	2013	GEP
6.2/036	M+E+Y	M+E+Y	PL13IEMABSD206C	Apple	CARPPPO	PL	2013	GEP
6.2/037	M+E+Y	M+E+Y	PL13IEMABSD206D	Apple	CARPPPO	PL	2013	GEP
6.2/175	M+E+Y	M+E+Y	PL21IEMABSD240A	Apple	CARPPPO	PL	2021	GEP
6.2/176	M+E+Y	M+E+Y	PL21IEMABSD240B	Apple	CARPPPO	PL	2021	GEP
<b>South-East EPPO Zone (11 trials)</b>								
6.2/050	M+E+Y	-	HU13IEMABSD631A	Apple	CARPPPO	HU	2013	GEP
6.2/051	M+E+Y	M+E+Y	HU13IEMABSD631B	Apple	CARPPPO	HU	2013	GEP
6.2/053	M+E+Y	M+E+Y	HU14IEMABSD012A	Apple	CARPPPO	HU	2014	GEP
6.2/178	E+Y	-	HU21IEMABSD173B	Apple	CARPPPO	HU	2021	GEP
6.2/179	E+Y	-	HU21IEMABSD173D	Apple	CARPPPO	HU	2021	GEP
6.2/057	M+Y	M+Y	RO13IEMABSD003A	Apple	CARPPPO	RO	2013	GEP
6.2/181	E+Y	-	RO21IEMABSD233B	Apple	CARPPPO	RO	2021	GEP
6.2/071	M+E+Y	M+E+Y	SK13IEMABSD002A	Apple	CARPPPO	SK	2013	GEP
6.2/072	M+E+Y	M+E+Y	SK13IEMABSD002B	Apple	CARPPPO	SK	2013	GEP
6.2/195	M+E+Y	E+Y	SK21IEMABSD538A	Apple	CARPPPO	SK	2021	GEP
6.2/196	M+E+Y	E+Y	SK21IEMABSD538B	Apple	CARPPPO	SK	2021	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, Y = trial with yield and/or quality assessment, M\* =MED data were in original L/ha LWA dosage.  
(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

### Dose rates

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), this section includes data from apple trials conducted in 2011-2014, the rates applied in these trials was based on L/ha and newer apple trials conducted in 2021-2022, the rates of MCW-2222 applied in these trials was based on L/ha tLWA. The data from the older trials conducted using L/ha has been recalculated to L/ha tLWA based on the canopy height and the row distance in each trial. To allow grouping of the application rates, the calculated L/ha tLWA application rates are presented in ranges with a 10 % deviation from the minimum and maximum target rate.

The efficacy studies with the rates applied in L/ha have been recalculated to L/ha tLWA rates as far as possible. However the necessary calculation parameters (e.g. treated crop height) were not available from all trials, therefore the number of trials with L/ha and L/ha tLWA rates are slightly different. Furthermore, after recalculation some of the trials didn't match the proposed GAP rates/ranges in L/ ha tLWA. Therefore, the number of trials with L/ha and L/ha tLWA rates matching the label claim are presented in separate tables in the following:

**Table 3.2-191: Summary of efficacy trials (CARPPPO in apple) based on application rates in L/ha**

Table 5/2 (2/1): Summary of efficacy trials (CARPPO in apple) based on application rates in 2014												
Pest	Crop	EPPO zone	Country	No. of trials							Total by zone	Total by pest
				Year					Total			
				2011	2013	2014	2021	2022				
CARPPO	Apple	MAR	CZ	-	-	7	6 2	2*	15 11	17 13	38 26	
			DE	-	-	-	-	1 + 1*	2			
		N-E	PL	4	4	-	2	-	10 6	10 6		
		S-E	RO	-	1	-	1	-	2	10		

Pest	Crop	EPPO zone	Country	No. of trials						Total	Total by zone	Total by pest
				Year								
				2011	2013	2014	2021	2022				
			SK	-	2	-	2	-	4	4	7	
			HU		2	1	2	-	3	3		

\* These trials used additional application rates in L/ha LWA, the 0.2 L/ha application rate was calculated from the application rates in L/ha LWA.

**Table 3.2-192: Summary of efficacy trials (CARPPO in apple) based on application rates in L/ha LWA (leaf wall area)**

Pest	Crop	EPPO zone	Country	No. of trials								
				Year				Total	Total by zone	Total by pest		
				2013	2014	2021	2022					
CARPPO	Apple	MAR	CZ	-	7	2*	2*	11	9	13	25	21
			DE	-	-	-	2*	2				
		N-E	PL	4	-	2*		6	6			
		S-E	SK	2	-	2*		4	2	6		
			HU	1	1	-		2				

\* These trials used additional application rates in L/ha LWA, the 0.2 L/ha application rate was calculated from the application rates in L/ha LWA.

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-193: Details on trial methodology (*Cydia pomonella* in apple)**

Guidelines	General guidelines	EPPO PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(1/2)
	Specific guidelines	EPPO PP 1/7(3), 1/131(3), 1/258(1)
Experimental design	Plot design	RCBD (all trials)
	Plot size	12- 129.6 m <sup>2</sup>
	Number of replications	4 (all)
Crop	Varieties	Golden Delicious, Melrose, Idared, Ligol, Jonagold, Gala, Szampion, Jonagored, Resista, Starkrimson delicious, Spartan, Galmac, Jersey mac, Ontario
Application	Crop stage (BBCH) at application	from BBCH 69 to BBCH 75
	Timing	Mixed growth stages of CARPPO
	Pest stage at application	
	Number of applications	1 (6 trials)
	Intervals between applications	2 (15 trials) with intervals of 14-70 days*
	*assessments were conducted after one application, additional assessments were conducted after 2-10 applications for the harvested fruits	3 (4 trials) 11-21 9-50 days* 4 (4 trials) with interval of 9-50 8-19 days * 6 (1 trial) with interval of 8-31 days* 9 (1 trial) with interval of 7-12 days* 10 (1 trial) with interval of 10-22 days*
Assessment	Spray volumes	500 - 1000 L/ha
	Assessment types	- incidence on dropped fruits - damaged dropped fruits (no./plot) - incidence on harvested fruits - accumulated damaged dropped fruits (no./plot)
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$

	Assessment dates	Usually 07-08 DAA 11-16 DAA, 20-24 DAA, 27-30 DAA, 30-38 DAA, 38-46 DAA, 48-54 DAA, 56-108 DAA, 20-80 DAA (harvested fruits), 38 DAB - 18 DAJ (harvested fruits)
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The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

To cover the data requirements for vertically treated crops / high growing crops acc. to EPPO PP 1/239(3), efficacy studies have been conducted with L/ha tLWA rates in addition to the ha rates. Only the 2021 and 2022 trials were conducted with original L/ha tLWA rates, whereas for the older trials the LWA rates have been recalculated based on the canopy height and the row distance. Please note, that these calculated L/ha tLWA application rates were presented in ranges with a 10 % deviation from the minimum and maximum target rate (refer to the following table).

**Table 3.2-194: Overview of L/ha application rates against *Cydia pomonella* in apple (bold letters = target rate)**

Product		No. of appl.*	Rate per treatment <sup>(1)</sup>		
			product/ha	active ingredient/ha	
Maritime (7 trials)					
Test product	MCW-2222	2	0.2 L	40 g	acetamiprid
		2	0.25 L	50 g	acetamiprid
		2	0.4 L	80 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.25 kg	50 g	acetamiprid
Maritime (4 trials)					
Test product	MCW-2222	2-4	0.4 L	80 g	acetamiprid
Reference product	Coragen 20 SC	2-4	0.155 L	32 g	chlorantraniliprole
Maritime (2 trials)**					
Test product	MCW-2222	2-3	0.4 L	80 g	acetamiprid
Reference product	Coragen 20 SC	2-3	0.16 L	32 g	chlorantraniliprole
Maritime (2 trials)**					
Test product	MCW-2222	3-4	0.4 L	80 g	acetamiprid
Reference product	Coragen 20 SC	3-4	0.88 L	17.6 g	chlorantraniliprole
Maritime (2 trials)**					
Test product	MCW-2222	2-4	0.2 L	40 g	acetamiprid
		2-4	0.35 L	70 g	acetamiprid
		2-4	0.4 L	80 g	acetamiprid
Reference product	Coragen 20 SC	2-4	0.155 L	32 g	chlorantraniliprole
North-East (8 4 trials)					
Test product	MCW-2222	2	0.2 L	40 g	acetamiprid
		2	0.25 L	50 g	acetamiprid
		2	0.4 L	80 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.2 kg	40 g	acetamiprid
North-East (2 trials)**					
Test product	MCW-2222	1-4	0.2 L	40 g	acetamiprid
		1-4	0.35 L	70 g	acetamiprid
		1-4	0.4 L	80 g	acetamiprid
Reference product	Coragen 20 SC	1-4	0.175 L	35 g	chlorantraniliprole
South-East (4 3 trials)					
Test product	MCW-2222	4-10	0.2 L	40 g	acetamiprid
		4-10	0.25 L	50 g	acetamiprid
		4-10	0.4 L	80 g	acetamiprid
Reference product	Mospilan 20 SG	4-10	0.25 kg	40 g	acetamiprid
South-East (3 trials)					

Product		No. of appl.*	Rate per treatment <sup>(1)</sup>	
			product/ha	active ingredient/ha
Test product	MCW-2222	1-3	0.4 L	80 g acetamiprid
Reference product	Coragen 20 SC	1-3	0.155 L	
<b>South-East (2 trials)**</b>				
Test product	MCW-2222	3	<b>0.2 L</b>	40 g acetamiprid
		3	0.35 L	70 g acetamiprid
		3	0.4 L	80 g acetamiprid
Reference product	Coragen 20 SC	3	0.88 L	17.6 g chlorantraniliprole

Product		No. of appl.*	Rate per treatment <sup>(1)</sup>	
			product/ha	active ingredient/ha
South-East (2 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
		1	0.4 L	80 g acetamiprid
Reference product	Mospilan 20 SP	1	0.25 kg	50 g acetamiprid

(1) Not every rate of the test product was tested in every trial

\*Some trials were conducted with more than one application, efficacy evaluation in this dossier were realised after one application acc. to the envisaged GAP. The assessment of efficacy data on harvested fruits was conducted after the last application.

\*\*Trials have additional application rate in L/ha LWA.

**Table 3.2-195: Overview of L/ha LWA application rates against *Cydia pomonella* in apple (bold letters = target rate)**

Product		No. of appl.+	Rate per treatment		
			product/ha LWA (7-3)	active ingredient/ha	
Maritime (6-7 trials)					
Test product	MCW-2222	2	0.1125 <sup>(1)</sup> -0.1875 <sup>(3)</sup> L 0.1125 <sup>(1)</sup> -0.2063 <sup>(2)</sup> L	23-38 g 41 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.1875 <sup>(3)</sup> -0.275 <sup>(2)</sup> L	38-55 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.25 kg/ha	50 g	acetamiprid
Maritime (1 trial)					
Test product	MCW-2222	2	0.1875 <sup>(3)</sup> -0.275 <sup>(2)</sup> L	38-55 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.25 kg/ha	50 g	acetamiprid
*Maritime (4 trials)					
Test product	MCW-2222	2-4	0.188 L	38 g	acetamiprid
		2-4	0.25 L	50 g	acetamiprid
Reference products	Coragen 20 SC	2-4	0.088 L/ha	17.6 g	chlorantraniliprole
	Coragen 20 SC	2-3	0.160 L/ha	32 g	chlorantraniliprole
*Maritime (2 trials)					
Test product	MCW-2222	2-4	0.25 L	50 g	acetamiprid
Reference product	Coragen 20 SC	2-4	0.160 L/ha	32 g	chlorantraniliprole
North-East (4 trials)					
Test product	MCW-2222	2	0.1125 <sup>(1)</sup> -0.1875 <sup>(3)</sup> L 0.1125 <sup>(1)</sup> -0.2063 <sup>(2)</sup> L	23-38 g 41 g	acetamiprid
		2	0.1875 <sup>(3)</sup> -0.275 <sup>(2)</sup> L	38-55 g	acetamiprid
Reference product	Mospilan 20 SP	2	0.20 kg/ha	50 g	acetamiprid
Reference product	Mospilan 20 SG	2	0.20 kg/ha	50 g	acetamiprid
**North-East (2 trials)					
Test product	MCW-2222	1-4	0.1125 <sup>(1)</sup> -0.1875 <sup>(3)</sup> L 0.1125 <sup>(1)</sup> -0.2063 <sup>(2)</sup> L	23-38 g 41 g	acetamiprid
		1-4	0.25 L	50 g	acetamiprid
Reference product	Coragen 20 SC	1-4	0.175 kg/ha	35 g	chlorantraniliprole
South-East (4 trials)					
Test product	MCW-2222	2-9	0.1125 <sup>(1)</sup> -0.1875 <sup>(3)</sup> L 0.1125 <sup>(1)</sup> -0.2063 <sup>(2)</sup> L	23-38 g 41 g	acetamiprid
		2-9	0.1875 <sup>(3)</sup> -0.275 <sup>(2)</sup> L	38-55 g	acetamiprid
Reference product	Mospilan 20 SP/SG	2-9	0.25 kg/ha	50 g	acetamiprid
*South-East (2 trials)					
Test product	MCW-2222	2-4	0.25 L	50 g	acetamiprid
Reference product	Coragen 20 SC	2-4	0.088 L/ha	17.6 g	chlorantraniliprole

(1) this value (0.1125 L/ha LWA) is the minimum target rate (0.125 L/ha LWA) minus 10 percent.

(2) this value (0.275 0.2063 L/ha LWA) is the maximum target rate (0.25 0.1875 L/ha LWA) plus 10 percent.

(3) this cut off value (0.1875 L/ha LWA) is the mean value of the minimum and maximum target rate.

† trials were conducted with more than one application, efficacy evaluation in this dossier were realised after one application acc. to the envisaged GAP. The assessment of efficacy data on harvested fruits were conducted after one and after the last

application.

\* trials with original L/ha LWA application rates.

\*\* trials with one original and one calculated L/ha LWA application rate

(~~3~~) Not every rate was tested in every trial. The application rate of the reference products were stated in L or kg/ha, not LWA.

## Results

The effectiveness of MCW-2222 against codling moth was tested in ~~39~~ 26 efficacy trials in apple conducted in the years ~~2011~~, 2013, 2014, 2015, 2021, and 2022 in Czech Republic, Germany, Poland, ~~Romania~~, Slovakia, and Hungary. Results are provided in the following tables. For detailed results please refer to Appendix 4 of the BAD.

## Conclusion

MCW-2222 applied at the target dose of ~~0.4~~ 0.3 L/ha (~~0.25~~ 0.1875 L/ha LWA) in the Maritime and North-East EPPO zone and at the target range of 0.2-~~0.4~~ 0.3 L/ha (0.125-~~0.25~~ 0.1875 L/ha LWA) in the South-East EPPO Zone showed effective control of *Cydia pomonella* in apples. Control levels of MCW-2222 were equivalent compared to the reference standards Mospilan and Coragen.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

**Table 3.2-196: Control (%) of CARPPO by MCW-2222 applied at target rate 0.4 L/ha for Maritime and North-East EPPO zone and the target range for South-East EPPO zone of 0.2-0.4 L/ha (40-80 g a.i./ha) compared to Mospilan SG/SP and Coragen in apple regarding PESINC on dropped fruits (%). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control damaged/dropped fruits no./plot		Untreated control PESINC on dropped fruits (%)		% control								No. of trials where MCW-2222 at max. rate is >, < = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.4 L/ha (target rate for MAR, N-E and S-E)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
07-08 DAA														
MAR	3	-	-	43.1	0.8-67.5	79	57-100	86	78-100	82	68-100	-	-	3 n.s.
MAR	1	8.3 (n=1)	-		-	-	-	39	-	-	-	73	-	1 n.s.
N-E	1	-	-	15.1	-	55	-	100	-			90	-	1 =
S-E	3	-	-	48.2	18.3-80.4	28 (n=2)	19-38	41	25-50	-	-	62	50-75	2 =, 1 <
C-EU	8	-	-	41.3	0.8-80.4	58 (n=6)	19-100	65	25-100	-	-	-	-	-
11-16 DAA														
MAR	7	-	-	45.0	0.5-73.5	74	38-100	93	60-100	91	52-100	-	-	7 n.s.
MAR	3	13 (n=1)	-	9.4	6.5-12.3	79	79	71	41-89	-	-	74	50-86	2 =, 1 n.s.
N-E	1	-	-	21.3	-	12	-	100	-	-	-	71	-	1 =
S-E	2	-	-	1	0.9-1.2	100	100	100	100	100	100	-	-	2 n.s.
S-E	4	5.8 (n=1)		56.9	45.8-74.1	59	34-83	64	26-83	-	-	68	33-88	3 =, 1 n.s.
C-EU	17	9.4	5.8-13	35.2	0.5-74.1	71	12-100	84	26-100	-	-	-	-	-
20-24 DAA													-	
MAR	7	-	-	53.1	0.5-85.3	81	42-100	94	63-100	92	55-100	-	-	7 n.s.
MAR	5	18.0 (n=1)	-	45.7	39.8-50.3	26	8-44	83	70-96	-	-	83	55-97	4 =, 1 n.s.
N-E	1	-	-	41.7	-	70	-	100	-	-	-	80	-	1 =
S-E	1	-	-	28.0	-	-	-	84	-	-	-	91	-	1 <
C-EU	14	18.0 (n=1)	-	48.0	0.5-85.3	69 (n=13)	8-100	90	63-100	-	-	-	-	-



EPPO zone	No. of trials	Untreated-control damaged/dropped fruits no./plot		Untreated-control PESINC on dropped fruits (%)		% control								No. of trials where MCW-2222 at max. rate is >, < = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.4 L/ha (target rate for MAR, N-E and S-E)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen-20 SC (0.155-0.175 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
27-30 DAA														
MAR	5	-	-	48.8	0.5-77.0	61	23-100	90	53-100	86	42-100	-	-	5 n.s.
MAR	4	-	-	75.1	58.6-91.3	21	5-37	92	73-100	-	-	97	88-100	4 =
N-E	1	-	-	20.8	-	40	-	100	-	-	-	100	-	1 =
S-E	1	15.3	-	-	-	-	-	88	-	-	-	92	-	1 =
C-EU	11	15.3 (n=1)	-	56.5	0.5-91.3	48	5-100	91	53-100	-	-	-	-	-
30-38 DAA														
MAR	7	-	-	50.4	0.3-89.0	88	75-100	98	88-100	96	83-100	-	-	7 n.s.
MAR	5	47.0 (n=1)		68.5	51.1-77.0	39	23-55	96	84-100			92	74-100	4 =, 1 n.s.
N-E	4	-	-	45	2.0-93.0	87	76-95	97	91-100	87	77-96	-	-	4 n.s.
N-E	1	-	-	21.3	-	100	-	100	-	-	-	100	-	1 =
C-EU	17	47.0 (n=1)		50.5	0.3-93.0	83	23-100	97	84-100	-	-	-	-	-
20-80 DAA (harvested fruits)														
MAR	2	-	-	4.0	2.5-5.5	96	95-97	100	100	100	100	-	-	n.s.
MAR	5	-	-	10.8 (n=3)	8.9-13.0	72	68-76	96	90-100	-	-	97	94-99	5 =
N-E	1	-	-	6.1	-	43	-	100	-	-	-	100	-	1 =
S-E	1	-	-	38.3	-	-	-	82	-	-	-	89	-	1 <
C-EU	9			11.8	2.5-38.3	76	43-97	96	82-100	-	-	-	-	-
38 DAB – 18 DAJ (harvested fruits)														
MAR	7	-	-	18.8	9.0-28.3	92	83-100	97	83-100	97	88-100	-	-	7 n.s.
MAR	10	-	-	14.4	1.4-31.4	69	46-92	87	54-100	-	-	94	78-100	9 =, 1 <
N-E	1	-	-	4.1	-	55	-	91	-	-	-	95	-	1 =
S-E	5	3.1 (n=2)	2.3-3.8	24.9 (n=3)	0-74.6	75	40-100	92	69-100	90	66-100	-	-	5 n.s.
S-E	4	-	-	16.0	10.2-27.8	69	60-77	71	51-90	-	-	83	76-91	2 <, 1 =, 1 >
C-EU	27	3.1 (n=2)	2.3-3.8	16.7	0-74.6	78	40-10	88	51-100	-	-	-	-	-

**Table 3.2-197: Control (%) of CARPPO by MCW-2222 applied at 0.2-0.278 L/ha (target rate) compared to Mospilan SG/SP and Coragen in apple regarding PESINC on (dropped or) harvested\* fruits (%). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested* fruits (%)		% control								No. of trials where MCW-2222 is >, <. = compared to standard(s) (n.s.: significance not stated)	
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.25-0.278 L/ha (target rate for MAR, N-E, S-E: 0.3 L/ha)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	0.2 L/ha	0.25-0.278 L/ha
07-08 DAA															
MAR	3	-	-	43.1	0.8-67.5	79	57-100	88	80-100	82	68-100	-	-	3 n.s.	3 n.s.
N-E	1	-	-	15.1	-	55	-	-	-	-	-	90	-	1 =	-
S-E	2	-	-	32.1	18.3-45.8	28	19-38	-	-	-	-	50	50	2 =	-
C-EU	6	-	-	34.8	0.8-67.5	58	19-100	88	80-100	-	-	-	-	-	-
11-16 DAA															
MAR	7	-	-	45.0	0.5-73.5	74	38-100	87	49-100	91	52-100	-	-	7 n.s.	7 n.s.
MAR	1	-	-	12.3	-	79	79	-	-	-	-	86	-	1 =	-
N-E	1	-	-	21.3	-	12	-	-	-	-	-	71	-	1 =	-
S-E	2	-	-	1	0.9-1.2	100	100	-	-	100	100	-	-	2 n.s.	-
S-E	2	-	-	48.3	45.8-50.7	59	34-83	-	-	-	-	48	33-63	2 =	-
C-EU	13	-	-	34.4	0.5-73.5	71	12-100	87	49-100	-	-	-	-		
20-24 DAA															
MAR	7	-	-	53.1	0.5-85.3	81	42-100	89	50-100	92	55-100	-	-	7 n.s.	7 n.s.
MAR	2	-	-	42.6	39.8-45.5	26	8-44	22 (n=1)	-	-	-	69	55-83	2 =	1 =
N-E	1	-	-	41.7	-	70	-	-	-	-	-	80	-	1 =	-
C-EU	10	-	-	49.9	0.5-85.3	69	8-100	81	22-100	-	-	-	-		

EPPO zone	No. of trials	Untreated control PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested* fruits (%)		% control								No. of trials where MCW-2222 is >, <. = compared to standard(s) (n.s.: significance not stated)	
						MCW-2222 0.2 L/ha (target rate for S-E)		MCW-2222 0.25-0.278 L/ha (target rate for MAR, N-E, S-E: 0.3 L/ha)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	0.2 L/ha	0.25-0.278 L/ha
27-30 DAA														5 n.s. 1 =, 1 < 1 =	5 n.s. 1 = -
MAR	5	-	-	48.8	0.5-77.0	61	23-100	84	41-100	86	42-100	-	-		
MAR	2	-	-	74.9	58.6-91.3	21	5-37	53 (n=1)	-	-	-	94	88-100		
N-E	1	-	-	20.8	-	40	-	-	-	-	-	100	-		
C-EU	8	-	-	51.8	0.5-91.3	48	5-100	79	41-100	-	-	-	-		
30-38 DAA															
MAR	7	-	-	50.4	0.3-89.0	88	75-100	97	86-100	96	83-100	-	-	7 n.s.	7 n.s.
MAR	2	-	-	62.2	51.1-73.3	39	23-55	43 (n=1)	-	-	-	100	100	1 =, 1 <	1 =
N-E	8	-	-	45.2	2.0-93.0	87	76-95	90 (n=4)	82-94	87	77-96	-	-	8 n.s.	4 n.s.
N-E	1	-	-	21.3	-	100	-	-	-	-	-	100	-	1 =	-
C-EU	18	-	-	47.8	0.3-93.0	83	23-100	90	43-100	-	-	-	-		
*20-80 DAA (harvested fruits)															
MAR	2	-	-	4.0	2.5-5.5	96	95-97	100	100	100	100	-	-	2 n.s.	2 n.s.
MAR	2	-	-	9.2	8.9-9.5	72	68-76	86 (n=1)	-	-	-	98	97-99	2 <	1 =
N-E	1	-	-	6.1	-	43	-	-	-	-	-	100	-	1 <	-
C-EU	5	-	-	6.5	2.5-9.5	76	43-97	95	86-100	-	-	-	-		
*38 DAB - 18 DAJ (harvested fruits)															
MAR	7	-	-	18.8	9.0-28.3	92	83-100	96	88-99	97	88-100	-	-	7 n.s.	7 n.s.
MAR	6	-	-	11.7	9.1-22.2	69	46-77	82	76-88	-	-	94	84-99	4 =, 2 <	1<, 1 =
N-E	1	-	-	4.1	-	55	-	-	-	-	-	95	-	1 <	-
S-E	5	66.2 (n= 2)	53.0-79.3	24.9 (n=3)	0-74.6	75	40-100	87 (n=3)	60-100	90	66-100	-	-	5 n.s.	3 n.s.
S-E	2	-	-	12.3	10.2-14.4	69	60-77	-	-	-	-	82	76-87	2 <	-
C-EU	21	66.2 (n= 2)	53.0-79.3	16.1	0-74.6	78	40-100	91	60-100	-	-	-	-		

**Table 3.2-198: Control (%) of CARPPO by MCW-2222 applied at two different LWA rates (0.25 L/ha LWA for Maritime and North-East EPPO zone and 0.125-0.25 L/ha LWA for South-East EPPO zone with max. 10% deviation) compared to Mospilan SG/SP and Coragen in apple regarding PESINC on dropped fruits (%). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated-control damaged-dropped fruits (no./plot)		Untreated-control PESINC on-dropped fruits (%)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s) (n.s.: significance not stated)
		mean	min-max	mean	min-max	MCW-2222 0.125 L/ha LWA (0.1125-0.1875 L/ha LWA)		MCW-2222 0.25 L/ha LWA (0.1875-0.275 L/ha LWA)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
						mean	min-max	mean	min-max	mean	min-max	mean	min-max	
07-08 DAA														
MAR	3	-	-	43.1	0.8-67.5	58	38-72	79	57-100	82	68-100	-	-	3 n.s.
N-E*	1	-	-	15.1	-	55	-	89	-	-	-	90	-	1=
S-E*	2	-	-	32	18.3-45.8	-	-	56	50-63	-	-	50	50	2=
C-EU	6	-	-	34.8	0.8-67.5	57 (n=4)	38-72	73 (n=6)	50-100	-	-	-	-	
11-16 DAA														
MAR	7	-	-	45.0	0.5-73.5	73 (n=6)	26-100	80 (n=6)	49-100	91	52-100	-	-	6 n.s.
MAR*	1	-	-	12.3	-	-	-	76	-	-	-	86	-	1=
N-E*	1	-	-	21.3	-	12	-	71	-	-	-	71	-	1=
S-E	2	-	-	1	0.9-1.2	88	87-88	100	100	100	100	-	-	2 n.s.
S-E*	2	-	-	48	45.8-50.7	-	-	75	49-100	-	-	48	33-63	2=
C-EU	13	-	-	34.4	0.5-73.5	69 (n=9)	12-100	81 (n=12)	49-100	-	-	-	-	-
20-24 DAA														
MAR	7	-	-	53.1	0.5-85.3	64 (n=6)	0-94	84 (n=6)	50-100	92	55-100	-	-	6 n.s.
MAR*	2	-	-	42.6	39.8-45.5	8 (n=1)		34	22-46	-	-	69	55-83	2=
N-E*	1	-	-	41.7	-	70	-	85	-	-	-	80	-	1=
C-EU	10	-	-	49.9	0.5-85.3	58 (n=8)	0-94	73 (n=9)	22-100	-	-	-	-	-
27-30 DAA														
MAR	5	-	-	48.8	0.5-77.0	38 (n=4)	0-78	72 (n=4)	41-100	86	42-100	-	-	4 n.s.
MAR*	2	-	-	74.9	58.6-91.3	37 (n=1)	-	61	53-69	-	-	94	88-100	2=
N-E*	1	-	-	20.8	-	40	-	100	-	-	-	100	-	1=
C-EU	8	-	-	51.8	0.5-91.3	38 (n=6)	0-78	73 (n=7)	41-100	-	-	-	-	-

EPPO zone	No. of trials	Untreated-control damaged-dropped fruits (no./plot)		Untreated-control PESINC on-dropped fruits (%)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.125 L/ha LWA (0.1125-0.1875 L/ha LWA)		MCW-2222 0.25 L/ha LWA (0.1875-0.275 L/ha LWA)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
30-38 DAA														
MAR	7	-	-	50.4	0.3-89.0	88 (n=6)	66-100	92 (n=6)	60-100	96	83-100	-	-	6 n.s.
MAR*	2	-	-	62.2	51.1-73.3	55 (n=1)		68	43-93	-	-	100	100	2 =
N-E	4	-	-	7.0	2.0-20.7	88	76-94	93	82-100	84	77-91	-	-	4 n.s.
N-E*	1	-	-	21.3	-	100	-	100	-	-	-	100	-	1 =
C-EU	14	-	-	37.6	0.3-89.0	86 (n=12)	55-100	89 (n=13)	43-100	-	-	-	-	-
38-46 DAA														
MAR	5	-	-	64.9	0.8-100	56 (n=4)	13-100	56	4-100	72	25-100	-	-	5 n.s.
MAR*	2	-	-	70.8	66.8-74.8	11 (n=1)		58	49-67	-	-	54	45-63	2 =
N-E	1*	-	-	12.5	-	75	-	100	-	-	-	75	-	1 =
C-EU	8	-	-	59.8	0.8-100	52 (n=6)	11-100	62	4-100	-	-	-	-	
48-54 DAA														
MAR	3	-	-	39.3	0.3-61.3	50 (n=2)	0-100	72	39-100	100	100	-	-	3 n.s.
MAR*	2	-	-	65.5	61.5-69.5	19 (n=1)		38	15-61	-	-	53	43-63	2 =
N-E*	1	-	-	16.7	-	25	-	100	-	-	-	100	-	1 =
S-E	2	-	-	11	9.9-12.0	72	70-75	96	96	96	96	-	-	2 n.s.
C-EU	8	-	-	35.9	0.3-69.5	48 (n=6)	0-100	73	15-100	-	-	-	-	
56-108 DAA														
MAR	2	-	-	68.8	50.0-87.5	48 (n=1)		75	50-100	100	100			2 n.s.
MAR*	1	-	-	66.6	-	31	-	35	-	-	-	86	-	1 =
N-E*	1	-	-	33.3	-	100	-	100	-	-	-	100	-	1 =
C-EU	4	-	-	59.4	33.3-87.5	60 (n=3)	31-100	71	35-100	-	-	-	-	-
20-56 DAA (harvested fruits)														
MAR	2	-	-	4.0	2.5-5.5	95 (n=1)		86	73-100	100	100	-	-	2 n.s.
MAR*	2	-	-	9	8.9-9.5	68 (n=1)		92	86-99	-	-	98	97-98	2 n.s.
N-E*	1	-	-	6.1	-	43	-	100	-	-	-	100	-	1 =
C-EU	5			6.5	2.5-9.5	68 (n=3)	43-95	92 (n=3)	73-100	-	-	-	-	-

EPPO zone	No. of trials	Untreated control damaged-dropped fruits (no./plot)		Untreated control PESINC on-dropped fruits (%)		% control								No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.125 L/ha LWA (0.1125-0.1875 L/ha LWA)		MCW-2222 0.25 L/ha LWA (0.1875-0.275 L/ha LWA)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
38 DAB-14 DAI (harvested fruits)														
MAR	7	-	-	18.8	9-28.3	84 (n=6)	44-97	94 (n=6)	73-100	97	88-100	-	-	6 n.s.
MAR*	6	-	-	11.7	1.4-22.2	76 (n=4)	61-88	83	59-96	-	-	94	84-99	3 =, 3 <
N-E*	1	-	-	4.1	-	55	-	89	-	-	-	95	-	1 =
S-E	4	3.1 (n=2)	2.3-3.8	0 (n=2)	0-0.1	58	0-100	96	92-100	90	66-100	-	-	4 n.s.
S-E	2*	-	-	12.3	10.2-14.4	-	-	93	92-93	-	-	82	76-87	1 >, 1 =
C-EU	20	3.1 (n=2)	2.3-3.8	12.8 (n=18)	0-28.3	73 (n=15)	0-100	90 (n=19)	59-100	-	-	-	-	-

1) this value (0.1125 L/ha LWA) is the low target rate (0.125 L/ha LWA) minus 10 percent.

2) this value (0.275 L/ha LWA) is the high target rate (0.25 L/ha LWA) plus 10 percent.

3) this cut off value (0.1875 L/ha LWA) is the mean value of the low (0.125 L/ha LWA) and high target rate (0.25 L/ha LWA).

\* The trials with the reference product Coragen 20 SC used application rates in L/ha LWA, for the other trials the application rates in L/ha LWA were calculated from the application rates in L/ha.

**Table 3.2-199: Control (%) of CARPPO by MCW-2222 applied at a target rate of 0.1875 L/ha LWA for Maritime and North-East EPPO zone and 0.125-0.1875 L/ha LWA for South-East EPPO zone with max. 10% deviation compared to Mospilan SG/SP and Coragen in apple regarding PESINC on (dropped or) harvested<sup>#</sup> fruits (%). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control #PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested# fruits (%)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)	
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10 %)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*			
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max		
07-08 DAA													
MAR	3	-	-	43.1	0.8-67.5	58	38-72	82	68-100	-	-	3 n.s.	
N-E*	1	-	-	15.1	-	55	-	-	-	90	-	1 <	
C-EU	4	-	-	36.1	0.8-67.5	57	38-72	-	-	-	-		
11-16 DAA													
MAR	7	-	-	45.0	0.5-73.5	75	38-100	91	52-100	-	-	7 n.s.	
N-E*	1	-	-	21.3	-	12	-	-	-	71	-	1 =	

EPPO zone	No. of trials	Untreated control #PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested# fruits (%)		% control						No. of trials where MCW- 2222 is >. <. = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10 %)		Mospilan SG/SP (0.2- 0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
S-E	2	-	-	1	0.9-1.2	88	87-88	100	100	-	-	2 n.s.
C-EU	10	-	-	33.8	0.5-73.5	71	12-100	-	-	-	-	-
20-24 DAA												
MAR	7	-	-	53.1	0.5-85.3	66	0-94	92	55-100	-	-	7 n.s.
MAR*	1	-	-	39.8	-	8	-	-	-	55	-	1=
N-E*	1	-	-	41.7	-	70	-	-	-	80	-	1 =
C-EU	9	-	-	50.3	0.5-85.3	60	0-94	-	-	-	-	-
27-30 DAA												
MAR	5	-	-	48.8	0.5-77.0	40	0-78	86	42-100	-	-	5 n.s.
MAR*	1	-	-	58.6	-	37	-	-	-	88	-	1 =
N-E*	1	-	-	20.8	-	40	-	-	-	100	-	1 =
C-EU	7	-	-	46.2	0.5-77.0	40	0-78	-	-	-	-	-

EPPO zone	No. of trials	Untreated control #PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested# fruits (%)		% control						No. of trials where MCW- 2222 is >. <. = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10 %)		Mospilan SG/SP (0.2- 0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
30-38 DAA												
MAR	7	-	-	50.4	0.3-89.0	86	60-100	96	83-100	-	-	7 n.s.
MAR*	1	-	-	51.1	-	55	-	-	-	100	-	1 =
N-E	4	-	-	7.0	2.0-20.7	88	76-94	84	77-91	-	-	4 n.s.
N-E*	1	-	-	21.3	-	100	-	-	-	100	-	1 =
C-EU	13	-	-	34.9	0.3-89.0	85	55-100	-	-	-	-	-
38-46 DAA												
MAR	5	-	-	64.9	0.8-100	56	13-100	72	25-100	-	-	5 n.s.
MAR*	1	-	-	66.8	-	11	-	-	-	45	45	1 =
N-E	1*	-	-	12.5	-	75	-	-	-	75	-	1 =
C-EU	7	-	-	57.7	0.8-100	53	11-100	-	-	-	-	-
48-54 DAA												
MAR	3	-	-	39.3	0.3-61.3	46	0-100	100	100	-	-	3 n.s.
MAR*	1	-	-	69.5	69.5	19	-	-	-	43	43	1 =
N-E*	1	-	-	16.7	-	25	-	-	-	100	-	1 =
S-E	2	-	-	11	9.9-12.0	72	70-75	96	96	-	-	2 n.s.
C-EU	7	-	-	32.3	0.3-69.5	47	0-100	-	-	-	-	-
56-108 DAA												
MAR	2	-	-	68.8	50.0-87.5	49	48-50	100	100			2 n.s.
MAR*	1	-	-	66.6	-	31	-	-	-	86	-	1 =
N-E*	1	-	-	33.3	-	100	-	-	-	100	-	1 =
C-EU	4	-	-	59.4	33.3-87.5	57	31-100	-	-	-	-	-
#20-56 DAA (harvested fruits)												
MAR	2	-	-	4.0	2.5-5.5	84	73-95	100	100	-	-	2 n.s.
MAR*	1	-	-	8.9	-	68	-	-	-	97	-	1 <
N-E*	1	-	-	6.1	-	43	-	-	-	100	-	1 =
C-EU	4			5.8	2.5-8.9	70	43-95	-	-	-	-	-



EPPO zone	No. of trials	Untreated control #PESINC acc. damaged dropped fruits (%)		Untreated control PESINC on (dropped or) harvested# fruits (%)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s) (n.s.: significance not stated)
						MCW-2222 0.125-0.1875 L/ha LWA (+/- 10 %)		Mospilan SG/SP (0.2-0.25 kg/ha)		Coragen 20 SC (0.155-0.175 kg/ha)*		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
#38 DAB -14 DAI (harvested fruits)												
MAR	7	-	-	18.8	9-28.3	83	44-97	97	88-100	-	-	7 n.s.
MAR*	4	-	-	10.7	1.4-22.2	76	61-88	-	-	94	84-98	3 =, 1 <
N-E*	1	-	-	4.1	-	55	-	-	-	95	-	1 <
S-E	4	66.2 (n=2)	53.0-79.3	0 (n=2)	0-0.1	70	50-100	90	66-100	-	-	4 n.s.
C-EU	16	66.2 (n=2)	53.0-79.3	12.7 (n=14)	0-28.3	76	44-100	-	-	-	-	-

\* The trials with the reference product Coragen 20 SC used application rates in L/ha LWA, for the other trials the application rates in L/ha LWA were calculated from the application rates in L/ha.

### 3.2.3.4 (4) European corn borer in maize

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Maize	PYRUNU	Jun-Aug BBCH 51-75	S-E	1	0.20-0.30	40-60

#### Material and methods

An overview of trials against European corn borer in maize is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-200: Overview of efficacy and dose justification trials with MCW-2222 against European corn borer in maize (7 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	Crop	Appl. timing <sup>(3)</sup>	Country	Year	Trial status
<b>South-East EPPO Zone (7 trials)</b>								
6.2/090	M+E	HU15IEZEAMX102A	PYRUNU	ZEAMX	1	HU	2015	GEP
6.2/091	M+E	HU15IEZEAMX102B	PYRUNU	ZEAMX	1	HU	2015	GEP
6.2/095	M+E	RO15IEZEAMX031A	PYRUNU	ZEAMX	1	RO	2015	GEP
6.2/096	M+E	RO15IEZEAMX031B	PYRUNU	ZEAMX	1	RO	2015	GEP
6.2/097	M+E	RO15IEZEAMX031C	PYRUNU	ZEAMX	1	RO	2015	GEP
6.2/212	M+E	RO22IEZEAMX282A	PYRUNU	ZEAMX	1	RO	2022	GEP
6.2/213	M+E	SK22IEZEAMX501A	PYRUNU	ZEAMX	1	SK	2022	GEP

(1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment

(2) Please refer to ‘Description of the target pests’ in Chapter 3.2 for an overview of the target pests

**Table 3.2-201: Summary of efficacy trials (European corn borer in maize)**

Pest	Crop	EPPO zone	Country	No. of trials			
				Year		Total	Total by zone
				2015	2022		
PYRUNU	Maize	S-E	HU	2	-	2	7
			RO	3	1	4	
			SK	-	1	1	

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-202: Details on trial methodology (beetles in maize)**

Guidelines	General guidelines	PP 1/135(4), 1/152(4), 1/181(4), 1/225(1)
	Specific guidelines	EPPO PP 1/13(3)
Experimental design	Plot design	RCB (all trials)
	Plot size	30 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per crop	Maize (11 efficacy trials 11 dose justification trials)
	Crop variety	DKC 4590, Kamparis, Cobalt, P9911, DKC5075, LUMINOX, SY Irridium
	Sowing period	April to May

Application	Crop stage (BBCH) at application	from BBCH 43-51 to BBCH 75
	Timing	June to August
	Pest stage at application	eggs - adult
	Number of applications	1 (all EFF trials); 1 (all MED trial)
Assessment	Spray volumes	350 250 - 600 L/ha
	Assessment types	- total no. of adults per 20 plants; additionally separated into no. of adults below husk, above husk, and on the husk itself per 20 plants - total no. of broken stems/ 20 plants; additionally separated into no. of broken stems below husk, above husk, and the husk itself
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 14-38 DAA, 28-82 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-203: Overview of application rates against *Ostrinia nubilalis* in maize**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
South-East (2 trials)				
Test product	MCW-2222	1	0.20 L	40 g acetamiprid
	MCW-2222	1	0.30 L	60 g acetamiprid
Reference product	Karate Zeon 050 CS	1	0.25 L	12.5 g lambda-cyhalothrin
South-East (2 trials)				
Test product	MCW-2222	1	0.20 L	40 g acetamiprid
	MCW-2222	1	0.30 L	60 g acetamiprid
Reference product	Avaunt 150 SC	1	0.25 L	37.5 g indoxacarb
South-East (2 trials)				
Test product	MCW-2222	1	0.20 L	40 g acetamiprid
	MCW-2222	1	0.30 L	60 g acetamiprid
Reference product	Coragen	1	0.125 L	25 g chlorantraniliprole

## Results

A total of 7 efficacy trials were conducted in maize and are summarised according to the according to the pest, country, EPPO zone, application rate and/or reference product. The efficacy of MCW-2222 was compared to Karate Zeon, Avaunt, and Biscaya and showed equivalent results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-204: Control (%) of PYRUNU by MCW-2222 applied at 0.20 and 0.30 L/ha (40-60 g a.i./ha) target rates for South-East EPPO zone compared to Karate Zeon, Avaunt 150 SC, and Coragen in maize. For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Infestation of untreated control		% control										No. of trials where MCW-2222 at max. rate is >, <, = compared to standard(s); n.s.: significance not stated
				MCW-2222 0.20 L/ha		MCW-2222 0.30 L/ha		Karate Zeon 0.25 L/ha		Avaunt 150 SC 0.25 L/ha		Coragen 0.125 L/ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
14-38 DAA														
S-E	2	23.3 <sup>1</sup>	19.8-26.8	72	46-97	77	56-98	86	73-99	-	-	-	-	2 n.s.
S-E	3	81.2 <sup>1</sup>	60.0-99.5	47	45-48	69	63-77	-	-	69	62	63-77	-	3 n.s.
												59-65		
S-E	2	66.6 <sup>1</sup>	14.0-119	82	77-87	91	89-93	-	-	-	-	85	83-87	2 =
mean	7	60.5 60.4 <sup>1</sup>	14.0-99.5	64	45-97	77 78	56-98	-	-	-	-	-	-	-
28-82 DAA														
S-E	2	7.2 <sup>2</sup>	3.5-10.8	79	57-100	83	67-100	77	57-97	-	-	-	-	2 n.s.
S-E	3	9.4 <sup>2</sup>	8.5-10.8	57 58	49-68	84 83	79-88	-	-	76	72-82	-	-	3 n.s.
S-E	2	9.4 9.2 <sup>2</sup>	4.3-14.0	83 82	82-84	96	91-100	-	-	-	-	82 81	76 75-87	1 =, 1 n.s.
mean	7	8.7 <sup>2</sup>	3.5-14.0	69 71	49-100	85 87	67-100	-	-	-	-	-	-	-

1) no. of larvae/ 20 plants

2) no. of broken stems/ 20 plants

## Conclusion

The data from the South-East EPPO zone demonstrated good to excellent control of *Ostrinia nubilalis* in maize after application of 0.20 and 0.30 L/ha MCW-2222. The efficacy of MCW-2222 was also equivalent to Karate Zeon, Avaunt, and Coragen. Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.5 (5) Virus vectors (aphids)

Label claim:

Crop	Pest(s)	EPPO zone	Application timing	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter cereals (wheat, spelt, barley, triticale, rye)	1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	Mar, N-E, S-E	Aug-Nov BBCH 12-29	1	0.15	30
Spring cereals (wheat, barley, triticale, oat, durum wheat)		Mar, N-E	Mar-Jun BBCH 12-29	1	0.175	35
Winter oilseed rape	Aphid vectors of Turnip Yellows Virus - MYZUPE	Mar	Aug-Nov BBCH 11-19	1	0.20	40

#### 3.2.3.5.1 (5a) Virus vectors in winter cereals (autumn application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter cereals (wheat, spelt, barley, triticale, rye)	1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	Aug-Nov BBCH 12-29	Mar, N-E, S-E	1	0.15*	30

\* 0.145 for Slovenia

### Material and methods

An overview of trials against aphids as virus vectors in winter cereals is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-205: Overview of efficacy trials with MCW-2222 conducted in winter cereals against *Sitobion avenae* and *Rhopalosiphum padi* (28 trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	parameter used for calculation <sup>(3)</sup>		Crop	Country	Year	Trial status
				no. of aphids	virus damage				
Maritime EPPO Zone (20 trials)									
6.2/344	M+E <sup>(3)</sup>	CZ20IEHORVW507A	MACSAV	-	X	w-barley	CZ	2020	GEP
6.2/356	M+E	CZ20IETRZAW507B	RHOPPA	X	-	w-wheat	CZ	2020	GEP
6.2/351	M+E	CZ21IEYCERW566A	RHOPPA	X	-	w-wheat	CZ	2020	GEP
6.2/265	M+E	CZ21IEYCERW566B	RHOPPA	X	X	w-barley	CZ	2020	GEP
6.2/144	M+E	DE13IEYCERE320H	MACSAV	X	-	w-barley	DE	2013	GEP
6.2/145	M+E	DE14IEYCERE320N	MACSAV	X	-	w-barley	DE	2014	GEP
6.2/310	M+E	DE15IENNNGW320I	MACSAV	X	-	w-barley	DE	2015	GEP
6.2/345	M+E	DE16IENNNGW311D	MACSAV	X	-	w-barley	DE	2016	GEP
6.2/346	M+E	DE16IENNNGW311F	MACSAV	X	-	w-barley	DE	2016	GEP
6.2/347	M+E	DE20IENNNGW507B	RHOPPA	X	X	w-barley	DE	2020	GEP
6.2/338	M+E	DE21IEYCERW566A	RHOPPA	X	X	w-barley	DE	2021	GEP
6.2/339	M+E <sup>(3)</sup>	DE21IEYCERW566B	RHOPPA	-	X	w-barley	DE	2021	GEP
6.2/348	M+E <sup>(3)</sup>	FR14IEYCERE111A	RHOPPA	-	X	w-barley	FR	2014	GEP
6.2/340	M+E <sup>(3)</sup>	NL21IEHORVW034A	MACSAV	-	X	w-barley	NL	2021	GEP
6.2/311	M+E	UK15IEYCERW240A	MACSAV	X	-	w-barley	UK	2015	GEP
6.2/312	M+E <sup>(3)</sup>	UK15IEYCERW240D	RHOPPA	-	X	w-barley	UK	2015	GEP
6.2/313	M+E <sup>(3)</sup>	UK15IEYCERW240F	RHOPPA	-	X	w-wheat	UK	2015	GEP

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Pest(s) <sup>(2)</sup>	parameter used for calculation <sup>(3)</sup>		Crop	Country	Year	Trial status
				no. of aphids	virus damage				
6.2/314	M+E <sup>(3)</sup>	UK15IEYCERW240G	RHOPPA	-	X	w-oat	UK	2015	GEP
6.2/259 359	M+E <sup>(3)</sup>	UK16IETRZAW269C	RHOPPA	-	X	w-wheat	UK	2016	GEP
6.2/349	M+E <sup>(3)</sup>	UK20IEHORVW209A	RHOPPA	-	X	w-barley	UK	2020	GEP
<b>North-East EPPO Zone (8 trials)</b>									
6.2/350	M+E	LT20IEYCERW559B	RHOPPA	X	-	w-barley	LT	2020	GEP
6.2/352	M+E	LT21IEYCERW408B	RHOPPA	X	-	w-barley wheat	LT	2021	GEP
6.2/341	M+E	LT21IEYCERW408C	RHOPPA	X	-	w-barley	LT	2021	GEP
6.2/353	M+E	LV21IEYCERW471A	RHOPPA	X	-	w-wheat	LV	2021	GEP
6.2/342	M+E	PL21IEHORVW277A	RHOPPA	X	-	w-barley	PL	2021	GEP
6.2/343	M+E	PL21IEHORVW277B	RHOPPA	X	-	w-barley	PL	2021	GEP
6.2/354	M+E	PL21IETRZAW278A	RHOPPA	X	-	w-wheat	PL	2021	GEP
6.2/355	M+E	PL21IETRZAW278B	RHOPPA	X	-	w-wheat	PL	2021	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with selectivity assessment, Y = trial with yield and/or quality assessment.  
(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests.  
(3) Trials with insufficient infestation were excluded from mean calculation for PESSEV (i.e. no. of wingless, winged, or total aphids) but virus symptoms in spring were used as parameter for efficacy calculation.

**Table 3.2-206: Summary of efficacy trials (aphids as virus vectors in winter cereals)**

Table 5.12-206. Summary of efficacy trials (aphids as virus vectors in winter cereals)													
Pest	Winter cereal	EPPO zone	Country	No. of trials								Total by zone	Total by pest
				Year						Total			
				2013	2014	2015	2016	2020	2021				
RHOPPA	Winter wheat	MAR	CZ UK	-	-	- 1	- 1	1 -	1 -	2 2	4	20	
		N-E	LV PL LT					1 2 1	1 2 1	4			
	Winter barley	MAR	CZ DE FR UK		1	1		1 2 1	1 4 1	7			
		N-E	PL LT					1 2 1	2 3 2	4			
	Winter oat	MAR	UK	-	-	1	-	-	-	1	1		
	MACSAV	Winter barley	MAR	CZ					1		1		8
DE				1	1	1	2			5			
NL									1	1			
UK						1				1			
			Total	1	2	5	3	6	12	28	-		

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-207: Details on trial methodology (aphids in winter cereals, autumn application)**

Guidelines	General guidelines	EPPO PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(1/2), 1/214(4)
	Specific guidelines	EPPO PP 1/20(3), 1/70(4)
Experimental design	Plot design	RCBD (all trials)
	Plot size	14.8-30 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per crop	Winter wheat (7 8 trials)
		Winter barley (20 19 trials)

		Winter oat (1 trial)
	Varieties per crop	Winter wheat: Annie, <del>Mascani</del> , Ostroga, Reform, JB Diego (2x), Julie, Informer, Skagen Winter barley: Sandra (2x), Quadriga, Fredericus (2x), Flemming, California (2x) Meridian (2x), Informer, Skagen, Julie, KWS Cassia, Kosmos, Titus, <del>Ostroga, Reform</del> , Annisette, Lomerit; Tower, KWS Orwell, KWS Tenor, Salamandre Winter oat: Mascani
	Sowing period	Winter wheat: from September to October Winter barley: September to October Winter oat: September
Application	Crop stage (BBCH) at application	Winter wheat: from BBCH 11 to BBCH 21 Winter barley: from BBCH 12 to BBCH 23 Winter oat: BBCH <del>12</del> 13
	Timing	October to November
	Pest stage at application	Mixed growth stages of aphids (nymph, adult, alate and apterous aphids)
	Number of applications	1 (all trials)
Assessment	Spray volumes	100 - 313 L/ha
	Assessment types	- number of aphids per plant based on 50 plants - number of wingless or winged aphids per plant based on 50 plants - virus damage PESSEV (foci area %) or stunting (%)
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	control of aphids: usually 1-3 DAA, 6-10 DAA, 10-14 DAA, 21 DAA virus damages: usually 21-54 DAA, 154-174 DAA, 166-217 DAA, 201-231 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-208: Overview of application rates against aphids in winter cereals, autumn application**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (10 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
Reference products	Karate Zeon	1	0.075 kg	7.5 g lambda-cyhalothrin
	Hallmark Zeon	1	0.05 kg	5 g lambda-cyhalothrin
Maritime (10 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
Reference product	Mavrik	1	0.2	48 g tau-fluvalinate
North-East (4 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
Reference product	Mavrik	1	0.2	48 g tau-fluvalinate
North-East (4 trials)				
Test product	MCW-2222	1	0.15 L	30 g acetamiprid
Reference product	Karate Zeon	1	0.075 kg	7.5 g lambda-cyhalothrin

## Results

A total of 28 efficacy trials were conducted in winter cereals and are summarised according to the pest, country, EPPO zone, application rate and/or reference product. Virus symptoms were observed in 12 out of the 28 trials listed above. In trials with too low aphid infestation levels but observed virus symptoms in spring, only the efficacy data regarding virus damage were used as parameter for calculation. The efficacy of MCW-2222 was compared to Karate/ Hallmark Zeon and Mavrik and showed equivalent results in comparison to the reference products. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-209: Control (%) of RHOPPA as virus vector by MCW-2222 applied at 0.15 L/ha (30 g a.i./ ha) compared to Karate Zeon/ 5 CS (7.5 g a.i./ha) for Maritime and North-East EPPO zone in winter cereals (autumn application) regarding PESSEV (no. of wingless aphids per plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control PESSEV (no. of wing- less aphids/ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to stand- ard(s); n.s.: significance not stated
				MCW-2222 0.15 L/ha		Karate Zeon/ 5 CS 0.075-0.15 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
1-3 DAA								
MAR (HORVW)	3	5.8 5.4	0.7-12.0 1.1-10.2	89 83	66-98 93	83	67-92	1 >, 2 =, 2 1 n.s.
MAR (TRZAW)	2	6.4	0.7-12.0	98	98-98	84	81-86	1 >, 1 n.s.
N-E (HORVW)	2	1.5 1.4	1.2-2.1 1.42-1.43	70 67	56-87 77	85 89	71 86-92	1 >, 2 1 <, 1 n.s.
N-E (TRZAW)	2	1.6	1.2-2.09	74	61-87	81	71-91	1 =, 1 <
C-EU	9	3.9	0.7-12.0	81	56-98	84	67-92	1 >, 3 =, 2 <, 3 n.s.
7-11 DAA								
MAR (HORVW)	3	6.5 7.5	0.2 1.2-17.0	89 92	83 88-94	77 95	40 91-98	1 >, 2 =, 2 1 n.s.
MAR (TRZAW)	2	4.9	0.2-9.5	85	83-86	50	40-60	1 >, 1 n.s.
N-E (HORVW)	2	1.8	1.4-2.4 2.1	83 82	68-96	92 98	84 95-100	2 =, 1 <, 1 n.s.
N-E (TRZAW)	2	1.9	1.4-2.4	85	83-86	87	84-89	2 =
C-EU	9	4.4	0.2-17.0	86	68-96	84	40-100	1 >, 4 =, 1 <, 3 n.s.

**Table 3.2-210: Control (%) of RHOPPA as virus vector by MCW-2222 applied at 0.15 L/ha (30 g a.i./ ha) compared to Karate Zeon/ 5 CS (7.5 g a.i./ha) for Maritime and North-East EPPO zone in winter cereals (autumn application) regarding PESSEV (no. of winged aphids per plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control PESSEV (no. of winged aphids/ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to stand- ard(s); n.s.: significance not stated
				MCW-2222 0.15 L/ha		Karate Zeon/ 5 CS 0.075 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
1-3 DAA								
MAR (HORVW)	2	1.7 1.6	0.3-3.3 0.4-2.7	85 70	56-100 84	79 76	70-94 81	3 2 =, 1 n.s.
MAR (TRZAW)	2	1.8	0.3-3.3	100	100-100	84	76-91	1 =, 1 n.s.



N-E (HORVW)	4 2	0.5 0.4	0.3-0.8 0.4	70 71	56-86	81 85	65-88 83-87	1 =, 2 1 <, 1 n.s.
N-E (TRZAW)	2	0.8	0.7-0.8	70	60-79	77	65-88	1 =, 1 <
C-EU	8	1.1	0.3-3.3	78	56-100	80	65-91	4 =, 2 <, 2 n.s.
<b>6-10 DAA</b>								
MAR (HORVW)	4 2	1.6 2.1	0.1 0.3-3.8	82 80	76-85 84	57 78	20 59-97	2 1 =, 2 1 n.s.
MAR (TRZAW)	2	1.1	0.1-2.0	84	82-85	35	20-50	1 =, 1 n.s.
N-E (HORVW)	4 2	0.6 0.4	0.3-0.9 0.4	76	66-85	89 92	87 88-95	2 1 =, 1 <, 1 n.s.
N-E (TRZAW)	2	0.8	0.7-0.9	78	76-79	87	87-87	1 =, 1 <
C-EU	8	1.1	0.1-3.8	79	66-85	73	20-97	4 =, 1 <, 3 n.s.

**Table 3.2-211: Control (%) of MACSAV and RHOPPA as virus vectors by MCW-2222 applied at 0.15 L/ha (30 g a.i./ ha) compared to Karate/ Hallmark Zeon (5-7.5 g a.i./ha) and Mavrik (48 g a.i./ha) for Maritime and North-East EPPO zone in winter cereals (autumn application) regarding PESSEV (no. of aphids per plant (winged and wingless)). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	Pest	No. of trials	Untreated control PESSEV (no. of aphids/ plant)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
					MCW-2222 0.15 L/ha		Mavrik 0.2 L/ha		Karate/ Hallmark Zeon (0.05-0.075 kg/ha)		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
1-3 DAA											
MAR (HORVW)	RHOPPA	1	2.4	-	40	-	53 73	-	-	-	1 =
	MACSAV	2	0.4	0.3-0.6	99	98-100	96 97	95-98	-	-	1 =, 1 n.s.
	MACSAV	5	4.8	0.7-16.3	78 81	48-95	-	-	87	68-59-100	1 =, 2<, 2 n.s.
N-E (HORVW)	RHOPPA	4 2	0.24 0.13	0.1-0.4 0.16	54 55.5	39-66 52-59	97 100	90-100 100-100	-	-	2 =, 2<
N-E (TRZAW)	RHOPPA	2	0.35	0.3-0.4	52.5	39-66	95	90-100	-	-	2 <
C-EU	all aphids	12	2.4	0.1-16.3	72	39-100	-	-	-	-	.
3-10 7-11 DAA											
MAR (HORVW)	RHOPPA	1	0.9	-	91	-	97 83	-	-	-	1 n.s.
	MACSAV	2	0.4	0.2-0.5	100	-	100	-	-	-	1 =, 1 n.s.
	MACSAV	4	3.2	0.7-5.6	85 88	59-100	-	-	97	54-94-100	1 >, 1 =, 1<, 1 n.s.
N-E (HORVW)	RHOPPA	4 2	0.44 0.09	0.1-1.5 0.07-0.11	82 71.5	66-100 77	99 98.5	97-100	-	-	3 1 =, 1 n.s.
N-E (TRZAW)	RHOPPA	2	0.8	0.1-1.5	93	86-100	100	100-100	-	-	2 =
C-EU	all aphids	11	1.5	0.1-5.6	89	59-100	-	-	-	-	
7 13-15 DAA											
MAR	MACSAV	2	0.3 0.4	0.2-0.5	100	100	100	100	-	-	1 =, 1 n.s.

EPPO zone	Pest	No. of trials	Untreated control PESSEV (no. of aphids/ plant)		% control						No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
					MCW-2222 0.15 L/ha		Mavrik 0.2 L/ha		Karate/ Hallmark Zeon (0.05-0.075 kg/ha)		
			mean	min-max	mean	min-max	mean	min-max	mean	min-max	
(HORVW)	MACSAV	5 4	5.1 5.5	1.1-9.5	91	81-100	-	-	94 93	82 76-100	2 =, 1 <, 2 n.s.
N-E (HORVW)	RHOPPA	3 1	1.3 3.9	0.04-3.9	64 75	50-74	83 100	50-100	-	-	2 =, 1 n.s.
N-E (TRZAW)	RHOPPA	2	0.07	0.04-0.1	58	50-66	75	50-100	-	-	2 =
C-EU	all aphids	10 9	3.0	0.04-9.5	85 84	50-100	-	-	-	-	

**Table 3.2-212: Control (%) of virus symptoms by MCW-2222 applied at 0.15 L/ha (30 g a.i./ ha) compared to Karate/ Hallmark Zeon (5-7.5 g a.i./ha) for Maritime EPPO zone in winter cereals (autumn application) regarding the virus severity (foci area (%)). For single trial data please refer to Appendix 4 of the BAD.**

Refer to Appendix 4 of the BAD.								
Pest in MAR EPPO zone	No. of trials	Untreated control PESSEV foci area (%)		% control				No. of trials where MCW-2222 is >, <, = compared to stand- ard(s); n.s.: significance not stated
				MCW-2222 0.15 L/ha		Karate/ Hallmark Zeon 0.05-0.075 kg/ha		
		mean	min-max	mean	min-max	mean	min-max	
21-54 DAA								
MACSAV	1	42	-	57	-	73	-	1 n.s.
RHOPPA	4	18.7	4.0-57.5	75	37-100	71	17-100	1 =, 3 n.s.
all aphids (HORVW)	5	23.3	4.0-57.5	72	37-100	71	17-100	1 =, 4 n.s.
154-174 DAA								
RHOPPA (HORVW)	6	10.5 11.3	1.3-19.6	69 73	38-97	74	23-100	1 =, 5 3 n.s.
RHOPPA (TRZAW)	1	7.3	-	69	-	93	-	1 n.s.
RHOPPA (AVESW)	1	10.8	-	55	-	59	-	1 n.s.
166-217 DAA								
MACSAV (HORVW)	1	31.3 6.0	-	68 100	-	85 100	-	1 n.s.
RHOPPA (HORVW)	8	13.3 22.2	2.5 4.0- 46.3	69 65	41-100 77	81 82	59-100 60-95	1 =, 7 4 n.s.
RHOPPA (TRZAW)	2	5.2	2.5-7.8	71	70-71	85	75-94	2 n.s.
RHOPPA (AVESW)	1	10.8	-	55	-	59	-	1 n.s.
all aphids	9	15.3	2.5-46.3	69	41-100	82	59-100	1 =, 8 n.s.

**Table 3.2-213: Control (%) of virus symptoms due to infestation with MACSAV and RHOPPA by MCW-2222 applied at 0.15 L/ha (30 g a.i./ha) compared to Karate/ Hallmark Zeon (5-7.5 g a.i./ha) for Maritime EPPO zone in winter cereals (autumn application) regarding the virus symptom stunting (%). For single trial data please refer to Appendix 4 of the BAD.**

Pest in MAR EPPO zone	No. of trials	Untreated control stunting (%)	% control		No. of trials where MCW-2222 is >, <, = compared
			MCW-2222 0.15 L/ha	Karate/ Hallmark Zeon 0.05-0.075 kg/ha	

		mean	min-max	mean	min-max	mean	min-max	to standard(s); n.s.: significance not stated
<b>154-174 DAA</b>								
RHOPPA (HORVW)	<del>5-3</del>	<del>13.5</del> 16.6	1.3-28.8 29	<del>47</del> 59	<del>23-66</del> 15-91	<del>60</del> 61	<del>15-91</del> 0-100	1 =, 4 2 n.s.
RHOPPA (TRZAW)	1	7.3	-	69	-	93	-	1 n.s.
RHOPPA (AVESW)	1	10.8	-	55	-	59	-	1 n.s.
<b>166-217 DAA</b>								
<del>MACSAV</del>	<del>1</del>	<del>10.5</del>	-	<del>90</del>	-	<del>95</del>	-	<del>1 n.s.</del>
RHOPPA (HORVW)	<del>7</del> 5	<del>13.7</del> 17.2	2.5-46.3	<del>66</del> 71	41-100	<del>81</del> 86	59-100	1 =, 6 4 n.s.
RHOPPA (TRZAW)	2	5.2	2.5-7.8	71	70-71	85	75-94	2 n.s.
RHOPPA (AVESW)	1	10.8	-	55	-	59	-	1 n.s.
all aphids	8	<del>13.3</del>	<del>2.5-46.3</del>	<del>69</del>	<del>41-100</del>	<del>82</del>	<del>59-100</del>	<del>1 =, 7 n.s.</del>

## Conclusion

The data from the Maritime and North-East EPPO zone demonstrated good to excellent aphid control in winter cereals from MCW-2222 applied at the target dose of 0.15 L/ha in autumn. The efficacy of MCW-2222 was also equivalent to the efficacy of the reference standards Mavrik and Karate Zeon/ 5 CS/ Hallmark Zeon. Further, MCW-2222 demonstrated good control of virus damages on an equivalent level as Karate/ Hallmark Zeon. The only country in the South-East EPPO zone for which a GAP on virus vectors in winter cereals is foreseen is Slovenia. For Slovenia, data from the maritime zone is considered sufficient. Please refer to chapter 3.2 'Efficacy data', subchapter 'General information about trial grouping' for an argumentation on the usability of efficacy data from different EPPO zones.

Since a sufficient number of trials was carried out in the major crops winter wheat and winter barley as well as one trial in winter oat, extrapolation is envisaged to ~~winter durum wheat~~, spelt, winter triticale and winter rye with similar growth characteristics and pests.

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.5.2 (5b) Virus vectors in spring cereals (spring application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Spring cereals (wheat, durum wheat, barley, triticale, oat)	1APHIF, e.g., RHOPPA, MACSAV (BYDV, WYLV)	Mar-Jun BBCH <del>42</del> 20-29	Mar, N-E	1	0.175	35

An overview of trials against aphids in spring cereals (spring application) is presented in subchapter (1d) 'Aphids in spring cereals (spring application)'. Due to the relevance for both GAP uses all trials were evaluated under the subchapter above.

The data of 7 efficacy trials conducted in spring cereals in the Maritime and North-East EPPO climatic zone demonstrated excellent control of MCW-2222 against *Sitobion avenae* and *Rhopalosiphum padi*. The efficacy of MCW-2222 was also equivalent to Mospilan 20 SG. For details on the control of these

aphids in spring cereals please refer to Table 3.2-129 and Table 3.2-130 in chapter 3.2.3, subchapter (1d) above.

For a more extensive database please refer to chapter 3.2.3, subchapter (1c) ‘Aphids in winter cereals (spring application)’ above, since similar growth characteristics, application timings and target pests enable to extrapolate from winter to spring cereals. The data from all three EPPO zones demonstrated excellent control of *Sitobion avenae*, *Rhopalosiphum padi* and *Metopolophium dirhodum* in winter cereals by MCW-2222 applied at the target dose of 0.18 L/ha in spring. The efficacy of MCW-2222 was also equivalent or superior to the efficacy of Mospilan 20 SG and equivalent to Karate Zeon. For details on the control of these aphids in winter cereals please refer to Table 3.2-122, Table 3.2-123 and Table 3.2-124 in chapter 3.2.3, subchapter (1c) above.

A summary of efficacy data for *Sitobion avenae* (which was assessed in the majority of the trials) in winter and spring cereals is presented in the following table. Extrapolation from the major pest *Sitobion avenae* to *Metopolophium dirhodum* and *Rhopalosiphum padi* is common<sup>7</sup>. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-214: Summary table. Control (%) of aphids (MACSAV) by MCW-2222 compared to reference products in winter and spring cereals, spring application**

Aphid	Crop	EPPO zones	No. of trials	% control					
				MCW-2222 0.175-0.18 L/ha		Mospilan 20 SG 0.15 kg/ha <sup>(1)</sup>		Karate Zeon 0.0625 L/ha	
				mean	min-max	mean	min-max	mean	min-max
			1-2 DAA						
MACSAV	Cereals	MAR, N-E, S-E	9	83	60-100	79	49-100	-	-
			2-3 DAA						
MACSAV	Cereals	MAR, N-E, S-E	24	87 (n=24)	60-100	82 (n=23)	53-100	94 (n=1)	-
			6-10 DAA						
MACSAV	Cereals	MAR, N-E, S-E	30	94 (n=30)	76-100	90 (n=29)	66-100	100 (n=1)	-
			10-14 DAA						
MACSAV	Cereals	MAR, N-E, S-E	8	85 (n=8)	48-100	82 (n=7)	55-100	99 (n=1)	-

(1) Reference standard slightly different in one trial (Report no. CZ20IETRZAW508B) but considered comparable: 0.18 kg/ha Mospilan 20 SP instead of 0.15 kg/ha Mospilan 20 SG

Thus, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data. The proposed label rate of MCW-2222 is considered to be appropriate for the control of aphids in terms of virus vectors in spring cereals.

<sup>7</sup> Board for the Authorisation of Plant Protection Products and Biocides, The Netherlands (2014) Chapter 8 efficacy: Appendix E: Extrapolation possibilities

### 3.2.3.5.3 (5c) Virus vectors in winter oilseed rape (autumn application)

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter oilseed rape	Aphid vectors of Turnip Yellows Virus - MYZUPE	Aug-Nov BBCH 11-19	Mar	1	0.2	40

#### Material and methods

An overview of trials against aphid vectors (i.e., *Myzus persicae*) of Turnip Yellows Virus in winter oilseed rape is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-215: Overview of efficacy trials with MCW-2222 conducted in winter oilseed rape against *Myzus persicae* (12 trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (12 trials)</b>							
6.2/364	M+E	CZ21IEBRSNW568A	w-osr	MYZUPE	CZ	2021	GEP
6.2/365	M+E	CZ21IEBRSNW568B	w-osr	MYZUPE	CZ	2021	GEP
6.2/385	M+E	DE21IEBRSNW568B	w-osr	MYZUPE	DE	2021	GEP
6.2/205	E	E-1277	w-osr	MYZUPE	FR	2012	GEP
6.2/206	E	E-1278	w-osr	MYZUPE	FR	2012	GEP
6.2/207	E	FR13IEBRNN302C	w-osr	MYZUPE	FR	2013	GEP
6.2/208	E	FR14IEBRNN105A	w-osr	MYZUPE	FR	2014	GEP
6.2/209	E	FR14IEBRNN105B	w-osr	MYZUPE	FR	2014	GEP
6.2/210	E	FR14IEBRNN105C	w-osr	MYZUPE	FR	2014	GEP
6.2/211	E	FR14IEBRNN105D	w-osr	MYZUPE	FR	2014	GEP
6.2/483	M+E	UK20IEBRSNW207A	w-osr	MYZUPE	UK	2020	GEP
6.2/484	M+E	UK20IEBRSNW207B	w-osr	MYZUPE	UK	2020	GEP

(1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with selectivity assessment

(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

**Table 3.2-216: Summary of efficacy trials (aphids as virus vectors in winter oilseed rape, autumn application)**

Pest	EPPO zone	Country	No. of trials					
			Year					Total
			2012	2013	2014	2020	2021	
MYZUPE	MAR	CZ	-	-	-	-	2	
		DE	-	-	-	-	1	
		FR	2	1	4	-	-	
		UK	-	-	-	2	-	
		Total	2	1	4	2	3	12

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-217: Details on trial methodology (aphids as virus vector in oilseed rape)**

Guidelines	General guidelines	EPPO PP 1/135(3), 1/152(4), 1/181(4), CEB 191
	Specific guidelines	n.s.
Experimental design	Plot design	RCB (all trials)
	Plot size	16 – <del>20</del> 30 m <sup>2</sup>
	Number of replications	4 (all trials)
Crop	Trials per crop	12 efficacy trials, 5 trials including dose justification data
	Crop variety	Mambo, Rescator, DK Exstorm, DK Exquisite, DK2727, Cash, Temptation, IVO KWS, Aspire, DK Expansion
	Sowing period	August to September
Application	Crop stage (BBCH) at application	from BBCH 11 to BBCH <del>16</del> 19
	Timing	September to October
	Pest stage at application	larvae or adult
	Number of applications	1
Assessment	Spray volumes	200 – 312.5 L/ha
	Assessment types	- number of larvae or adults per plant
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
	Assessment dates	usually 2-3 DAA, 6-7 DAA, 13-14 DAA, 21 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-218: Overview of application rates against *Myzus persicae* in oilseed rape**

Product		No. of appl.	Rate per treatment	
			product/ha	active ingredient/ha
Maritime (12 trials)				
Test product	MCW-2222	1	0.2 L	40 g acetamiprid
Reference product	Mavrik Flo	1	0.2 L	48 g tau-fluvalinate

## Results

A total of 12 efficacy trials were conducted in winter oilseed rape at the same rate and are summarised according to EPPO zone. In 1 out of the 12 trials virus symptoms were observed but very slight and therefore not usable for efficacy calculation. The efficacy of MCW-2222 was compared to Mavrik Flo and showed superior results in comparison to the reference product. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-219: Control (%) of MYZUPE by MCW-2222 applied at 0.2 L/ha (40 g a.i./ha) compared to Mavrik Flo (48 g a.i./ha) for Maritime zone in oilseed rape regarding PESSEV (no. of aphids / plant). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (no. of aphids/ plant)		% control				No. of trials where MCW-2222 is >, <, = compared to stand-ard(s); n.s.: significance not stated
				MCW-2222 0.2 L/ha		Mavrik Flo 0.2 L/ha		
		mean	min-max	mean	min-max	mean	min-max	
2-3 DAA								
MAR	12	48.4	0.5-253	85	38-100	46	0-98	8 >, 4 =
6-7 DAA								
MAR	12	68.3	1.0-278	93	56-100	52	0-100	10 >, 2 =
13-14 DAA								
MAR	12	66.4	1.2-278	91	56-100	54	0-100	9 >, 3 =
21 DAA								
MAR	7	50.1	0.1-278	86	56-100	49	12-100	3 >, 4 =

## Conclusion

MCW-2222 applied at the target dose of 0.2 L/ha showed excellent control of *Myzus persicae* on oilseed rape. Control levels of MCW-2222 against *M. persicae* were superior compared to Mavrik Flo.

In conclusion, the GAP use as summarised above and stated in Part B, Section 0 was proven by the data.

### 3.2.3.6 (6) Brassica pod midge

Label claim:

Crop	Pest(s)	Application timing	EPPO zone	No. of appl. and interval (days)	Dose rate (per appl.)	
					L product /ha	g ai/ha
Winter oilseed rape	DASYBR	Mar-Jun BBCH 31-71	Mar, N-E	1-2 (7)	0.30	60
		May-Jun BBCH 61-71	S-E	1-2 (7)	0.18-0.30	36-60
Spring oilseed rape	DASYBR	May-Jun BBCH 61-71	Mar, N-E	1-2 (7)	0.30	60
			S-E	1-2 (7)	0.18-0.30	36-60

## Material and methods

An overview of trials against brassica pod midge is presented in the following, for detailed information please refer to Appendix 2. Additionally, the trial locations are marked on the corresponding maps in Appendix 3.

**Table 3.2-220: Overview of efficacy and dose justification trials with MCW-2222 against Brassica pod midge in oilseed rape (25 efficacy trials)**

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
<b>Maritime EPPO Zone (7 trials)</b>							
6.2/186	M+E+Y	CZ14IEBRSNW007A	w-osr	CEUTAS, DASYBR	CZ	2014	GEP
6.2/187	M+E	CZ14IEBRSNW007B	w-osr	CEUTAS, DASYBR	CZ	2014	GEP
6.2/192	M+E	CZ15IEBRSNW001G	w-osr	CEUTAS, DASYBR	CZ	2015	GEP
6.2/193	M+E	CZ15IEBRSNW001H	w-osr	CEUTAS, DASYBR	CZ	2015	GEP
6.2/194	M+E	CZ15IEBRSNW001I	w-osr	CEUTAS, DASYBR	CZ	2015	GEP

Ref. no.	Trial type <sup>(1)</sup>	Report no.	Crop	Pest(s) <sup>(2)</sup>	Country	Year	Trial status
6.2/199	M+E	DE14IEBRSNW320H	w-osr	DASYBR	DE	2014	GEP
6.2/414	M+E	SE20IEBRSNW258A	w-osr	DASYBR	SE	2020	GEP
<b>North-East EPPO Zone (9 trials)</b>							
6.2/424	M+E	LV20IEBRSNW527A_2	w-osr	DASYBR	LV	2020	GEP
6.2/425	M+E	LV20IEBRSNW527B	w-osr	DASYBR	LV	2020	GEP
6.2/238	M+E	PL14IEBRSNW303A	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/239	M+E	PL14IEBRSNW303B	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/240	M+E	PL14IEBRSNW303C	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/241	M+E	PL14IEBRSNW303D	w-osr	CEUTAS, DASYBR	PL	2014	GEP
6.2/251	M+E	PL15IEBRSNW303B	w-osr	CEUTAS, DASYBR	PL	2015	GEP
6.2/252	M+E	PL15IEBRSNW304A	w-osr	CEUTAS, DASYBR	PL	2015	GEP
6.2/253	M+E	PL15IEBRSNW304B	w-osr	CEUTAS, DASYBR	PL	2015	GEP
<b>South-East EPPO Zone (9 trials)</b>							
6.2/287	M+E	HU15IEBRSNW103A	w-osr	DASYBR	HU	2015	GEP
6.2/288	M+E	HU15IEBRSNW103B	w-osr	MELIAE, DASYBR	HU	2015	GEP
6.2/289	M+E	HU15IEBRSNW103C	w-osr	MELIAE, DASYBR	HU	2015	GEP
6.2/290	M+E	HU15IEBRSNW103D	w-osr	DASYBR	HU	2015	GEP
6.2/294	M+E	HU15IEBRSNW104D	w-osr	CEUTAS, MELIAE, DASYBR	HU	2015	GEP
6.2/456	M+E	SK14IEBRSNW003A	w-osr	DASYBR	SK	2014	GEP
6.2/457	M+E	SK14IEBRSNW003B	w-osr	DASYBR	SK	2014	GEP
<del>6.2/303</del>							
6.2/462	M+E	SK15IEBRSNW001J	w-osr	DASYBR	SK	2015	GEP
6.2/308	M+E	SK15IEBRSNW001D	w-osr	CEUTAS, DASYBR	SK	2015	GEP

- (1) M = efficacy trial with minimum effective dose determination, E = efficacy trial with target rate compared to reference product, E\* = supportive efficacy trials without target rate, Y = trial with yield and/or quality assessment  
(2) Please refer to 'Description of the target pests' in Chapter 3.2 for an overview of the target pests

**Table 3.2-221: Summary of efficacy trials (Brassica pod midge in oilseed rape)**

Pest	Crop	EPPO zone	Country	No. of trials					
				Year			Total	Total by zone	Total by pest
				2014	2015	2020			
DASYBR	Winter oilseed rape	MAR	CZ	2	3	-	5	7	25
			DE	1	-	-	1		
			SE	-	-	1	1		
		N-E	PL	4	3	-	7	9	
			LV	-	-	2	2		
		S-E	HU	-	5	-	5	9	
			SK	2	2	-	4		

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.2-222: Details on trial methodology (*Dasineura brassicae* in winter oilseed rape)**

<b>Guidelines</b>	General guidelines	PP 1/135(3/4), 1/152(3/4), 1/181(3/4), 1/225(2)
	Specific guidelines	EPPO 1/219(1), 1/220(1) referred to in all reports, yet not listed here
<b>Experimental design</b>	Plot design	RCBD
	Plot size	Winter oilseed rape: <del>25-60</del> 21-60
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter oilseed rape (25)
	Varieties per crop	ONTARIO, Kodiak, <del>MANITOBA</del> , Cantate, D-03, DK EXSTORM, Remy, GK Gabriella, Sherpa, KWS 'Adelneo', Avatar F1, Quartz, Rohan, SY Alister, Californium, Allesio F1, SY Alister, Monolit, Holl V3160L, Avatar, Da Vinci, PR45DO3, Rescator, PR045D03, <del>Da Vinci</del>
	Sowing period	Winter oilseed rape: from August to September



<b>Application</b>	Crop stage (BBCH) at application	from BBCH 51 to BBCH <del>74</del> 75
	Timing	April to June
	Pest stage at application	larvae- adult
	Number of applications Intervals between applications	1 (all trials)
<b>Assessment</b>	Spray volumes	200 - 400 L/ha
	Pre-treatment	- No. of insects per plant or shoot - damaged pods per 25 shoots - all larvae (No. per 100 pods)
	Assessment types	- No. of insects per plant, shoot or pod - damaged pods per 25 shoots - all larvae (no. per plant, shoot or pod)
	Efficacy calculation	Efficacy calculation according to Henderson-Tilton: $= (1 - \frac{\text{control}_{\text{before treatment}} * \text{treatment}_{\text{after treatment}}}{\text{control}_{\text{after treatment}} * \text{treatment}_{\text{before treatment}}}) * 100$ Efficacy calculation according to Abbott: $= (1 - \frac{\text{incidence}_{\text{treatment}}}{\text{incidence}_{\text{control}}}) * 100$
Assessment dates		usually 2-6 DAA, 10-18 DAA, 7-15 DAA, 20-30 DAA

The test product MCW-2222 was applied according to the proposed GAP uses and compared to registered reference products. Please refer to the following tables for details on the tested rates. Detailed information about all reference products is presented in chapter 3.2 under ‘Information on the reference products’.

**Table 3.2-223: Overview of application rates against *Dasineura brassicae* in oilseed rape**

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
Maritime (6 trials)					
Test product	MCW-2222	1	0.15 L	35 g	acetamiprid
	MCW-2222	1	0.20 L	40 g	acetamiprid
	MCW-2222	1	0.25 L	50 g	acetamiprid
	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon	1	0.075 L	7.5 g	lambda-cyhalothrin
	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
Maritime (1 trial)					
Test product	MCW-2222	1	0.12 L	24 g	acetamiprid
	MCW-2222	1	0.15 L	30 g	acetamiprid
	MCW-2222	1	0.20 L	40 g	acetamiprid
	MCW-2222	1	0.25 L	50 g	acetamiprid
	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Mavrik	1	0.20 L	48 g	tau-fluvalinate
North-East (7 trials)					
Test product	MCW-2222	1	0.15 L	35 g	acetamiprid
	MCW-2222	1	0.20 L	40 g	acetamiprid
	MCW-2222	1	0.25 L	50 g	acetamiprid
	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin
North-East (2 trials)					
Test product	MCW-2222	1	0.12 L	24 g	acetamiprid
	MCW-2222	1	0.15 L	30 g	acetamiprid
	MCW-2222	1	0.20 L	40 g	acetamiprid
	MCW-2222	1	0.25 L	50 g	acetamiprid
	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Mavrik	1	0.20 L	48 g	tau-fluvalinate

Product		No. of appl.	Rate per treatment		
			product/ha	active ingredient/ha	
South-East (9 trials)					
Test product	MCW-2222	1	0.15 L	35 g	acetamiprid
	MCW-2222	1	0.20 L	40 g	acetamiprid
	MCW-2222	1	0.25 L	50 g	acetamiprid
	MCW-2222	1	0.30 L	60 g	acetamiprid
Reference product	Karate Zeon 050 CS	1	0.15 L	7.5 g	lambda-cyhalothrin

## Results

The effectiveness of MCW-2222 against brassica pod midge was tested in 25 efficacy trials in oilseed rape conducted in the years 2014, 2015, and 2020 in Czech Republic, Germany, Sweden, Latvia, Poland, Slovakia, and Hungary. Results are provided in the following tables. For detailed results please refer to Appendix 4 of the BAD.

**Table 3.2-224: Control (%) of DASYBR by MCW-2222 applied at 0.3 L/ha (60 g a.i./ha) compared to Karate Zeon 050 or 100 CS for all zones in oilseed rape regarding PESSEV (no. of larvae or insects/ plant, shoot or pod). Total 19 trials (5 MAR, 7 N-E, 7 S-E). For single trial data please refer to Appendix 4 of the BAD.**

Please Refer to Appendix 4 of the DAA.										
EPPO zone	No. of trials	Untreated control (no. of larvae/ plant or pod)		Untreated control (no. of insects/ plant or shoot)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
		mean	min-max	mean	min-max	MCW-2222 0.30 L/ha		Karate Zeon 050 or 100 CS 7.5 g a.i./ha		
						mean	min-max	mean	min-max	
2-6 DAA										
MAR	5	12.5 (n=1)	-	16.1 (n=4)	7.5-36.8	99	97-100	87	92-100	1 =, 4 n.s.
N-E	6	-	-	6.0 (n=6)	0.1-17	92	67-100	77	14-100	1 >, 5 =
S-E	3	-	-	2.8 (n=3)	0.1-5.8	61	10-92	75	63-92	3 =
C-EU	14	12.5 (n=1)	-	8.4 (n=13)	0.1-36.8	88	10-100	81	14-100	-
10-18 DAA										
MAR	3	1023 (n=3)	11.0-3043	-	-	98	93-100	75	38-100	1 =, 2 n.s.
N-E	7	-	-	10.3 (n=7)	0.8-24.8	94	88-99	82	69-88	1>, 6 =
S-E	6	37.1 (n=3)	4.8-6.3	4.6 (n=3)	0.1-12	83	78-90	59	21-84	2 >, 3 =, 1 n.s.
C-EU	16	530.1 (n=6)	4.8-3043	8.6 (n=10)	0.1-24.8	91	78-100	72	21-100	-
20-30 DAA										
MAR	2	20.5 (n=2)	17.9-23.1	-	-	99	99	88	88-89	2 n.s.
S-E	3	6.3 (n=2)	5.5-7.0	6.5 (n=1)	-	82	73-90	65	35-86	3 =
C-EU	5	13.4 (n=4)	5.5-23.1	6.5 (n=1)	-	88	73-99	74	35-97	-

**Table 3.2-225: Control (%) of DASYBR by MCW-2222 applied at 0.3 L/ha (60 g a.i./ha) compared to MCW-5023 (0.20 L/ha) and Karate Zeon 050 or 100 CS (7.5 g a.i./ha) for all zones in oilseed rape regarding PESINC (damaged pods/ 25 shoots). Total 6 trials (2 MAR, 2 N-E, 2 S-E). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of trials	Untreated control (damaged pods/ 25 shoots)		% control						No. of trials where MCW-2222 is >, <, = compared to stand- ard(s); n.s.: signifi- cance not stated
				MCW-2222 0.3 L/ha		Mavrik 0.20 L/ha		Karate Zeon 050 or 100 CS 7.5 g a.i./ha		
		mean	min- max	mean	min-max	mean	min-max	mean	min-max	
2-6 DAA										
MAR	1	0.11	-	64	-	55	-			1 =
MAR	1	3.3	-	39	-	-	-	58	-	1 =
S-E	1	126	-	95	-	-	-	88	-	1 n.s.
C-EU	3	43.1	0.1-126	66	39-95	-	-	-	-	-
10-18 DAA										
MAR	1	0.6	-	63	-	61	-			1 =
MAR	1	4.3	-	71	-	-	-	97	-	1 =
S-E	2	32.8	1.8-64	97	95-100	-	-	93	85-100	1 =, 1 n.s.
C-EU	4	17.6	0.6-63.8	84	63-100	-	-	-	-	-
20-30 DAA										
MAR	1	0.27	-	59	-	56	-	-	-	1 =
N-E	2	2.2	1.8-2.6	71	63-79	44	25-64	-	-	1=, 1 n.s.
S-E	1	42.3	-	93	-	-	-	86	-	1 n.s.
C-EU	4	11.7	0.3-42.3	74	59-93	-	-	-	-	-

**Table 3.2-226: Control (%) of DASYBR by MCW-2222 applied at 0.20-0.30 L/ha (40-60 g a.i./ha) compared to Karate Zeon 050 or 100 CS (75 g a.i./ha) for South-East EPPO zone in oilseed rape regarding PESSEV (no. of larvae or insects/ plant, shoot or pod). Total 9 trials (9 S-E). For single trial data please refer to Appendix 4 of the BAD.**

EPPO zone	No. of tri- als	Untreated control (no. of larvae/ plant or pod)		Untreated control (no. of insects/ plant or shoot)		% control								No. of trials where the max. rate of MCW-2222 is >, <, = compared to standard(s); n.s.: significance not stated
						MCW-2222 0.20 L/ha		MCW-2222 0.25 L/ha		MCW-2222 0.30 L/ha		Karate Zeon 050 or 100 CS 75 g a.i./ha		
		mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	mean	min-max	
2-6 DAA														
S-E	3	-	-	2.8 (n=3)	0.1-5.8	75	67-88	83	75-88	91	82-100	79	70-92	3 =
10-18 DAA														
S-E	6	37.1 (n=3)	4.8-6.3	4.6 (n=3)	0.1-12	67	54-81	79	67-86	83	78-90	59	21-84	2 >, 3 =, 1 n.s.
20-30 DAA														
S-E	3	6.3 (n=2)	5.5-7.0	6.5 (n=1)	-	60	39-72	84	79-89	82	73-90	65	35-86	3 =

## Conclusion

The data from all EPPO zones demonstrated excellent control of *Dasineura brassicae* in winter oilseed rape from MCW-2222 applied at 0.30 L/ha, the efficacy of MCW-2222 was also equivalent to Mavrik and Karate Zeon 050 or 100 CS.

For the target range to be registered in the South-East EPPO zone, MCW-2222 showed also excellent control of *Dasineura brassicae* at 0.25 and 0.30 L/ha, the lowest target rate with 0.20 L/ha showed good control of the target pest.

A sufficient number of trials was carried out in the major crop winter oilseed rape. As the growth characteristics, application timings and target pests enable extrapolation from winter to spring oilseed rape, the proposed label rate of MCW-2222 is considered to be appropriate for the control of Brassica pod midge in winter and spring oilseed rape.

## Yield (and relevant quality indicators), from efficacy trials (in the presence of challenging pest populations)

Efficacy trials with yield determination have been conducted on maize, potato, cereals, oilseed rape, sugar beet, ornamentals and apple. However, for the uses included in this submission on maize, potato, cereals, oilseed rape, sugar beet and ornamentals and conducted according to the relevant EPPO guidelines stated in the following table, yield assessments are not required. Therefore, for these crops the yield data is not presented. In apples, the effective control of the target pests mostly improves yield of the treated plants compared to the untreated control. For details refer to chapter 3.4.2 of the BAD and the relevant Appendices thereof.

**Table 3.2-227: Overview of trials with yield determination**

Use no.	Crop	No. of trials (EPPO zone)			Argumentation for non-submission
		Maritime	North-East	South-East	
(1)	Maize	-	-	-	Not required by EPPO PP 1/13(3), 1/212(1), 1/274(1)
(2)	Apple	24	12	11	-
(3)	Potato	3 5*	4 2*	-	Not required by EPPO PP 1/12(4), 1/230(1)
(4)	Cereals	3*	-	-	Not required by EPPO PP 1/20(3); 1/70(4)
(5)	Oilseed rape	13*	8*	8*	Not required by EPPO PP 1/73(3), 1/83(2), 1/107(3), 1/178(3), 1/218(1), 1/219(1), 1/220(1), 1/294(1)
(6)	Sugar beet	-	-	-	Not required by PP 1/228(2/3)
(7)	Ornamentals	-	-	-	Not required by PP 1/23(2)

\* Since data is not required according to EPPO and no phytotoxicity occurred, an overview of the results was omitted

### Comments of zRMS:

The non submission of the yield data has been accepted.

**Comments of zRMS on:  
Efficacy tests (3.2.3)**

A total of 494 valid efficacy trials carried out between 2011 and 2022 have been submitted to support the authorisation of the insecticide MCW-2222. The trials were conducted in 3 EPPO zones: Maritime (229), North-East (129) and South-East (136).

MCW-2222 is intended for the control of: piercing-sucking pests in cereals, potato, and sugar beet, in apple orchards, in tree nursery crops, floricultures and bulb and tuber ornamental cultures, in control of aphids as virus vectors in cereals and the oilseed rape (OSR), in control of beetles and their larvae in corn, potato and the OSR, as well as weevils and the brassica pod midge in the OSR, and in control of lepidopteran larvae in apple orchards and corn. All intended uses are claimed on the grounds of article 33 of Regulation (EC) No 1107/2009.

Conclusions from the evaluation have been summarized separately for individual claimed uses listed in the GAP table.

**MABSD: APHISP**

In accordance with the GAP, this use is claimed in Maritime (CZ, DE, NL), North-East (PL) and South-East (HU, SI, SK) EPPO zone. MCW-2222 is intended to be applied at dose rate of 0.125 L/ha, at application timing starting from BBCH 62 until the beginning of the pre harvest interval (PHI). The recommended application rate regarding tLWA is 0.078 L/ha LWA. Dose rate range 0.09-0.125 L/ha (0.056-0.078 L/ha LWA) is also claimed in South-East EPPO zone. The maximum number of applications is 2. The claimed water volume is 500-1000 L/ha (CZ, DE, NL, SI, SK), 500-900 L/ha (PL) and 600-1000 L/ha (HU).

**MABSD: APHISP/ Maritime EPPO zone**

Results from 16 efficacy trials have been presented to support this claimed use. The trials were carried out in Czech Republic (12), Germany (1), the Netherlands (1) and in the United Kingdom (2) in 4 growth seasons (2013 – 2 trials, 2014 – 7 trials, 2015 – 2 trials, 2022 – 5 trials). The aphid species, that occurred in all trials was *Aphis pomi* (APHIPO). MCW-2222 was applied once (12 trials) or twice (4 Czech Republic trials), at growth stage of the crop range BBCH 69-78, and water volume range 500-1000 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (originally tested or recalculated where possible – based on available parameters: e.g. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at dose rate of 0.125 L/ha or 0.078 L/ha LWA is effective in the control of APHISP in apple in MAR EPPO zone. Comparable efficacy results were noted between MCW-2222 and reference products: Mospilan or Teppeki in the majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of APHISP in apple in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ, DE, NL).

**MABSD: APHISP/ North-East EPPO zone**

Eleven efficacy trials have been submitted for the evaluation of MCW-2222 in the control of APHISP in apple. The aphid species, that occurred in all trials was *Aphis pomi* (APHIPO). The trials were conducted in Poland in 4 growth seasons (2012 – 2 trials, 2013 – 4 trials, 2014 – 3 trials, 2015 – 2 trials). MCW-2222 was applied once in all trials, at growth stage of the crop range BBCH 67-76, and water volume range 750-1000 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (recalculated – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at dose rate of 0.125 L/ha or 0.078 L/ha LWA is effective in the control of APHIPO in apple in N-E EPPO zone. Comparable efficacy results were demonstrated between MCW-2222 and reference product Mospilan in the majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of APHISP in apple in N-E EPPO zone. Based on the efficacy trial results, this use is accepted in N-E EPPO zone (PL).

**MABSD: APHISP/ South-East EPPO zone**

The number of trials submitted for the evaluation is 8. The aphid species, that occurred in all trials was *Aphis pomi* (APHIPO). The trials were conducted in Hungary (2), Romania (1) and Slovakia (5) in 3 growth seasons (2013 – 3 trials, 2014 – 3 trials, 2015 – 2 trials). MCW-2222 was applied once in all trials, at growth stage of the crop range BBCH 69-74, and water volume range 500-1000 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (recalculated where possible – based on available parameters: eg. treated canopy

height, row spacing) - matching the label claim, have been presented separately by the applicant. Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at dose rates of 0.09-0.125 L/ha or 0.078 L/ha LWA is moderately to highly effective in the control of APHIPO in apple in S-E EPPO zone. Moderate to high efficacy was noted for MCW-222 applied at 0.056 L/ha LWA in MAR and N-E EPPO zone (no data available for S-E EPPO zone). The efficacy of reference product: Mospilan was comparable or higher than the efficacy of MCW-2222 applied at the maximum recommended dose rate in the presented trials. The efficacy data package is sufficient to support authorization of MCW-2222 for the control of APHISP in apple in S-E EPPO zone. Based on the efficacy trial results, this use is accepted in S-E EPPO zone (HU, SI, SK). Dose rate range 0.09-0.125L/ha (0.056-0.078 L/ha LWA) is acceptable. Lower dose rate can be recommended under conditions of low pest pressure in S-E EPPO zone.

#### **MABSD: ERISLA**

In accordance with the GAP, this use is claimed in South-East (HU, SI, SK) EPPO zone. MCW-2222 is intended to be applied at dose rate range 0.2-0.3 L/ha, at application timing starting from BBCH 71 until the beginning of the pre harvest interval (PHI). The recommended application rate range regarding tLWA is 0.125-0.1875 L/ha LWA. The maximum number of applications is 1. The claimed water volume is 600-1000 L/ha (HU) and 500-1000 L/ha (SI, SK).

#### **MABSD: ERISLA/ South-East EPPO zone**

The number of trials submitted for the evaluation is 11. The trials were conducted in Romania (6) and Slovakia (5) in 4 growth seasons (2012 – 1 trial, 2013 – 1 trial, 2014 – 5 trials, 2015 – 4 trials). MCW-2222 was applied once in all trials, at growth stage of the crop BBCH 69-78, and water volume range 1000-1500 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (recalculated where possible – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at recommended application rate 0.3 L/ha is effective in the control of ERISLA in apple in S-E EPPO zone. Moderate to high and moderate efficacy was noted for MCW-222 applied at 0.2 L/ha and 0.125 – 0.1875 L/ha LWA respectively in S-E EPPO zone. The efficacy of reference product: Mospilan was comparable or higher than the efficacy of MCW-2222 applied at the recommended dose rate in the presented trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of ERISLA in apple in S-E EPPO zone. Based on the efficacy trial results, this use is accepted in S-E EPPO zone (HU, SI, SK). Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) is acceptable. Lower dose rate of the range presented can be recommended under conditions of low pest pressure in S-E EPPO zone.

#### **MABSD: QUADPE**

In accordance with the GAP, this use is claimed in Maritime (CZ, DE) and South-East (HU, SI, SK) EPPO zone. MCW-2222 is intended to be applied at dose rate of 0.3 L/ha, at application timing starting from BBCH 71 until the beginning of the pre harvest interval (PHI). The recommended application rate regarding tLWA is 0.1875 L/ha LWA. Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) is claimed in South-East EPPO zone. The maximum number of applications is 1. The claimed water volume is 500-1000 L/ha (CZ, DE, SI, SK) and 600-1000 L/ha (HU).

#### **MABSD: QUADPE/ Maritime EPPO zone**

Results from 9 trials have been presented to support the evaluation of MCW-2222 in the control of QUADPE in apple in MAR EPPO zone. The trials were conducted in Czech Republic in 2 growth seasons (2014 – 3 trials, 2015 – 6 trials). MCW-2222 was applied once in all trials, at growth stage of the crop BBCH 59-74, and water volume 1000 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (recalculated – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at recommended application rate 0.3 L/ha is effective in the control of QUADPE in apple in MAR EPPO zone. Moderate efficacy was noted for MCW-222 applied at 0.125 – 0.1875 L/ha LWA. Comparable efficacy results were demonstrated between MCW-2222 and reference product Mospilan in the majority of trials.

Additional table with efficacy of MCW-222 at target rate 0.1875 L/ha LWA in the control of QUADPE in Maritime EPPO zone is presented below:

**Control (%) of QUADPE by MCW-2222 applied at a target rate of 0.1875 L/ha LWA with max. 10% deviation for Maritime EPPO zone compared to Mospilan SG in apple regarding PESSEV (no. of larva/shoot).**

Trial code	No. of trials	Untreated control larvae, (no./shoot)		% control				No. of trials where MCW-2222 is >, <, = compared to standard(s), n.s.: significance not stated
				MCW-2222 0.1875 L/ha LWA (+/- 10 %) (0.175-0.2 L/ha LWA)		Mospilan 20 SG (0.2-0.25 kg/ha)		
		mean	min-max	mean	min-max	mean	min-max	
18-27 DAA								
MAR	4	169	51-298	68	41-97	84	73-100	= (2) < (2)
34-41 DAA								
MAR	4	129	54-193	72	42-95	85	68-100	= (2) < (2)
120-127 DAA (fruits)*								
MAR	3	16	8-22	81	74-87	94	92-98	= (2) < (1)

\*infestation/damage (%)

MCW-2222 applied at recommended application rate 0.1875 L/ha was moderately effective (shoots assessments) and effective (fruits assessments) in the control of QUADPE in apple in MAR EPPO zone. The efficacy of reference product was comparable or higher than results achieved for MCW-2222.

The efficacy data package is sufficient to support authorization of MCW-2222 at target dose rate of 0.3 L/ha (0.1875 L/ha LWA) for the control of QUADPE in apple in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ,DE).

#### **MABSD: QUADPE/ South-East EPPO zone**

The number of trials submitted for the evaluation is 9. The trials were conducted in Romania (6) and Slovakia (3) in 3 growth seasons (2012 – 1 trial, 2013 – 1 trial, 2014 – 7 trials). MCW-2222 was applied once in 7 trials and twice in 2 trials, at growth stage of the crop BBCH 72-79, and water volume range 1000-1500 L/ha. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (recalculated where possible – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

Based on the efficacy trial results, it can be concluded, that MCW-2222 applied at recommended application rate 0.3 L/ha is effective in the control of QUADPE in apple in S-E EPPO zone. Moderate efficacy was noted for MCW-222 applied at 0.2 L/ha and 0.125 – 0.1875 L/ha LWA. The efficacy of reference product: Mospilan was comparable or higher than the efficacy of MCW-2222 applied at the maximum recommended dose rate in the presented vast majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of QUADPE in apple in S-E EPPO zone. Based on the efficacy trial results, this use is accepted in S-E EPPO zone (HU, SI, SK). Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) is acceptable. Lower dose rate of the range presented can be recommended under conditions of low pest pressure in S-E EPPO zone.

#### **MABSD: CARPPO**

In accordance with the GAP, this use is claimed in Maritime (CZ, DE), North-East (PL) and South-East (HU, SI, SK) EPPO zone. MCW-2222 is intended to be applied at dose rate of 0.3 L/ha, at application timing starting from BBCH 71 until the beginning of the pre harvest interval (PHI). The recommended application rate regarding tLWA is 0.1875 L/ha LWA. Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) is claimed in South-East EPPO zone. The maximum number of applications is 1. The claimed water volume is 500-1000 L/ha (CZ, DE, SI, SK) 500-900 L/ha (PL) and 600-1000 L/ha (HU).

#### **MABSD: CARPPO/ Maritime EPPO zone and North-East EPPO zone**



Results from 13 valid trials have been presented to support the evaluation of MCW-2222 in the control of CARPPO in apple in MAR EPPO zone. The trials were conducted in Czech Republic (11) and Germany (2) in 3 growth seasons (2014 – 7 trials, 2021 – 2 trials, 2022 – 4 trials). MCW-2222 was applied twice (9 trials), three times (2 trials) and 4 times (2 trials). The growth stage of the crop for the first application was BBCH 71-73. The water volume range was 500-1000 L/ha in the presented trials. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (originally tested or recalculated – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant. The efficacy results have been presented after the first application (PESINC on dropped fruits, PESINC on harvested fruits) and after the last application (PESINC on harvested fruits). Based on the efficacy trial results it can be concluded, that MCW-2222 applied at dose rate of 0.25-0.278 L/ha is effective in the control of CARPPO in apple in MAR EPPO zone. Moderate efficacy was demonstrated for MCW-2222 applied at 0.125-0.1875 L/ha LWA during most assessments (11-16 DAA, 20-24 DAA, 30-38 DAA, 20-56 DAA, 38 DAB-14 DAI). The efficacy of reference products: Mospilan and Coragen was higher or comparable to the efficacy of MCW-2222.

Results from 6 valid trials have been considered for the evaluation of MCW-2222 in the control of CARPPO in apple in N-E EPPO zone. The trials were conducted in Poland, in 2 growth seasons (2013 – 4 trials, 2021 – 2 trials). MCW-2222 was applied once (1 trial), twice (4 trials), three times (1 trial). The growth stage of the crop for the first application was BBCH 71-73. The water volume range was 750-1000 L/ha in the presented trials. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (originally tested or recalculated – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant. The efficacy results have been presented after the first application (PESINC on dropped fruits, PESINC on harvested fruits) and after the last application (PESINC on harvested fruits). Based on the efficacy trial results from the assessments carried out 20-24 DAA, 30-38 DAA, 38-46 DAA it can be concluded, that MCW-2222 applied at dose rate of 0.25 L/ha or 0.125-0.1875 L/ha LWA is effective and-moderately effective respectively in the control of CARPPO in apple in N-E EPPO zone. Comparable or lower efficacy was demonstrated for MCW-2222 as compared with reference products Coragen or Mospilan in the presented trials.

Additional table with efficacy of MCW-222 at target rate 0.1875 L/ha LWA in the control of CARPPO in Maritime and North-East EPPO zone is presented below:

**Control (%) of CARPPO by MCW-2222 applied at a target rate of 0.1875 L/ha LWA with max. 10% deviation for Maritime and North-East EPPO zone compared to Mospilan SG/SP and Coragen in apple regarding PESINC on (dropped or) harvested<sup>#</sup> fruits (%).**

Trial code	No. of trials	Untreated control PESINC on (dropped or) har- vested <sup>#</sup> fruits (%)		% control						No. of trials where MCW-2222 is >. <. = compared to standard(s) (n.s.: significance not stated)	
				MCW-2222 0.1875 L/ha LWA (+/- 10 %) (0.174-0.2 L/ha LWA)		Mospilan SG/SP (0.2- 0.25 kg/ha)		Coragen 20 SC (0.155- 0.175 kg/ha)*			
		mean	min- max	mean	min- max	mean	min- max	mean	min- max		
13-15 DAA											
MAR	4	43	23-58	69	38-85	86	54-100	-	-	= (2), < (1), n.s. (1)	
20-22 DAA											
MAR	5	50	37-61	70 (n=4) 8 (n=1)	42-94 8	86 (n=4)	57-100			= (3) < (1) n.s. (1)	
27-34 DAA											
MAR	5	61	46-77	50 (n=4) 37 (n=1)	23-78 37	82 (n=4)	42-100	88 (n=1)	88	= (2) < (3)	

NE	1	21	21	76	76	90	90	-	-	n.s. (1)
MAR + NE	6	54	21-77	55 (n=5) 37 (n=1)	23-78 37	84 (n=5)	42-100	88 (n=1)	88	= (2) < (3) n.s. (1)
<b>35-38 DAA</b>										
MAR	5	44	27-77	76 (n=4) 55(n=1)	60-86	92 (n=4)	81-100	100 (n=1)	100	= (3) n.s. (2)
<b>42-46 DAA</b>										
MAR	3	70	43-100	70 (n=2) 11 (n=1)	58-81 11	100 (n=2)	100-100	45 (n=1)	45	= (3)
<b>48-53 DAA</b>										
MAR	3	62	56-70	70 (n=2) 19 (n=1)	39-100 19	100 (n=2)	100-100	43 (n=1)	43	= (2) n.s. (1)
<b>56-69 DAA</b>										
MAR	3	68	50-88	49 (n=2) 31 (n=1)	48-51 31	100 (n=2)	100-100	86 (n=1)	86	= (1) n.s. (2)
<b>21-53 DAA (harvested fruits)</b>										
MAR	3	6	3-9	84 (n=2) 68 (n=1)	73-95 68	100 (n=2)	100-100	97 (n=1)	97	< (3)
<b>38 DAB-60 DAD (harvested fruits)</b>										
MAR	8	13	1-22	86 (n=4) 76 (n=4)	73-95 61-88	97 (n=4)	95-99	94 (n=4)	84-98	= (5), < (1), n.s. (2)

MCW-2222 applied at recommended application rate 0.1875 L/ha was moderately effective (dropped fruits assessments) and moderately to highly effective (harvested fruits assessments) in the control of CARPPO in apple in the majority of presented trials/assessments carried out mostly in Maritime EPPO zone (CZ, DE). The efficacy of reference products was comparable or higher than results achieved for MCW-2222.

The efficacy data package is sufficient to support authorization of MCW-2222 at target dose rate of 0.3 L/ha (0.1875 L/ha LWA) for the control of CARPPO in apple in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ, DE).

Considering data from N-E and supportive trials from MAR EPPO zone (CZ, DE) it can be concluded that the efficacy data package is sufficient to support authorization of MCW-2222 at target dose rate of 0.3 L/ha (0.1875 L/ha LWA) for the control of CARPPO in apple in N-E EPPO zone. Based on the efficacy trial results, this use is accepted in N-E EPPO zone (PL).

#### **MABSD: CARPPO/ South-East EPPO zone**

The number of valid trials submitted for the evaluation is 7. The trials were conducted in Hungary (3) and Slovakia (4) in 3 growth seasons (2013 – 4 trials, 2014 – 1 trial, 2021 – 2 trials). MCW-2222 was applied twice (2 trials), 3 times (2 trials), 4 times (1 trial), 9 times (1 trial) and 10 times (1 trial). The growth stage of the crop for the first application was BBCH 69-75. The water volume range was 800-1000 L/ha in the presented trials. Results from the trials with MCW-2222 applied at L/ha and L/ha tLWA (originally tested or recalculated – based on available parameters: eg. treated canopy height, row spacing) - matching the label claim, have been presented separately by the applicant.

The efficacy results have been presented after the first application (PESINC on dropped fruits, PESINC on harvested fruits) and after the last application (PESINC on harvested fruits).

Based on the efficacy trial results it can be concluded, that MCW-2222 applied at recommended application rate range 0.2-0.3 L/ha or 0.125-0.1875 L/ha LWA is effective and moderately effective in the control of CARPPO

in apple in S-E EPPO zone. The efficacy of reference products: Coragen and Mospilan was comparable or higher as compared with the efficacy of MCW-2222.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of CARPPPO in apple in S-E EPPO zone. Based on the efficacy trial results, this use is accepted in S-E EPPO zone (HU, SI, SK). Dose rate range 0.2-0.3 L/ha (0.125-0.1875 L/ha LWA) is acceptable. Lower dose rate of the range presented can be recommended under conditions of low pest pressure in S-E EPPO zone.

#### **SOLTU: LPTNDE, MYZUPE, MACSEU**

According to the GAP table this use is claimed in Maritime (CZ, DE, NL), North-East (PL) and South-East (SI, SK) EPPO zone. In South-East EPPO zone LPTNDE (SK) or LPTNDE and MYZUPE (SI) are the only target pests claimed. MCW-2222 is intended to be applied at dose rate of 0.18 L/ha, at growth stage of the crop range BBCH 12-79. Dose rate range 0.12-0.18 L/ha is also claimed in South-East EPPO zone (SK, SI). The maximum number of applications is 1. The claimed water volume is 200-400 L/ha (NL, PL, SI, SK) or 200-500 L/ha (CZ, DE).

#### **SOLTU: LPTNDE/ Maritime EPPO zone**

The number of trials submitted for the evaluation is 15. The trials were conducted in Czech Republic (9) and Germany (6) in 4 growth seasons (2013 – 3 trials, 2014 – 6 trials, 2015 – 3 trials, 2021 – 3 trials). MCW-2222 at recommended dose rate of 0.18 L/ha was applied once (14 trials) or twice (1 trial), at growth stage of the crop BBCH 19-91, and water volume range 200-400 L/ha.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at dose rate of 0.18 L/ha is effective in the control of LPTNDE (larva and adults) in potato in MAR EPPO zone. Visible decrease of efficacy in the control of adults only was noted 11-14 DAA (average efficacy 42%). The efficacy of MCW-2222 was comparable or higher than the efficacy of reference products Karate Zeon or Mavrik.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of LPTNDE in potato in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ, DE, NL).

#### **SOLTU: LPTNDE/ North-East EPPO zone**

Sixteen trials have been submitted for the evaluation. The trials were conducted in Poland (15) and Latvia (1) in 4 growth seasons (2013 – 4 trials, 2014 – 7 trials, 2020 – 1 trial, 2021 – 4 trials). MCW-2222 was applied once (15 trials) or twice (1 trial), at growth stage of the crop BBCH 31-67, and water volume range 200-400 L/ha. Trials from MAR EPPO zone (CZ, DE) have been also considered for this use.

MCW-2222 applied at the recommended dose rate of 0.18 L/ha was effective in the control of LPTNDE (larva and adults) in potato, based on the efficacy trials results from N-E EPPO zone. The efficacy of reference products: Karate Zeon, Mavrik was comparable or lower than the efficacy of MCW-2222 in the vast majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of LPTNDE in potato in N-E EPPO zone. Based on the efficacy trial results, this use is accepted in N-E EPPO zone (PL).

#### **SOLTU: LPTNDE/South-East EPPO zone**

The number of trials submitted for the evaluation is 17. The trials were conducted in Hungary (3), Slovakia (5) and Romania (9) in 4 growth seasons (2013 – 2 trials, 2014 – 8 trials, 2015 – 2 trials, 2021 – 5 trials). MCW-2222 was applied once (16 trials) or twice (1 trial), at growth stage of the crop BBCH 16-72, and water volume range 200-500 L/ha.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at the maximum recommended dose rate of 0.18 L/ha is effective in the control of LPTNDE (larva and adults) in potato in S-E EPPO zone. MCW-2222 applied at the lowest recommended dose rate of 0.12 L/ha was highly effective in the control of target pest 2-3 DAA and 6-12 DAA. Visible decrease of efficacy was noted 11-14 DAA (average efficacy 67%). The efficacy of reference products: Karate Zeon, Mavrik was comparable or lower than the efficacy of MCW-2222.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of LPTNDE in potato in S-E EPPO zone. Based on the efficacy trial results, this use is accepted in S-E EPPO zone (SI, SK). Dose rate range 0.12-0.18 L/ha is acceptable. Lower dose rates of the range presented can be recommended under conditions of low pest pressure in S-E EPPO zone (SI, SK).

#### **SOLTU: Aphids (MYZUPE, MACSEU)/ Maritime EPPO zone**

Eight trials have been submitted for the efficacy evaluation of MCW-2222 against aphids on potato. The efficacy of MCW-2222 in the control of MACSEU was tested in 5 trials. 4 of 8 trials present efficacy data for MCW-

2222 in the control of MYZUPE. The trials were conducted in Czech Republic (1), Germany (3), the Netherlands (2), United Kingdom (1) and Sweden (1) in 2 growing seasons (2020- 1 trial, 2022- 7 trials). MCW-2222 at recommended dose rate of 0.18 L/ha was applied once in all trials, at growth stage of the crop BBCH 13-75, and water volume range 200-400 L/ha.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at dose rate of 0.18 L/ha is effective in the control of aphids (MYZUPE, MACSEU) in potato in MAR EPPO zone. The efficacy of MCW-2222 was comparable or higher than the efficacy of reference products: Mospilan SG, Mavrik Flo.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of aphids in potato in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ, DE, NL).

#### **SOLTU: Aphids (MYZUPE, MACSEU)/ North-East EPPO zone**

Fourteen trials have been submitted for the efficacy evaluation of MCW-2222 against aphids on potato. The efficacy of MCW-2222 in the control of MACSEU and MYZUPE was tested in 8 and 6 trials respectively. All the trials were conducted in Poland in 2 growth seasons (2013 – 2 trials, 2022 -12 trials). MCW-2222 at recommended dose rate of 0.18 L/ha was applied once in all trials, at growth stage of the crop BBCH 21-69, and water volume range 200-300 L/ha. Trials from MAR EPPO zone (CZ, DE) have been also considered for this use.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at dose rate of 0.18 L/ha is effective in the control of aphids (MYZUPE, MACSEU) in potato in N-E EPPO zone. The efficacy of MCW-2222 was comparable or higher than the efficacy of reference product Karate Zeon in the vast majority of trials. The efficacy data package is sufficient to support authorization of MCW-2222 for the control of aphids in potato in N-E EPPO zone. Based on the efficacy trial results, this use is accepted in N-E EPPO zone (PL).

#### **SOLTU: Aphids (MYZUPE) / South-East EPPO zone**

According to the GAP table, this use is claimed only in Slovenia. Only 2 trials have been submitted for the efficacy evaluation of MCW-2222 against aphids in potato. The trials were conducted in Romania in 2014. MCW-2222 at recommended dose rates 0.12-0.18 L/ha was applied once in these trials, at growth stage of the crop BBCH 39, and water volume 200 L/ha. Aphid species were not specified in these trials.

Results from 2 efficacy trials show high efficacy of MCW-2222 applied at 0.12-0.18 L/ha against APHISP in potato in S-E EPPO zone. The efficacy of MCW-2222 was comparable with the efficacy of reference product Karate Zeon.

Due to limited efficacy data from S-E EPPO zone submitted for this use, the cMS Slovenia is kindly advised to consider efficacy data from MAR and N-E EPPO zone and make decision on acceptance this use individually, according to the national requirements.

#### **TRZAW, HORVW, SECCW, TTLWI, TRZSP (spring application): 1APHIF**

10 efficacy trials were carried out to control aphids (MACSAV and METODR) in winter wheat in **the Maritime EPPO climatic zone**. MCW-2222 applied at dose rate of 0,18 l/ha achieved high effectiveness after 1-21 days after application. In case of MACSAV, the test product had the results of 93% after 2-3 DAA in 8 trials, 92% after 6-10 DAA in 9 trials and 77% after 10-14 DAA in 5 trials. In case of METODR, the effectiveness of 80-95% after 2-13 DAA was observed in 1 trial. No significant differences have been noted for the reference product Mospilan 20 SG in the most of efficacy trials. Because of the efficacy trials were conducted only in winter wheat, cMSs are kindly asked to consider other species of winter cereals on national level. Based on the above summary, it can be concluded that MCW-2222 at 0,18 l/ha is effective for spring aphid control in winter wheat in the MAR zone.

4 efficacy trials were carried out to control aphids (MACSAV, RHOPPA) in winter wheat and winter triticale in **the North-East EPPO climatic zone**. Also 9 efficacy trials from the Maritime zone (Germany and Czech Republic) were used to the general calculation for the Polish registration. MCW-2222 applied at dose rate of 0,18 l/ha achieved high effectiveness, either in NE and MAR zone. In case of MACSAV in winter wheat, the test product had the results of >90% after 2-3 DAA and 6-10 DAA. Also good control has been noted for RHOPPA in winter wheat (98% after 2-3 DAA and 96% after 7-8 DAA). The effectiveness of the test product against METODR was confirmed in 1 trial conducted in Germany. No significant differences between test and reference product have been presented. Taking into account the submission of 2 efficacy trials on winter triticale, extrapolation from winter wheat is possible. Based on the above summary, it can be concluded that MCW-2222 at 0,18 l/ha is effective for spring aphid control in winter wheat and winter triticale in the NE zone.

11 efficacy trials were carried out to control aphids (MACSAV, RHOPPA) in winter wheat in **the South-East EPPO climatic zone**. MCW-2222 applied at dose rate of 0,18 l/ha achieved high effectiveness with the results of 94% after 6-10 DAA in all trials. Moderate control has been noted in the earlier assessment, 72% after 1 DAA and 76% after 2-3 DAA. Full effectiveness was observed in 1 trial for RHOPPA. MCW-2222 was slight superior compared to the reference product in the most trials. Because of the efficacy trials were conducted only in winter

wheat, cMSs are kindly asked to consider other species of winter cereals on national level. Based on the above summary, it can be concluded that MCW-2222 at 0,18 l/ha is effective for spring aphid control in winter wheat in the SE zone.

**TRZAS, HORVS, AVESP, TRZDS, TTLSO (spring application): 1APHIF**

3 efficacy trials were carried out to control aphids (RHOPPA, MACSAV) in spring wheat in **the Maritime EPPO climatic zone**. In case of MACSAV, MCW-2222 applied at dose rate of 0,18 l/ha achieved high results of 82% after 1-3 DAA and 93% after 7-9 DAA in 2 trials. Full control was presented for RHOPPA in 1 efficacy trial. Also 2 trials has been submitted for spring barley. The test product at claimed dose rate had similar effect compared to spring wheat with the results of 91% after 1-3 DAA and 83% after 7-9 DAA. Based on the above summary, it can be concluded that MCW-2222 at 0,18 l/ha is effective for control of aphids in spring wheat and spring barley. However, the number of trials is limited for each crop separately, even taking into account trials from the NE zone. Due to that, cMSs are kindly asked to consider this use on national level.

Only 2 efficacy trials were carried out to control *Sitobion avenae* (MACSAV) in spring barley in **the North-East EPPO climatic zone**. MCW-2222 applied at dose rate of 0,18 l/ha achieved high effectiveness with the mean results of 93% after 1-3 DAA and 95% after 7-9 DAA. According to Polish requirements, 2 efficacy trials from Germany can be support for the national registration. However, a total of 4 efficacy trials is insufficient number of trials for Poland. Spring cereals are the major crops and a minimum of 6 efficacy trials are necessary to evaluate. An extrapolation is not possible in this case. This use cannot be accepted in Poland.

No efficacy trials have been presented for **the South-East EPPO climatic zone**. The cMS Slovenia is kindly asked to use dataset from other EPPO zones and consider this use on national level.

**BEAVA: APHIFA, MYZUPE, MACSEU**

According to the GAP table this use is claimed in Maritime (CZ, DE, NL), North-East (PL) and South-East (SI) EPPO zone. MCW-2222 is intended to be applied at dose rate of 0.25 L/ha, at growth stage of the crop BBCH 12-39. The maximum number of applications is 2 ( for CZ, DE, NL) or 1 (for PL and SI). The claimed water volume is 200-400 L/ha.

**BEAVA: Aphids (APHIFA, MYZUPE, MACSEU)/ Maritime EPPO zone**

Eleven trials have been submitted for the efficacy evaluation of MCW-2222 against aphids in sugar beet. The efficacy of MCW-2222 in the control of APHIFA was tested in 9 trials. 3 of 11 trials present efficacy data for MCW-2222 in the control of MYZUPE. MACSEU has not occurred in the presented trials carried out in sugar beet. However, efficacy of MCW-2222 in the control of MACSEU has been demonstrated in potato trials. The trials were conducted in Czech Republic (3), Germany (6) and the Netherlands (2), in 3 growth seasons (2020-2 trials, 2021-1 trial, 2022-8 trials). MCW-2222 at recommended dose rate of 0.25 L/ha was applied once in 10 trials and twice in 1 trial, at growth stage of the crop BBCH 11-39, and water volume range 200-300 L/ha.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at dose rate of 0.25 L/ha is effective in the control of aphids (APHIFA, MYZUPE) in sugar beet in MAR EPPO zone. The efficacy of MCW-2222 was comparable with the efficacy of reference products: Mospilan SG, Teppeki, Pirimor in the vast majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of aphids in sugar beet in MAR EPPO zone. Based on the efficacy trial results, this use is accepted in MAR EPPO zone (CZ, DE, NL).

**BEAVA: Aphids (APHIFA, MYZUPE, MACSEU)/ North-East EPPO zone**

20 trials have been submitted for the efficacy evaluation of MCW-2222 against aphids in sugar beet. The efficacy of MCW-2222 in the control of APHIFA and MYZUPE was tested in 14 and 6 trials respectively. MACSEU has not occurred in the presented trials carried out in sugar beet. The trials were conducted in Poland (19) and Lithuania (1 trial) in 3 growth seasons (2020-3 trials, 2021-7 trials, 2022-10 trials). MCW-2222 at recommended dose rate of 0.25 L/ha was applied once in 10 trials and twice in other 10 trials, at growth stage of the crop BBCH 14-44, and water volume range 200-500 L/ha. Trials from Maritime EPPO zone (CZ, DE) have been also considered for this use.

Based on the efficacy trials results, it can be concluded, that MCW-2222 applied at dose rate of 0.25 L/ha is effective in the control of aphids (APHIFA, MYZUPE) in sugar beet in N-E EPPO zone. The efficacy of MCW-2222 was comparable or higher than the efficacy of reference products: Decis Mega, Fury in the vast majority of trials.

The efficacy data package is sufficient to support authorization of MCW-2222 for the control of aphids (APHIFA, MYZUPE) in sugar beet in N-E EPPO zone. Based on the efficacy trial results, this use is accepted in N-E EPPO zone (PL). Due to the less occurrence of the species MACSEU in sugar beet in Poland and no

trials with MACSEU in sugar beet, this species was deleted for Poland.

**BEAVA: Aphids (APHIFA, MYZUPE, MACSEU)/ South-East EPPO zone**

No efficacy trials have been submitted to support the authorization of MCW-2222 against aphids in sugar beet in S-E EPPO zone. Therefore, the cMS (SI) is kindly advised to consider efficacy data from MAR and N-E EPPO zone and make decision on acceptance this use individually, according to the national requirements.

**Flower bulbs and flower tubers: 1APHIF**

**Floriculture crops, tree nursery crops, perennial nursery crops: 1APHIF**

A total of 22 efficacy trials were carried out to control aphids on ornamental plants (17 trials), lily (3 trials) and beech (2 trials) in **the Maritime EPPO climatic zone**. 5 out of 22 trials conducted under protected conditions (greenhouse) are supportive for the field claimed uses.

**In case of floriculture crops**, MCW-2222 applied once per growth season at dose rate of 0,23 l/ha achieved 73-85% (unprotected conditions) and 52-83% (protected conditions) after 1-4 DAA, 90-95% (unprotected conditions) and 88-97% (protected conditions) after 6-8 DAA, 89-96% (unprotected conditions) and 59-100% (protected conditions) after 13-15 DAA. Taking into account 1-2 applications per growth season, the test product at dose rate of 0,17 l/ha presented the results of >80% after 6-8 days and 13-15 days after first application in the field conditions and 6-8 DAA in the unprotected trials. Also good control has been observed after second application: 75% (unprotected conditions) and 88% (protected conditions) after 6-7 DAB. Based on the above summary, it can be concluded that MCW-2222 at 0,17 l/ha (1-2 applications per growth season) and 0,23 l/ha (once per growth season) are effective for control aphids on ornamental plants growing in the field in the MAR zone.

**In case of flower bulbs**, MCW-2222 applied once per growth season at dose rate of 0,23 l/ha achieved 69% after 1-4 DAA, 84% after 6-8 DAA and 95% after 13-15 DAA. Taking into account 1-2 applications per growth season, the test product at dose rate of 0,17 l/ha presented the results of 65-92% after first application and 68-100% after second application. According to the table 3.2-5, flower bulbs are minor crops in the Netherlands but only under protected conditions. All efficacy trials (3 trials) submitted by the applicant were carried out under unprotected conditions. Also the GAP table indicates the use of MCW-2222 on flower bulbs and flower tubers growing in the field. In opinion of zRMS the number of available trials is insufficient but cMS NL is kindly asked to consider this use on national level.

**In case of tree nursery crops**, MCW-2222 applied once per growth season at dose rate of 0,23 l/ha achieved 35% after 1 DAA, 74% after 6 DAA and 68% after 14 DAA. Taking into account 1-2 applications per growth season, the test product at dose rate of 0,17 l/ha presented the results of 46% after 1 DAA, 21-86% (6 DAA and 7 DAB) and 57% after 14 DAA. According to the table 3.2-5, nursery are minor crops in the Netherlands but only under protected conditions. All efficacy trials (2 trials) submitted by the applicant were carried out under unprotected conditions. Also the GAP table indicates the use of MCW-2222 on tree nursery crops growing in the field. In opinion of zRMS the number of available trials is insufficient but cMS NL is kindly asked to consider this use on national level.

No efficacy trials have been submitted for **the South-East EPPO climatic zone**. The cMS Slovenia is kindly asked to extrapolate trials from the MAR zone and consider this use on national level.

**ZEAMX: DIABVI**

8 efficacy trials were carried out to control *Diabrotica virgifera virgifera* in maize in **the South-East EPPO climatic zone**. MCW-2222 applied at dose rate of 0,2-0,3 l/ha achieved high effectiveness in earlier assessments. Lower claimed dose was effective on a level of 90% after 2-3 DAA and 80% after 7-8 DAA. Higher claimed dose has the results of 93% after 2-3 DAA and 86% after 7-8 DAA. Significant inferior effectiveness has been noted in the late assessment (56% and 62% after 14-16 DAA). The reference product Steward achieved comparable results to the test product and Biscaya presented similar or inferior effectiveness. Based on the above summary, it can be concluded that MCW-2222 at 0,2-0,3 l/ha is effective for control of DIABVI in maize in the SE zone. However, it should be noted that the dose rate of 0,3 l/ha is recommended at higher pest pressure.

**ZEAMX: PYRUNU**

7 efficacy trials were carried out to control *Ostrinia nubilalis* in maize in **the South-East EPPO climatic zone**. MCW-2222 applied at dose rate of 0,2-0,3 l/ha achieved medium to high effectiveness with the results of 64-78% after 14-38 DAA and 71-87% after 28-82 DAA. Taking into account pest pressure in the submitted trials, the higher dose rate of 0,3 l/ha should be recommended at higher infestation. No significant differences between test and reference products have been observed. Similar or slight inferior effect have been noted in the most trials. Based on the above summary, it can be concluded that MCW-2222 at 0,2-0,3 l/ha is effective for control

PYRUNU in maize in the SE zone. However, it should be noted that the dose rate of 0,3 l/ha is recommended at higher pest pressure.

**TRZAW, HORVW, SECCW, TTLWI, TRZSP (autumn application): 1APHIF: RHOPPA, MACSAV (BYDV, WYLV)/ vector control**

28 efficacy trials were carried out to control of virus vectors in winter cereals (winter wheat, winter barley and winter oat) in autumn application in the Maritime (20 trials) and North-East EPPO (8 trials) climatic zone.

**In the Maritime EPPO zone**, MCW-2222 at dose rate of 0,15 l/ha achieved good results in control of either wingless and winged aphids. In case of wingless aphids, the test product had the efficacy of 83-92% on winter barley and 85-98% on winter wheat. In case of winged aphids, the effectiveness was 70-80% on winter barley and 84-100% on winter wheat. Comparable or significant inferior results have been noted for the reference product. Also the virus symptoms were assessed in 12 efficacy trials. Based on the foci area, MCW-2222 at dose rate of 0,15 l/ha achieved the results of >70% on winter barley and 70% on winter wheat. Based on the stunting parameter, the test product at claimed dose rate had the efficacy of 71% on winter barley and winter wheat after 166-217 DAA. Superior results have been noted for the reference products. Taking into account both assessments of aphids and virus vectors, it can be concluded that MCW-2222 at 0,15 l/ha is effective for control virus vectors in winter barley. Limited number of efficacy trials was available for winter wheat in the MAR zone. However, 2 efficacy trials were conducted on winter wheat in Poland. In opinion of zRMS it can be support for the product registration in Germany and Czech Republic. No trials have been submitted for winter triticale, winter rye and spelt. The cMSs are kindly asked to consider these uses on national level.

**In the North-East EPPO zone**, MCW-2222 at dose rate of 0,15 l/ha achieved medium to high level of control for wingless and winged aphids. In case of wingless aphids, the test product had the efficacy of 67-82% on winter barley and 74-85% on winter wheat. In case of winged aphids, the mean efficacy was >70% on either winter barley and winter wheat after 1-10 DAA. No significant differences between test and reference product have been observed. Also 10 efficacy trials conducted in the neighbouring countries (Czech Republic and Germany) have been included in the general calculation as support for Polish registration. Finally, a total of 6 trials on winter wheat and 12 trials on winter barley were available for the number of aphids assessment. Also 5 trials conducted in the neighbouring countries have been used for the evaluation of virus damage. Based on the submitted dataset, it can be concluded that MCW-2222 at 0,15 l/ha is effective for control of virus vectors in winter wheat and winter barley in the NE zone. Because no trials on other winter cereals have been presented, these uses cannot be accepted in Poland.

No efficacy trials for control of virus vectors in winter cereals have been submitted in **the South-East EPPO climatic zone**. The cMS Slovenia is kindly asked to use dataset from other EPPO zones and consider this use on national level.

**TRZAS, HORVS, AVESP, TRZDS, TTLSO (spring application): 1APHIF: RHOPPA, MACSAV (BYDV, WYLV)/ vector control**

No new dataset has been submitted for the control of virus vectors in spring cereals. The applicant proposed to use of the trial results presented in subchapter 1d 'Aphids in spring cereals (spring application)'. According to the EPPO guideline PP 1/70(4) *Aphid vectors of Barley yellow dwarf virus*, two types of assessment should be included: assessment of the aphid vectors and assessment of BYDV infection. No visible foci have been noted in the efficacy trials submitted in subchapter 1d. Taking into account only assessment of the aphid vectors, zRMS decided to present the summary of conclusions relevant to the above subchapter. Because no new efficacy trials were available for subchapter 5b, the below conclusions are appropriate for the use of virus vectors in spring cereals (spring application).

3 efficacy trials were carried out to control aphids (RHOPPA, MACSAV) in spring wheat in the Maritime EPPO climatic zone. In case of MACSAV, MCW-2222 applied at dose rate of 0,18 l/ha achieved high results of 82% after 1-3 DAA and 93% after 7-9 DAA in 2 trials. Full control was presented for RHOPPA in 1 efficacy trial. Also 2 trials has been submitted for spring barley. The test product at claimed dose rate had similar effect compared to spring wheat with the results of 91% after 1-3 DAA and 83% after 7-9 DAA. Based on the above summary, it can be concluded that MCW-2222 at 0,18 l/ha is effective for control of aphids in spring wheat and spring barley. However, the number of trials is limited for each crop separately, even taking into account trials from the NE zone. Due to that, cMSs are kindly asked to consider this use on national level.

Only 2 efficacy trials were carried out to control *Sitobion avenae* (MACSAV) in spring barley in the North-East EPPO climatic zone. MCW-2222 applied at dose rate of 0,18 l/ha achieved high effectiveness with the mean results of 93% after 1-3 DAA and 95% after 7-9 DAA. According to Polish requirements, 2 efficacy trials from Germany can be support for the national registration. However, a total of 4 efficacy trials is insufficient number of trials for Poland. Spring cereals are the major crops and a minimum of 6 efficacy trials are necessary to evaluate. An extrapolation is not possible in this case. This use cannot be accepted in Poland.

No efficacy trials have been presented for the South-East EPPO climatic zone. The cMS Slovenia is kindly asked to use dataset from other EPPO zones and consider this use on national level.

**BRSNW, BRSNS; spring application: CEUTNA, CEUTQU, MELIAE, CEUTAS, DASYBR**

A total of **190** trials have been carried out in winter oilseed rape and 2 trials – in spring oilseed rape (OSR), in order to demonstrate the efficacy in control of beetles, weevils and the brassica pod midge in the oilseed rape.

The **90 Maritime** trials include **72 within the Central EU zone** (29 trials in CZ, 33 in DE, 10 trials in the UK) as well as 17 trials in FR (EU South Zone) and 1 - in SE (EU North zone).

The **46** trials carried out in the **North-Eastern** EPPO zone include 44 within the Central EU zone (PL) as well as 2 trials in LV (EU North zone).

The **54** trials carried out in the **South-Eastern** EPPO zone include 33 trials in HU and 21 trials in SK. The two **spring OSR trials** were carried out in UK (2021) and in PL (2022).

**Target pest presence in trials:**

Among the **90** efficacy trials carried out in the **Maritime** EPPO zone, 7 tested control of CEUTNA, 9 tested control of CEUTQU, 6 tested control of CEUTAS, 29 – the control of MELIAE, 17- the control of PSYICH, 8- the control of PHYESP and 7 – the control of DASYBR.

Among the **46** efficacy trials carried out in the **North-Eastern** EPPO zone, 10 tested control of CEUTNA, 9 tested control of CEUTQU, 8 tested control of CEUTAS, 19 – the control of MELIAE, 4 - the control of PSYICH, 1- the control of PHYECR and 9 – the control of DASYBR.

Among the **54** efficacy trials carried out in the **South-Eastern** EPPO zone, 12 tested control of CEUTNA, 11 tested control of each CEUTQU and CEUTAS, 26 – the control of MELIAE and 9 – the control of DASYBR.

In the **Maritime zone** the efficacy of MCW-2222 in control of CEUTQU and CEUTNA was assessed as 87% and 91% respectively, on average in 12-95 DAA assessments, with the distance to the standard Karate Zeon 050 CS 14% and 9% respectively, to the advantage of the test item.

Efficacy in control of the pollen beetle (MELIAE) was assessed as 85% and 64% between the 1 DAA and 10 DAA assessments, which is respectively by 24 and 23% higher compared to the average of Karate Zeon and Hallmark Zeon standards, with the efficacy decreasing gradually in 3 consecutive observations.

In control of CEUTAS, the efficacy fluctuated between 90% and 100%, in 1-3 DAA to 21-28 DAA assessments, with the distance to the standard Karate Zeon 050 CS between 5% and 20%, to the advantage of the test item.

The efficacy in control of DASYBR was very high when assessed based on the adult insect or larvae count on plants – 98-99 % across the assessments at 2-30 DAA, with 12-23% advantage compared to the standard Karate Zeon 050 CS. **When measured by the pest damage** to the pods, the efficacy was **apparently lower**: even as low as **39%** (58% with Karate Zeon, single trial datapoint), but up to 71% (97% with Karate Zeon, single trial either, 10-18 DAA). The efficacy of MCW-2222 assessed based on the pod damage is closer to the standard Mavrik (55-61%).

In the **North-Eastern zone** the efficacy of MCW-2222 in control of CEUTQU and CEUTNA was assessed as 97% and 95% respectively, on average in 12-95 DAA assessments, with the distance to the standard Karate Zeon 050 CS 13% and 12% respectively, to the advantage of the test item.

Efficacy in control of the pollen beetle (MELIAE) was assessed as 80% and 93% between the 1 DAA and 10 DAA assessments, which is respectively by 9% and 5% higher compared to the average of Karate Zeon and Hallmark Zeon standards, with the highest efficacy 93% observed between 2 and 5 DAA (n=20), and the lowest one – 80% - between 5 and 10 DAA (n=20).

In control of CEUTAS, the efficacy fluctuated between 83% and 97%, in 1-3 DAA to 21-28 DAA assessments, with the distance to the standard Karate Zeon 050 CS between 0% and 13%, to the advantage of the test item.

The efficacy in control of DASYBR was **rather high** when assessed based on the adult insect or larvae count on plants – **92-94** % across the assessments at 2-18 DAA, with 12-15% advantage compared to the standard Karate Zeon 050 CS. **When measured by the pest damage to the pods**, 20-30 DAA, the efficacy was **visibly lower: 71%**, yet still apparently higher compared to that of the standard Mavrik - 44%.

**0.3 L/ha dose rate in the South-Eastern zone** The efficacy of MCW-2222 at **0.3. L/ha** in control of CEUTQU and CEUTNA was assessed as 85-93% and 75-89% respectively, on average in 12-95 DAA assessments, with the distance to the standard Karate Zeon 050 CS 10-13% and 0-14% respectively, to the advantage of the test item.

The efficacy of MCW-2222 at **0.3. L/ha** in control of the pollen beetle (MELIAE) was assessed as 63% to 83% between the 1 DAA and 10 DAA assessments, which is respectively by 18% and 9% higher compared to the average of Karate Zeon and Hallmark Zeon standards, with the efficacy decreasing gradually in 3 consecutive



observations.

In control of CEUTAS, the efficacy of **0.3 L/ha** dose rate fluctuated between 77% and 83%, in 1-3 DAA to 21-28 DAA assessments, with the distance to the standard Karate Zeon 050 CS between 5% to 25%, to the advantage of the test item.

The efficacy (of the 0.3 L/ha dose rate) in control of DASYBR was moderate to good when assessed based on the adult insect or larvae count on plants – 61-83 % across the assessments at 2-30 DAA, with the 17-24% advantage compared to the standard Karate Zeon 050 CS, on the second and third assessment dates. However, within the first assessment interval (2-6 DAA) efficacy of only 10% was demonstrated in one of the 3 trials, while the reference product has performed low but still at the level > 60%, thus the trial's exclusion is not justified. The efficacy against DASYBR was assessed as **apparently higher when measured by the pest damage to the pods: 93-97%** across 2-30 DAA interval, with 4-7% advantage to the reference product Karate Zeon 100 CS.

#### **Extrapolation of the spring application / uses to the spring oilseed rape**

To the opinion of zRMS the extrapolation of spring applications against CEUTNA, CEUTQU, MELIAE, CEUTAS and DASYBR to the spring oilseed rape, as claimed by the applicant, **is justified**, based on the similar crop biology and its availability for the target pests, plus the two trials in spring oilseed rape carried out in the UK and in Poland: UK21IEBRSNW219A and PL22IEBRSNW113A (KCP 6.2/420 and KCP 6.2/441). These trials tested control of MELIAE and they demonstrated the efficacy of MCW - 2222 at **0.3 L/ha**: 76%, 84% and 63% on the 1 DAA, 3 DAA and 7 DAA respectively, compared to 78%, 78% and 63% respectively for the reference Mavrik at 0.2 L/ha.

#### **South-Eastern zone dose range**

In the SE EPPO zone the applicant has proposed the **dose range of 0.15-0.30 L/ha** - in control of the stem and pod weevils plus brassica pod midge, and **0.18-0.30 L/ha** - in the control of the pollen beetle, in spring OSR, instead of the fixed dose rate of **0.30 L/ha**, as proposed for the other two zones. Summaries meant to support this are as follows: Table 3.2-168 (CEUTAS; 0.15-**0.25** L/ha), Table 3.2-170 (CEUTNA; 0.15-**0.30** L/ha), Table 3.2-171 (CEUTNA; 0.15 and **0.18** L/ha), Table 3.2-174 (CEUTQU; 0.15-**0.30** L/ha), Table 3.2-176 (MELIAE; 0.20-**0.30** L/ha), and Table 3.2-214 (DASYBR; 0.20-**0.30** L/ha).

The respective data summaries either do not include the target 0.30 L/ha within the same table like the tables 3.2-168 and 3.2-171, they are far from orthogonal, like the Table 3.2-176, or they demonstrate that the lowest of the doses proposed (0.15 or 0.20 L/ha) provide efficacy lower by > 10% than that of the target rate (e.g. Table 3.2-170 – CEUTNA – 2-95 DAA, Table 3.2-174 – CEUTQU, Table 3.2-176 – MELIAE – 5-10 DAA, Table 3.2-214 – DASYBR – 2-30 DAA). In some cases the efficacy of the sub-target dose is reduced drastically on later observation dates and the only rationale behind insisting on such low doses is perhaps that they keep up with or exceed the standards, **although they do not do so to the extent observed for the target dose rate** (Table 3.2-168 – CEUTAS; Table 3.2-176 – MELIAE).

The zRMS considers this data set wobbly and the proposal - not only risky from the resistance perspective, but also not in line with the concept of the minimum effective dose. However, to the knowledge of zRMS, the dose range is being frequently claimed for the SE EPPO zone, in PPPs of different types including fungicides, for the regulatory constraints specific for that zone make the rates < MED not allowed, if not explicitly listed in the product label. Therefore the uses in the spring OSR have been accepted by zRMS with the 0.3 L/ha as the MED, whereas the range of the lower doses, declared in the GAP table separately in the “Remarks” column and as the direction for the SE zone national labels, has been marked as “to be confirmed” by the cMSs in that zone.

#### **BRSNW, BRSNS; autumn application: PHYESP, PSYICH, CEUTPI**

##### **Target pest presence in trials:**

Among the **90** efficacy trials carried out in the **Maritime** EPPO zone, 7 trials tested the control of CEUTPI, 17 - the control of PSYICH and 8- the control of PHYESP.

Among the **46** efficacy trials carried out in the **North-Eastern** EPPO zone, 4 tested the control of PSYICH and 1- the control of PHYECR.

It had been originally assessed by zRMS that:

*“In the **Maritime** zone the efficacy in control of PHYESP was assessed at the level of 57%-64% in observations at 3-36 DAA, based on the counting of bites or larvae per plant or measured by the extent (%) of the damaged plant area per plot, with the maximum efficacy observed between the 6-10 DAA. Efficacy at 170-202 DAA was assessed as 94% on average (larvae/bites/plant damage), but this very good result has been demonstrated in only 2 trials out of 8 submitted. The standard Mavrik performed, within the same assessment-time framework,*

at the level of 55%-64%, with the maximum on 14-16 DAA (delayed action typical of tau-fluvalinate), and with the efficacy of 82 % at 170-202 DAA.

The efficacy in control of **PSYICH** was assessed at the level of 51%-71% in observations at 3-65 DAA based on the larvae count per plant, or on the extent of the damaged plant area per plot, with the maximum average efficacy of 71% (n=5) observed between the 11-18 DAA. The efficacy averaged across the set of 3 trials at 3DAA, or across 3 to 5 trials at 19-65 DAA, was visibly (4-7%) lower compared to standards, but the differences in the individual trials were reported as insignificant, or significance has not been declared in trial reports. On the contrary, the efficacy measured based on the larvae count per plant, at 126-189 DAA, was either 75% (6% > Karate/Hallmark, n=7), or 66 (7% > Mavrik Flo, n=5).

The efficacy in control of **CEUTPI** was assessed **only in the Maritime zone**, either at 118-166 DAA, based on larvae count per plant (88% compared to 75% with Mavrik Flo; n=7) or at 168 DAA, based on the plant damage area (84% compared to 92% with Mavrik Flo, n=1, significance not declared by the testing unit).

In the **North-Eastern zone** the efficacy in control of **PHYESP** was assessed at the level of 75%-86% (with standard Mavrik performing 46% and 63% respectively) in observations at 6-16 DAA, based on the **extent of damaged plant area** alone, with the higher efficacy of MCW-2222 observed between the 6-10 DAA, compared to 14-16 DAA. The assessment is based on a single trial.

The efficacy in control of **PSYICH** was assessed at 56%-61% (with the standard Mavrik performing the same level) in observations at 7-18 DAA, based on the **extent of damaged plant area**, or on the larvae count, with higher efficacy observed on the second assessment (11-18 DAA) compared to the first one (7-10 DAA). Efficacy based on the **larvae count** alone, at 19-65 DAA and at 126-189 DAA, was 75% (3% > Mavrik Flo), and 98% (5% > Mavrik Flo), respectively.

The single trial testing efficacy in control of *Phyllotreta cruciferae* (**PHYECR**) in the North-Eastern zone is insufficient to authorize the use against *Phyllotreta* sp. (**PHYESP**) in general. The number of trials testing for the control of *Psylliodes chrysocephala* in that zone is also lower than the required minimum: 2 trials are missing. Nevertheless, as a number of trials from the neighbouring Czech Republic and Germany cover control of *P.chrysocephala*, these can be used as data supportive for Poland. The use can be authorized.

#### **South-Eastern zone**

The autumn application was not tested and is not supported in the South-Eastern EPPO zone."

#### **TARGET DOSE RATE UPDATE TO 0.24 L/ha and consequences for efficacy**

As the result of the update triggered by Section 8, the target dose rate for the autumn application against **PSYICH**, **PHYESP** and **CEUTPI** has been reduced to **0.24 L/ha**.

Tables 3.2-177 – 3.2-179 summarize completely the efficacy data concerned with control of **PSYICH**, **PHYESP** and **CEUTPI**. Unlike in the MED chapter, **the tables had been amended by the applicant** following the update, probably in order to highlight the efficacy of the sparsely-used 0.25 L/ha dose rate, the one most similar (104%) to the new target dose: 0.24 L/ha.

With few exceptions (Table 3.2-179, **PSYICH**, 7-10 DAA, 11-18 DAA) the efficacy of MCW-2222 at 0.25 L/ha is apparently inferior to the standards used, or at best equivalent to them (**CEUTPI**, Table 3.2-177, n=4). The same is even more true for the 0.225 L/ha, the dose rate which, given the circumstances, can be only used as another, lower (94%) "proxy", or substitute, of the target 0.24 L/ha. Still, the efficacy shown with the 0.225 L/ha compared to that of standards at their full rates, allows to expect that MCW-2222 performs and keeps up with the standards slightly better at the new (+0.015 L/ha) target rate, even though the efficacy would never be as high as with the 0.3 L/ha.

Therefore, as explained by zRMS in the MED commenting box, the new target rate, although not investigated directly, has been accepted as MED, with the necessary condition that its efficacy must be described as "moderate", in the product label. Anticipating possible doubts of cMSs, related to resistance issues triggered by this lower dose rate, zRMS explains that autumn application against aphids as virus vectors (see below) has been accepted either, based on sufficient number of trials, within the same application window and using even lower dose rate of the MCW-2222: 0.2 L/ha, thus making flea beetles and the winter stem beetle exposed anyway.

The autumn use against flea beetles and the *C. picitarsis* can thereby be authorized with new target dose rate of 0.24 L/ha, with the necessary label description of "moderate control level". For details of justification of the 0.24 L/ha dose rate as new MED see the [specific zRMS comments](#) in the MED commenting box.

**BRSNW; autumn application: MYZUPE – virus vector; the Maritime zone only**

Altogether 12 trials tested control of *Myzus persicae* as the vector of the Turnip Yellow Virus in winter OSR. All these trials were carried out in the **Maritime EPPO zone** (CZ – 2 trials, DE – 1 trial, UK – 2 trials and FR – **EU South zone** – 7 trials).

The efficacy of MCW-2222 in control of MYZUPE was assessed at the level of 85% - 93% across the assessments on 2-21 DAA, with the highest efficacy in the observations on 6-7 DAA and the distance to the standard Mavrik Flo 37%-41%, to the advantage of the test item.

In five trials (CZ -2, DE, UK -2) the visual assessment of symptoms of virus infection level was carried out. In the single DE trial, 5.3% of plants were found infected in the UNCK, based on discoloration symptoms, and 0.8% of plants had shown dwarfed growth symptoms, compared to none in any of the treated plots. Likewise, in one of the UK trials the reduced plant height in the UNCK plots had been observed in two consecutive spring assessments, but there the plant height has been measured and compared to the treated plots. Plant height proved statistically lower in the untreated, compared to (all) treated plots, at the time of the second observation.

Considered nearly no incidence of symptoms in the UNCK plots in 10 trials out of 12, the data submitted are too scarce to allow for virus reduction claim as the result of the MCW-2222 application, whereas the control of the vector itself proved successful.

**Summarizing the evaluation, the following uses are accepted by the zRMS:**

#### **Maritime EPPO zone**

SOLTU: LPTNDE, MYZUPE, MACSEU (CZ, DE, NL)

BEAVA: APHIFA, MYZUPE, MACSEU (CZ, DE, ~~NL~~)

**BEAVA: APHIFA, MYZUPE (NL)**

MABSD: CARPPO, QUADPE, APHISP (CZ, DE)

MABSD: APHISP (NL)

TRZAW: ~~1APHIF~~ **1APHIG** (CZ, ~~NL, DE~~)

**TRZAW, HORVW, TTLWI, SECCW, TRZSP: 1APHIG (DE)**

**TRZAW, TTLWI, TRZSP, HORVW: 1APHIG (NL)**

TRZAW, HORVW: ~~1APHIF~~ **1APHIG**, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, ~~NL, DE~~)

**TRZAW, HORVW, TTLWI, SECCW, TRZSP: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (DE)**

**TRZAW, HORVW, AVESW, TTLWI, SECCW, TRZSP: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (NL)**

**TRZAS, HORVS: 1APHIG (NL)**

**Flower bulbs and flower tubers: 1APHIG (NL)**

Floriculture, **tree nursery & perennial nursery crops: 1APHIF 1APHIG (NL)**

BRSNW: **autumn application** against PSYICH, PHYESP and CEUTPI, **autumn** application against MYZUPE as vector of Turnip Yellow Virus.

BRSNW and BRSNS: **spring** application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

#### **North-East EPPO zone (PL)**

SOLTU: LPTNDE, MYZUPE, MACSEU (PL)

BEAVA: APHIFA, MYZUPE, ~~MACSEU~~ (PL)

MABSD: CARPPO, APHISP (PL)

TRZAW, HORVW: ~~1APHIF~~ **1APHIG**, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

TRZAW, TTLWI: ~~1APHIF~~ **1APHIG** (PL)

BRSNW: **autumn application** against PSYICH, **autumn** application against MYZUPE as vector of Turnip Yellow Virus.

BRSNW: **spring** application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

BRSNS: **spring** application in control of MELIAE, CEUTAS and DASYBR.

#### **South-East EPPO zone**

SOLTU: LPTNDE (SI, SK)

MABSD: CARPPO, QUADPE, ERISLA, APHISP (HU, SK, SI)

ZEAMX: DIABVI, PYRUNU (HU, SK, SI)

BRSNW and BRSNS: **spring** application in control of CEUTQU, CEUTNA, MELIAE, CEUTAS and DASYBR.

The following uses are **not accepted** by the zRMS:

**Maritime EPPO zone:**

HORVS, AVESP, TRZAS, TTLSO: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (NL, DE)

HORVS, AVESP, TRZAS, TTLSO: 1APHIG (DE)

**North-East EPPO zone**

BEAVA: MACSEU (PL)

HORVS, AVESP, TRZAS, TTLSO: 1APHIF (PL)

HORVS, AVESP, TRZAS, TTLSO: 1APHIF e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

SECCW, TTLWI: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (PL)

HORVW, SECCW: 1APHIF 1APHIG (PL)

BRSNW: control of *Phyllotreta* sp. (PHYESP)

The following uses should be **confirmed** by cMSs:

**Maritime EPPO zone**

TRZAS, HORVS, AVESP, TRZDS, TTLSO: 1APHIF 1APHIG (CZ, NL, DE)

AVESP, TTLSO: 1APHIG (NL)

TRZAS, HORVS, AVESP, TRZDS, TTLSO: 1APHIF 1APHIG, e.g. RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, NL, DE)

HORVW, TTLWI, SECCW, TRZSP: 1APHIF 1APHIG (CZ, NL, DE)

TRZDU, AVESW: 1APHIG (DE)

AVESW, SECCW: 1APHIG (NL)

SECCW, TTLWI, TRZSP: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (CZ, NL, DE)

TRZDU, AVESW: 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (DE)

Flower bulbs and flower tubers: 1APHIF (NL)

Tree nursery & Perennial nursery crops: 1APHIF (NL)

**South-East EPPO zone**

SOLTU: MYZUPE (SI)

BEAVA: APHIFA, MYZUPE, MACSEU (SI)

HORVS, AVESP, TRZAS, TRZDS, TTLSO: 1APHIF 1APHIG (SI)

TRZAW, HORVW, TTLWI, SECCW: 1APHIF 1APHIG, e.g., RHOPPA, MACSAV (BYDV, WYLV)/ aphids virus control (SI)

Flower bulbs and flower tubers: 1APHIF 1APHIG (SI)

Floriculture, tree nursery & Perennial nursery crops: 1APHIF 1APHIG (SI)

BRSNW and BRSNS: the dose range in spring application.

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### 3.3 Information on the occurrence or possible occurrence of the development of resistance (KCP 6.3)

In the following, an analysis of the occurrence and possible development of resistance associated with the envisaged GAP uses of the test product MCW-2222 (SL, 200 g/L acetamiprid), and based on the most recent resistance situation, is performed according to the framework provided in EPPO Standard PP 1/213 (4) ‘Resistance risk analysis’.

The resistance risk of the product MCW-2222 was evaluated by combining the inherent factors posed by the **insecticide** and the inherent factors of the **target pests** under consideration of the **agronomic risk** of the intended use.

#### *Inherent factors of the insecticide*

Regarding the insecticide, acetamiprid is classified as an IRAC Subgroup 4A insecticide (neonicotinoid). For neonicotinoids, mainly metabolic, but also target site resistance has been observed. Regarding only the resistance cases associated to acetamiprid in Central EU **Authorization Zone**, no case has been reported so far. Regarding the target species of MCW-2222, worldwide only 35 resistance cases for acetamiprid are documented at all, but none in the Central EU **Authorization Zone**. For details refer to point III. “Evidence of resistance to neonicotinoids”(in the BAD).

IRAC considers acetamiprid as having a low risk of metabolic cross-resistance between other group 4 Nicotinic acetylcholine receptor (NACHR) competitive modulators which include nicotine (Subgroup 4B), sulfoximines (Subgroup 4C), butenolides (Subgroup 4D), Mesoionics (Subgroup 4E) and Pyridylidenes (Subgroup 4F)). For further information on potential cross or multiple resistances with regard to acetamiprid, please refer to points III. “Evidence of resistance to neonicotinoids” and IV. “Cross resistance” (in the BAD).

#### *Inherent factors of the target pests*

Regarding the target pests, specific sensitivity data from nine studies conducted in different years on the major pests and key species *Brassicogethes aeneus* (MELIAE), *Psylliodes chrysocephala* (PSYICH), and on aphids in general\* are provided due to the fact, that the inherent resistance risk for some of the target pests is evaluated as medium or high under point VII. “Resistance risk assessment of unrestricted use pattern” (in the BAD). The trials conducted in different years and using pest populations sampled at various locations within the Central EU Zone show that the active ingredient acetamiprid effectively controls the respective pests. Compared to the tested reference products, acetamiprid is clearly more effective.

#### **\*Comments of zRMS:**

\* The aphids tested are: *Myzus persicae*, *M. cerasi*, *Aphis nasturtii* and *Dysaphis plantaginea* (report of 22-04-2021), *M. persicae*, *A. nasturtii* and *D. plantaginea* (report of 02-05-2022), *M. persicae* and *D. plantaginea* (report of 24-11-2022).

#### *Agronomic risk*

The agronomic risk is evaluated under point VII. “Resistance risk assessment of unrestricted use pattern” (the BAD). The agronomic risk is considered medium to low for the envisaged GAP uses. This is due to the availability of different pest control measures including cultural and mechanical techniques and the rotating cropping system in most crops. In addition, the availability of further active substances belonging to other mode of action groups and the low number of 1 to 2 applications of MCW-2222 per crop/season reduces the resistance risk. Also the rotating cropping system in most crops, the use of pest resistant cultivars where available and the exclusive use on outdoor crops minimise the agronomic risk.

#### *Risk of practical resistance*

Considering the inherent factors of the insecticide and the inherent factors of the target organisms together with the agronomic risk, a medium or low resistance risk is concluded for the different GAP uses of MCW-2222 applied for. This conclusion is not only based on the documentation of reported acetamiprid resistance cases – which shows only a limited number of cases worldwide and no cases at all within the Central EU Zone – but as well on the low potential for future development of resistant insect populations. Despite the fact that for some target species a medium or high inherent resistance risk was assessed, the risk of resistance development is assessed as medium or low for the different GAP uses of MCW-2222 applied for as a result of the conditions of use of MCW-2222 and under consideration of the medium inherent risk of the active substance. For the uses in agricultural crops, ornamentals and orchards for which approval is sought, cultural and mechanical control measures as well as alternative substances belonging to different mode of action groups are available. Furthermore, in the majority of crops full or limited rotational cropping systems are implemented. Thus, when the product is applied according to the proposed uses, the development of resistances in insects is unlikely to occur.

In conclusion, the resistance risk of the plant protection product MCW-2222 (200 g/L acetamiprid) for insecticidal outdoor use in agricultural crops, ornamentals and orchards against sucking and biting insects, when used according to the envisaged GAP uses is considered to be acceptable. Thus, the unrestricted use is not to be restricted further and hence is identical to the use applied for. The implementation of special risk modifying measures or resistance management strategies is not required for this product.

**Comments of zRMS on:**

**Information on the occurrence or possible occurrence of the development of resistance (3.3)**

The applicant has provided an extensive review of the cases of resistance to acetamiprid and other actives of the group 4A. Majority of this data is presented and commented by the applicant in the BAD. The review, based on IRAC data (2022) made available through Arthropod Pest Resistance Database (APRD), presents a record of 14 cases of resistance to acetamiprid in *Trialeurodes vaporariorum*, reported in 2010 from Spain alone. Otherwise, no resistance cases, to acetamiprid itself (although yes to other 4A actives), have been retrieved, from the APRD, and the zRMS access to this same database in January 2024 has revealed no new resistance facts indeed. The EPPO resistance database, on the other hand, as surveyed in the same time (Jan. 2024), reveals 14 records of resistance to neo-nicotinoids in Europe (DE, FR, GR, ES, UK), including 3 cases of resistance to all 7 members of the 4A group in one pest, and 4 cases of resistance to acetamiprid itself, in MYZUPE, TRIAVA and BEMITA, with one record of resistance in MYZUPE concerning the pest on peach orchard in south-eastern France.

Along with the submission, **9 sensitivity trials have been presented**, monitoring sensitivity to acetamiprid in aphids *Myzus persicae*, *M. cerasi*, *Aphis nasturtii* and *Dysaphis plantaginea*, as well as in *Psylliodes chrysocephala* and in *Brassicogethes aeneus*. The studies have covered the years of 2013, 2014, 2020, 2021 and 2022 and the pest populations had been sampled in BE, DK, North of FR, NL, PL, SE and UK (3 studies in aphids), in DE, UK and PL (2 studies in adult PSYICH) and in CZ, DE, HU, FR and PL (4 studies in adult MELIAE). The results of these trials can be summarized as follows:

The **aphid** part of the monitoring data testify that the species tested respond to acetamiprid, and that they are controlled by it effectively, including populations showing resistance or decreased susceptibility to other groups of insecticides. In one of the two studies in *P. chrysocephala* (2020), including populations from DE (5 sites), PL (3 sites) and UK (1 site), no dose response was detected with acetamiprid. Consequently, the LC<sub>50</sub> and LC<sub>90</sub> could not be determined. The other study (2021) tested populations from 16 sites in DE and 4 sites in PL. Contrary to the first trial, this one had mortality assessed following tarsal contact with products (tube test) instead of apical application / spraying. Both studies concluded that the populations tested were sensitive to acetamiprid. Four studies of *B. aeneus* had also used the tube test method. Two pairs of studies have been carried out at 7-year distance from one another (2013-14 and 2020-21). As concluded by the applicant, in some populations of MELIAE in 2020-21 a “moderate resistance” or “resistance” to acetamiprid were detected, that had not been observed previously, in the studies of 2013-14. It should nevertheless be noted that a reduction of sensitivity to the standard used in comparison (lambda-cyhalothrin) was observed either, over the 7 years between the two groups of trials. The observation itself may either suggest that the assortment of insecticide MsoA for alternate application in the OSR is poor, in the states where the populations were sampled, or the respective options have been still poorly adopted by farmers.

Since variation in performance of different products (of any active indeed) in the field, observed across the



climatic zones, across the uses claimed and across the target-adjusted dose rates may be, **next to resistance issues**, inevitable a consequence of different formulations and of the field conditions encountered in the trials, it has been concluded for most of the time that acetamiprid is still performing well. However, opinions to the contrary are expressed either. In one of the other dossiers of an acetamiprid product, known to zRMS, the gradual loss of sensitivity to neonicotinoids as a group had been reported by an applicant as evident since ca 2015. This is much in line with the view expressed by Matsuda et al. (2020), after authors publishing as early as 2015 and 2018, that the widespread use of neonicotinoids “*threatens their future*“. In yet another dossier, the scientific literature quoted by zRMS emphasizes the fact that resistance can be easily induced in some pests or pest groups by a stubborn, repeated application of **acetamiprid**, but fortunately, in many cases the susceptibility may be restored, after a number of generations, if the selection pressure is removed.

Although the biochemical background of the anticipated and observed resistance (and tolerance – in non targets) to neonicotinoid insecticides is generally recognized, a selection of the original research and review papers demonstrate how much and what type of research is still needed in order to understand even more precisely the interaction of the group with target and non-target organisms. It is apparently clear now, that there are several types of nAChR architecture in insects and multiple binding sites within them, each contributing to a different degree to the efficacy of insecticidal action. Different neonicotinoids are known to interact in variable ways with different nAChRs (Moffat et al. 2016, Shimada et al. 2020, Matsuda et al. 2020). That is why, even though “*compounds of Subgroups 4A to 4F are believed to have the same target site*” (the applicant, BAD), the statement of low risk of the cross-resistance, within the group 4 as a whole, is justified. This is but one optimistic message, as the modern assortment of the group 4 is in fact restricted to the 3 actives: acetamiprid, sulfoxaflor and flupyradifurone, making the rotation options, within the group 4, **rather moderate**.

As can be seen, with even a snapshot of original-research and review papers, taken by zRMS, the emerging and development of neonicotinoid resistance in arthropods is rather complex an issue, and still subject to both basic and applicable research. Nonetheless, the facts established so far allow for a definite practical conclusion: The monitoring data, provided by the applicant with the present submission, along with the APRD and EPPO dBase data, do substantiate the opinion that resistance to the neonicotinoid insecticide acetamiprid **is already in place in pest populations**, but while the risk of its further development is real, it may be indeed estimated as medium to low, depending on the target species in question.

At the same time, it is the zRMS opinion that all possible measures related to the agricultural context of application and capable of reducing the risk to acceptable level are still at hand of the end user and can be effective, **provided that they are implemented**. Majority of these measures are the standard components of the good agricultural practice such as crop rotation and cultural techniques. Furthermore, no more than 2 applications are proposed per growth season or per crop, which should not follow one another; if the third application is needed, another MoA should be used in between. In species producing more than one generation in the growth season care should be taken to avoid spraying two consecutive generations with acetamiprid. The above recommendations should be found in the national labels.

Regardless of the zRMS standpoint concerned with the present submission, it is beyond question that considerable effort is needed, on the side of the industry, that is aimed not just at new products, but at delivering **new actives**. Without it, the situation in arthropod control (and in any other pests indeed) is sooner or later bound for disaster.

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The sources quoted:

Christopher **Moffat**, Stephen T. Buckland, Andrew J. Samson, Robin McArthur, Victor Chamosa Pino, Karen A. Bollan, Jeffrey T.-J. Huang and Christopher N. Connolly, 2016. *Neonicotinoids target distinct nicotinic acetylcholine receptors and neurons, leading to differential risks to bumblebees*. Scientific Reports | 6:24764 | DOI: 10.1038/srep24764  
Shota **Shimada**, Masaki Kamiya, Sho Shigetou, Kakeru Tomiyama, Yuma Komori, Leo Magara, Makoto Ihara and Kazuhiko Matsuda, 2020. *The mechanism of loop C-neonicotinoid interactions at insect nicotinic acetylcholine receptor  $\alpha 1$  subunit predicts resistance emergence in pests*. Scientific Reports | (2020) 10:7529 | <https://doi.org/10.1038/s41598-020-64258-z>  
Kazuhiko **Matsuda**, Makoto Ihara and David B. Sattelle, 2020. *Neonicotinoid Insecticides: Molecular Targets, Resistance, and Toxicity*. Annu. Rev. Pharmacol. Toxicol. 2020. 60:241–55 <https://doi.org/10.1146/annurev-pharmtox-010818-021747>

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### 3.4 Adverse effects on treated crops (KCP 6.4)

#### 3.4.1 Phytotoxicity to host crop (KCP 6.4.1)

Introductory note: The evaluation of the phytotoxicity was not affected by the change of the target rate for certain uses in winter oilseed rape and apples as the former target rate represents the worst case compared to the new lowered target rate. Thus, the new rates are covered by the following considerations.

Phytotoxicity was evaluated in all efficacy trials in maize, apple, potato, cereals, oilseed rape, sugar beet and ornamentals covering a wide range of commercially grown varieties. All trials were conducted under GEP and followed the appropriate EPPO standards by officially recognised testing organisations. The test design was always a randomised complete block design with 4 replicates. The trials were conducted in various years and countries representing the Maritime, North-East and South-East EPPO climatic zone. An overview of all efficacy and dose justification trials including trial IDs, varieties and a short description of the trial methodology is presented in chapter 3.2.3 Efficacy tests (KCP 6.2) as well as in the BAD.

**Table 3.4-1: Overview of efficacy trials with phytotoxicity assessment**

No.	Crop	Efficacy trials					No. of varieties
		No.	Countries			Status <sup>(1)</sup>	
			Mar	N-E	S-E		
(1)	Maize	18	-	-	18	GEP	18
(2)	Apple	100	40	21	39	GEP	28
(3)	Potato	70	23	30	17	GEP	40
(4)	Cereals	63	35	16	12	GEP	( <sup>2</sup> )
(5)	Oilseed rape	<del>203</del> 202	102	47	54	GEP	107
(6)	Sugar beet	31	11	20	-	GEP	24
(7)	Ornamentals	22	22	-	-	GEP	( <sup>2</sup> )
Total:		<del>507</del> 506	233	134	140	GEP	-

(1) For an overview of the testing facilities and the corresponding certificates please refer to chapter 3.7

(2) Not feasible due to different crops within this crop group. Please refer to overview tables presented in chapter 3.2.3 stating the different varieties per crop.

General phytotoxicity did not occur in any of the trials conducted in maize, apple, potato, cereals, oilseed rape, sugar beet and ornamentals. In contrast, plants treated with the test product MCW-2222 were significantly more vigorous compared to the untreated control in some of the trials in maize, potato, winter and spring cereals, oilseed rape, sugar beet, and ornamentals and the results are given in detail in chapter 3.4.1 of the BAD for the respective crops. Further, there were two trials in winter oilseed rape where treated plants showed significantly less stunting or thinning, respectively, than the untreated plants. Thus, MCW-2222 can be regarded as completely safe for all target crops when applied according to the envisaged GAP use.

The evaluation of phytotoxicity on host crops of MCW-2222 (i.e., maize, apple, potato, cereals, oilseed rape, sugar beet and ornamentals) complies with the uniform principles.

**Comments of zRMS on:  
Phytotoxicity to host crop (3.4.1)**

No phytotoxicity symptoms have been observed in efficacy trials carried out in apple, potato, sugar beet, maize, winter wheat, spring wheat, winter barley, spring barley, winter triticale, winter oat, ornamentals, nor in winter or spring (2 trials) oilseed rape. It can be concluded, that MCW-2222 can be safely used in the target crops.



### 3.4.2 Effect on the yield of treated plants or plant product (KCP 6.4.2)

Crop yield was assessed in efficacy trials conducted on maize, potato, cereals, oilseed rape, sugar beet, ornamentals and apple. However, for the uses included in this submission on maize, potato, cereals, oilseed rape, sugar beet and ornamentals and conducted according to the relevant EPPO guidelines stated in the following table, yield assessments are not required. Therefore, for these crops the yield data is not presented.

Regarding apple, total of 47 trials were carried out to evaluate yield and quality level on apple trees treated with MCW-2222. All trials were conducted to GEP and followed the appropriate EPPO standards by officially recognised testing organisations. The test design was a randomised complete block design with 4 replicates. The trials were conducted in the years 2011-2015, 2021, and 2022 in CZ, DE, PL, HU, RO, and SK representing the Maritime, North-East and South-East EPPO climatic zone.

**Table 3.4-2: Overview of trials with yield determination**

Use no.	Crop	No. of trials (EPPO zone)			Argumentation for non-submission
		Maritime	North-East	South-East	
(1)	Maize	-	-	-	Not required by EPPO PP 1/13(3), 1/212(1), 1/274(1)
(2)	Apple	24	12	11	-
(3)	Potato	3 5*	4 2*	-	Not required by EPPO PP 1/12(4), 1/230(1)
(4)	Cereals	3*	-	-	Not required by EPPO PP 1/20(3); 1/70(4)
(5)	Oilseed rape	13*	8*	8*	Not required by EPPO PP 1/73(3), 1/83(2), 1/107(3), 1/178(3), 1/218(1), 1/219(1), 1/220(1), 1/294(1)
(6)	Sugar beet	-	-	-	Not required by PP 1/228(2/3)
(7)	Ornamentals	-	-	-	Not required by PP 1/23(2)

\* Since data is not required according to EPPO and no phytotoxicity occurred, an overview of the results was omitted

All 47 studies conducted in apple revealed no negative impact of MCW-2222 on the fruit yield or fruit quality in terms of commercial product. In contrast, the application of MCW-2222 for the effective control of sucking and biting insects mostly improved the yield level when compared to the untreated control. Thus, MCW-2222 can be regarded as safe in apple when applied according to the GAP uses as described in Part B, Section 0.

In conclusion, any negative effect of MCW-2222 on the yield can be excluded based on the yield data presented in the BAD in chapter 3.4.2. In contrast, the effective control of the target pests mostly improves yield of the treated plants compared to the untreated control. Since submission of data for the uses against sucking and biting insects in maize, potato, cereals, oilseed rape, sugar beet and ornamentals is not requested by EPPO, and no negative impact is to be expected by the insecticide treatment due to complete absence of any phytotoxicity, MCW-2222 can be regarded as safe for all requested uses (refer to Part B, Section 0).

The evaluation of effects on the yield of treated plants and plant products for the GAP uses of MCW-2222 complies with the uniform principles.

#### Comments of zRMS on:

#### Effect on the yield of treated plants or plant product (3.4.2)

##### Maize

According to the EPPO guideline: PP 1/13(3), 1/212(1) and 1/274(1) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted in maize.

##### Apple

Quantitative and qualitative recording of yield is not obligatory required due to the EPPO guidelines: PP 1/258

(1) and PP 1/131 (3). The EPPO guideline: PP 1/7 (3) requires recording of yield. Based on the submitted yield data from efficacy trials it can be concluded, that no adverse effect of MCW-2222 on apple fruits was demonstrated. Additionally, increase of the yield was noted as compared treated objects with the untreated control. Detailed data on yield can be found in BAD document.

#### **Potato**

According to the EPPO guidelines: PP 1/12 (4), PP 1/231 (1) quantitative and qualitative recording of yield is not required. Therefore, no yield data has been presented by the applicant. However, yield was recorded in 7 efficacy trials conducted in Maritime EPPO zone (5 trials carried out in Czech Republic (CZ13IESOLTU026A, CZ14IESOLTU009A) and Germany (DE15IESOLTU320A, DE15IESOLTU320B, DE15IESOLTU320C)) and North-East EPPO zone (2 trials carried out in Poland: PL13IESOLTU204A, PL13IESOLTU204B). Statistically significant increase of the yield (tuber harvestable) was noted in 2 Polish trials and in 1 Czech Republic trial for all trial objects treated with MCW-2222 and reference products and in 1 other German trial after application of MCW-2222 at dose rate of 0.15 L/ha. No statistically significant differences in tuber harvestable yield have been demonstrated in other 3 trials. Detailed data on yield can be found in single trial reports.

#### **Cereals**

According to the EPPO guideline: PP 1/20(3) and 1/70(4) quantitative and qualitative recording of yield is not obligatory required. However, yield was recorded in 3 efficacy trials conducted in the Maritime EPPO climatic zone (in Czech Republic and Germany). The increase of the yield has been observed for either the test and reference product compared to the untreated objects.

#### **Sugar beet**

According to the EPPO guideline: PP 1/228 (3) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted in sugar beet.

#### **Oilseed rape**

Quantitative and qualitative recording of yield is not obligatory, according to the guidelines followed by the applicant in the OSR trials. Therefore, and since the yield data have not been summarized by the applicant, they were also not evaluated.

#### **Ornamentals**

According to the EPPO guideline: PP 1/23(2) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted on ornamentals.

### **3.4.3 Effects on the quality of plants or plant products (KCP 6.4.3)**

Product quality in terms of the amount of commercial product (COMPRO) was determined for apples in the course of the yield trials. Details are reported under chapter 3.4.2 of the BAD.

Product quality in terms of taint tests was determined for fresh and processed apples and for processed potatoes. For a summary please refer to chapter 3.4.4 below, and for detailed information on the trials refer to the respective chapter of the BAD.

Studies on yield quality (apple) and on processing/taint (apple and potato) revealed no negative impact of MCW-2222 on quality of plant products.

#### **Comments of zRMS on:**

#### **Effects on the quality of plants or plant products (3.4.3)**

##### **Maize**

According to the EPPO guideline: PP 1/13(3), 1/212(1) and 1/274(1) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted in maize.

##### **Apple**

Quantitative and qualitative recording of yield is not obligatory required due to the EPPO guidelines: PP 1/258

(1) and PP 1/131 (3). The EPPO guideline: PP 1/7 (3) requires recording of yield. Based on the submitted yield data from efficacy trials it can be concluded, that no adverse effect of MCW-2222 on quality of apple fruits was demonstrated. In a part of the trials significantly less unmarketable fruits from treated plots was demonstrated as compared with untreated control. In some of the trials significantly less fruits with low or high russetting from treated plots was demonstrated as compared with untreated control. Detailed data on yield can be found in BAD document.

#### **Potato**

According to the EPPO guidelines: PP 1/12 (4), PP 1/231 (1) quantitative and qualitative recording of yield is not required. Therefore, no yield data has been presented by the applicant. However, yield was recorded in 7 efficacy trials conducted in Maritime EPPO zone (5 trials carried out in Czech Republic (CZ13IESOLTU026A, CZ14IESOLTU009A) and Germany (DE15IESOLTU320A, DE15IESOLTU320B, DE15IESOLTU320C)) and North-East EPPO zone (2 trials carried out in Poland: PL13IESOLTU204A, PL13IESOLTU204B). Statistically significant increase of the yield (tuber large) was noted in 2 Czech Republic trials and in 1 Polish trial for all trial objects treated with MCW-2222 and reference products. At the same time, statistically significant decrease of the yield (tuber small) was noted in 1 Czech Republic and in 1 Polish trial for all trial objects treated with MCW-2222 and reference products. Detailed data on yield can be found in single trial reports.

#### **Cereals**

According to the EPPO guideline: PP 1/20(3) and 1/70(4) quantitative and qualitative recording of yield is not obligatory required. However, yield was recorded in 3 efficacy trials conducted in the Maritime EPPO climatic zone (in Czech Republic and Germany). No adverse effect on moisture content, TKW and HLW has been noted for either the test and reference product compared to the untreated objects.

#### **Sugar beet**

According to the EPPO guideline: PP 1/228 (3) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted in sugar beet.

#### **Oilseed rape**

Testing for plant and its products quality change following test product application is not obligatory, according to the guidelines followed by the applicant in the OSR trials. Therefore these data had not been collected.

#### **Ornamentals**

According to the EPPO guideline: PP 1/23(2) quantitative and qualitative recording of yield is not obligatory required. Yield was not recorded in any efficacy trial conducted on ornamentals.

### **3.4.4 Effects on transformation processes (KCP 6.4.4)**

The quality of treated and untreated potatoes and apples in terms of sensory attributes and culinary aptitude was determined in a total of 16 taint/processing tests: the samples of 8 tests in potato were collected in Poland, Germany and Romania, the samples of 8 trials in apples were collected in Poland and Czech Republic. The laboratory testing of all trials was conducted in Poland. Any unintentional effects of MCW-2222 applied in potatoes (1 x 36 g a.i./ha) and apples (1-3 x 80 g a.i./ha or 2-3 x 40 or 50 g a.i./ha) did not occur in any of the trials. Thus, MCW-2222 can be regarded as safe according to the envisaged GAP uses.

The data submitted for the effect on taint and processing of potatoes and apples treated with MCW-2222 comply with the uniform principles.

An overview of taint and processing studies with potatoes and apples treated with MCW-2222 is presented below, for detailed information please refer to the BAD and the relevant appendices thereof

**Table 3.4-3: Overview of processing and taint trials with MCW2222 conducted in potato and apple (16 trials)**

Trial type	Report no.	Crop	Sampling		Trial status
			Country	Year	
Maritime EPPO Zone					
Processing/taint	15ADA0139-6	Potato	DE	2014	GEP
Processing/taint	DE15IESOLTU320C	Potato	DE	2015	GEP
Processing/taint	DE15IESOLTU320A	Potato	DE	2015	GEP
Processing/taint	DE15IESOLTU320B	Potato	DE	2015	GEP
Processing/taint	PL15IPMABSD100A	Apple	CZ	2015	GEP
Processing/taint	15ADA0138-4	Apple	CZ	2014	GEP
Processing/taint	15ADA0138-5	Apple	CZ	2014	GEP
North-East EPPO Zone					
Processing/taint	PL15IPMABSD100B	Apple	PL	2015	GEP
Processing/taint	15ADA0187-3	Apple	PL	2015	GEP
Processing/taint	15ADA0138-1	Apple	PL	2014	GEP
Processing/taint	15ADA0138-2	Apple	PL	2014	GEP
Processing/taint	15ADA0138-3	Apple	PL	2014	GEP
Processing/taint	15ADA0139-1	Potato	PL	2014	GEP
Processing/taint	15ADA0139-2	Potato	PL	2014	GEP
Processing/taint	15ADA0139-3	Potato	PL	2014	GEP
South-East EPPO Zone					
Processing/taint	15ADA0188-1	Potato	RO	2015	GEP

All trials were conducted in accordance with GEP principles and appropriate EPPO guidelines by officially recognised testing organisations. For a short description of the trial methodology please refer to the following table.

**Table 3.4-4: Details on trial methodology**

<b>Guidelines</b>	General guidelines	EPPO PP 1/242(1/2), 1/243(1/2)
	Specific guidelines	MB/AGR/011, MB/AGR/012, PN-EN ISO 8589:2010, PN-EN ISO 4120: 2007, PN-EN ISO 5492:2009
<b>Experimental design</b>	Plot design/ field site	RCBD (8)
	Number of assessors	Potato: 18 (8) Apple: 18 (8)
	Kind of transformation	<u>Potato:</u> - chips and diced potatoes (rinsed, peeled, washed, cut to blanched, dried and frozen) - mashed potatoes (peeled, rinsed, boiled and blended) <u>Apple:</u> - juice (fruits washed, shredded, pressed and pasteurized) - dried fruits (washed, cut into thin slices and dried at 50- 80°C)
<b>Crop</b>	Trials per crop	Potato: 8 Apple: 8
	Varieties per crop	Potato: Gala, Adretta, Fontane, Toscana, Carrera, Vineta (2), Tajfun Apple: James Grieve, Ligol (3), Cortland, Jonagold, Resista, Golden Delicious
<b>Application</b>	Dose rates	Potato: 1 x 0.18 L (8 trials) Apple: 1 x 0.40 L (1 trial), 3 x 0.40 L (2 trials), 3 x 0.20, 0.25 or 0.40 L (3 trials), 2 x 0.20, 0.25 or 0.40 L (2 trials)
	Number of applications Intervals between applications	Potato: 1 ( 8 trials) Apple: 1 (1 trial), 2 (2 trials) with and interval of 51-56 days, 3 (5 trials) with an interval of 6-42 days
	PHI (pre-harvest interval)	Potato: n.s. Apple: 32-65 DALA

	Spray volumes	Potato: 200-300 L/ha Apple: 750-1000 L/ha
<b>Assessment</b>	Assessment types	Potato: - taint evaluation test (diced potatoes, chips and mashed potatoes) Apple: - taint evaluation test (apples, apple juice and dried apples)
	Method	Triangle Test Method – a minimum of 10 out of 18 positive responses (indication of different product) are required to establish a significant difference between samples, probability $\alpha = 0.05$ is 10

## Results

In a total of 16 sensory studies conducted in the years 2014 and 2015, the sensoric and culinary quality of potato tubers and apples (harvested from trials in Czech Republic, Germany, Poland and Romania) from MCW-2222 treated, untreated and reference treated plots was determined.

**Potato:** Eight taste tests were performed in the years 2014 and 2015 on seven different potato varieties. The samples collected from trials performed with an application rate of 0.18 L/ha MCW-2222. The Triangle Test Method was conducted on treated and untreated potatoes which had been formerly cooked and diced, baked or mashed. 18 trained assessors were asked to pick out the odd sample, distinguishing flavour (including odour) only. No statistically significant differences were observed in any of the eight trials (refer to Table 3.4-5).

**Table 3.4-5: Result of triangle test (18 assessors) with processed potatoes collected in Germany, Poland and Romania, 2014 and 2015**

Treatment	Tested product	No. of responses indicating presence of taint *				Results
		Germany				
		6.4.4/001	6.4.4/002	6.4.4/003	6.4.4/004	
MCW-2222 (0.18 L/ha)	chips	7	6	9	7	< 10
	diced potatoes	8	6	6	4	< 10
	mashed potatoes	-	6	6	6	< 10
Mospilan 20 SG (0.15 kg/ha)	chips	7	3	7	6	< 10
	diced potatoes	4	6	5	6	< 10
	mashed potatoes	-	6	5	5	< 10
Treatment	Tested product	No. of responses indicating presence of taint *				Results
		Poland			Romania	
		6.4.4/014	6.4.4/015	6.4.4/016	6.4.4/008	
MCW-2222 (0.18 L/ha)	chips	6	6	5	5	< 10
	diced potatoes	3	4	5	7	< 10
	mashed potatoes	-	-	-	5	< 10
Mospilan 20 SG (0.15 kg/ha)	chips	10**	6	6	9	< 10
	diced potatoes	7	3	4	9	< 10
	mashed potatoes	-	-	-	7	< 10

\* lack of taint for 18 assessors at a probability level of  $\alpha = 0.05$  is fulfilled, when the number of responses indicating taint, is <10

\*\* there were significant differences of taste in chips after processing of potatoes treated with Mospilan 20 SP

**Apple:** Eight taint tests were performed in the year 2015 on six different apple varieties with samples collected in Czech Republic and Poland (2014, 2015). A single application of 0.40 L/ha MCW-2222 was applied in one trial, three applications of MCW-2222 at 0.40 L/ha were tested in two trials and two or three applications MCW-2222 at 0.20, 0.25 or 0.40 L/ha in a total of five trials. The Triangle Test Method was conducted on treated and untreated apples which had been formerly juiced or dried, reflecting commercial process operations. 18 trained assessors were asked to pick out the odd sample, distinguishing flavour (including odour) only. No statistically significant differences were observed in any of the eight trials (refer to Table 3.4-6).

**Table 3.4-6: Result of triangle test (18 assessors) with apples and apple products collected in Czech Republic and Poland, 2014 and 2015**

Treatment	Tested product	No. of responses indicating presence of taint *			Results
		Czech Republic			
		6.4.4/005	6.4.4/009 <sup>1)</sup>	6.4.4/010 <sup>1)</sup>	
MCW-2222 (0.40 L/ha)	apples	8	7	3	< 10
	apple juice	7	7	7	< 10
	dried apples	6	5	9	< 10
Mospilan 20 SG (0.25 kg/ha)	apples	3	3	7	< 10
	apple juice	9	6	6	< 10
	dried apples	8	5	7	< 10

Treatment	Tested product	No. of responses indicating presence of taint *					Results
		Poland					
		6.4.4/006	6.4.4/007	6.4.4/011 <sup>1)</sup>	6.4.4/012	6.4.4/013 <sup>1)</sup>	
MCW-2222 (0.40 L/ha)	apples	9	5	7	3 <sup>2)</sup>	7	< 10
	apple juice	9	6	7	7 <sup>2)</sup>	5	< 10
	dried apples	5	7	5	9 <sup>2)</sup>	7	< 10
Mospilan 20 SG (0.25 kg/ha)	apples	7	5	3	7	5	< 10
	apple juice	8	5	6 <sup>3)</sup>	6 <sup>3)</sup>	11	< 10
	dried apples	6	9	5	7	9	< 10

\* lack of taint for 18 assessors at a probability level of  $\alpha = 0.05$  is fulfilled, when the number of responses indicating taint, is <10

- 1) MCW-2222 was additionally applied at 0.20 and 0.25 L/ha, but since no impact on taint was observed with 0.4 L/ha, the lower rates have not been tested
- 2) Samples treated with 0.25 L/ha MCW-2222 (samples treated with 0.4 L/ha were not collected, samples treated with 0.2 L/ha have not been tested due to the absence of any taint after 0.25 L/ha)
- 3) there were significant differences of taste in apple juice after processing of apples treated with Mospilan 20 SP

## Conclusion

Considering the results of all 16 sensory studies, the treatment with MCW-2222 according to the GAP uses as presented in Part B, Section 0 did not have any unintentional effect on the taste of potato and apple products after processing (e.g. chips, apple juice, dried apples) and the taste of mashed potatoes or fresh apples.

Thus, MCW-2222 can be regarded to have no adverse effect on taint and processing of potatoes and apples when applied according to the envisaged GAP uses (refer to Part B, Section 0).

### Comments of zRMS:

#### Effects on transformation processes (3.4.4)

16 taint tests have been submitted to determine effects on transformation processes. 8 tests were carried out on potato (Germany, Poland and Romania) and 8 tests on apple (Czech Republic and Poland). In case of potato, there was no taint of processing potatoes (chips, diced and mashed potatoes) after application of the tested product MCW-2222 at the rate of 0.18 L/ha. In case of apple, there was no taint of fresh and processing apples (apple juice and dried apples) after application of the tested product MCW-2222 at the rate of 0.4 L/ha. Taking into account all dataset, it can be concluded that MCW-2222 is safe for potato and apple when applied according to the recommendations in the GAP table.

### 3.4.5 Impact on treated plants or plant products to be used for propagation (KCP 6.4.5)

Submission of data on propagation material is not required for insecticides according to EPPO PP 1/135(4) '*Phytotoxicity assessment*'.

**Comments of zRMS:** Noted and accepted.

## 3.5 Observations on other undesirable or unintended side-effects (KCP 6.5)

### 3.5.1 Impact on succeeding crops (KCP 6.5.1)

Submission of data or information for the impact on succeeding crops is not required for the use in apple since pome fruits are perennial crops and not followed in rotation by succeeding crops.

For all other uses a simple study considering biological data may be all that is required for insecticides according to EPPO PP 1/207(2) '*Effects on succeeding crops*'. Therefore, explicit reference is made to study KCP 10.6.2/01 (Friedrich, S., 2014) submitted with dRR Part B9 and summarised and evaluated in chapter 9.10 'Effects on non-target terrestrial plants (KCP 10.6)' of dRR Part B9. A concise summary of the evaluation is presented in the following:

The potential effects of MCW-2222 on vegetative vigour of six non-target terrestrial plants has been tested; there were no observable effects on vegetative vigour at a test rate of 510 g a.s./ha (equivalent to 2.55 L product/ha) for six species tested. The species were oats, ryegrass; brassica, tomato, cucumber, soybean. Less than 50% effect on vegetative vigour on all species was observed at 510 g a.s./ha a rate much higher than the full proposed label rate of 80 g a.s./ha (equivalent to 0.40 L product/ha). It can therefore be concluded that the proposed use of MCW-2222 poses no unacceptable risk to non-target plants.

#### Effects on non-target plants (KCP 10.6.2/01):

Test sub- stance	Species	Effect (%) at maximum pro- posed application rate	NOEC (g a.s./ha)	PER <sub>off-field</sub> (g a.s./ha)	TER
		Vegetative vigour			
MCW-2222	6 species <sup>a</sup>	0%	> 510	20.424	>25

a) oats, ryegrass, brassica, tomato, cucumber, soybean

The estimated TER values demonstrated that no negative effects on non-target plants are expected when MCW-2222 is applied according to the intended application rates. Furthermore, MCW-2222 is an insecticide without any herbicidal action and therefore not expected to be harmful for any succeeding crop. Additionally, any negative impact on succeeding crops from the long-term practical experience with the active ingredient acetamiprid in Europe is not known. In conclusion, the GAP uses applied for MCW-2222 are considered to be safe for succeeding crops.

#### **Comments of zRMS:** **Impact on succeeding crops (3.5.1)**

In a 21-day vegetative vigour test, the phytotoxicity of MCW-2222 to 6 plant species was tested (oat, perennial ryegrass, turnip, tomato, cucumber, soybean). In the experiments MCW-2222 was applied onto the foliage of plants in the 2 - 4 leaf stage at the nominal application rate of 510 g a.s./ha. According to the final conclusion, the foliar application of MCW-2222 at the rate of 510 g a.s./ha to six terrestrial plant species at the 2 to 4 leaf

stage did not produce adverse effects on survival and shoot fresh weight. The NOER for survival and shoot fresh weight was determined to be > 510 g a.s./ha. Taking into account the above results, no adverse effect on succeeding crops is expected after application of MCW-2222 at the intended dose rates.

### **3.5.2 Impact on other plants including adjacent crops (KCP 6.5.2)**

Since MCW-2222 is an insecticide and was tested on a range of sensitive crops, selectivity data can be taken from the efficacy trials presented in this document and former applications according to EPPO guideline PP 1/256(1) '*Effects on adjacent crops*'. Any negative side effects on target or adjacent crops have not been reported in the efficacy trials. For more details please refer to the risk assessment for non-target plants in chapter 9.10 of dRR Part B9. In conclusion, the GAP uses applied for MCW-2222 are considered to be safe for non-target plants.

#### **Tank cleaning**

Furthermore, tank cleaning studies/ calculations are not submitted, because MCW-2222 is an insecticide and there is no risk to subsequently treated crops.

**Comments of zRMS:** Noted and accepted.

### **3.5.3 Effects on beneficial and other non-target organisms (KCP 6.5.3)**

During the course of the effectiveness trials (chapter 3.2) observations indicating any effects whatsoever on beneficial or other non-target organisms were not reported. The lack of observations of negative impacts on non-target organisms is in accordance with the results of toxicity tests in ecotoxicologically relevant indicator species. For details, please refer to the relevant subchapters of dRR Part B9.

**Comments of zRMS:** Noted.

### **3.6 Other/special studies**

None.



### 3.7 List of test facilities including the corresponding certificates

**Table 3.7-1: List of test facilities**

Testing facility	Country	Address	Telephone Fax / E-Mail	Certificate (Yes or No)	Link to GEP Certibase
Agrartest GmbH, Germany	DE	Palmbachstr.37 65326 Aarbergen- Panrod	Phone: +49(0)6120 921970 E-mail: h.rohr@agrartest.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70565237b">http://gepcertibase.eu/certificate/download/1d70565237b</a> <a href="http://gepcertibase.eu/certificate/download/1d7057d911d">http://gepcertibase.eu/certificate/download/1d7057d911d</a>
AGRECO Sp. z o.o., Oława, Poland	PL	ul. Cicha 1 lok. 106 57-320 Polanica- Zdrój	- E-mail: agreco@agreco.pl	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ad79">http://gepcertibase.eu/certificate/download/1d70566ad79</a>
AGRITEC Research, Breeding and Services, Ltd, Czech Republic	CZ	Zemědělská 2520/16 787 01 Šumperk	Tel: +420 583 382 204 E-mail: safar@agritec.cz	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aead">http://gepcertibase.eu/certificate/download/1d70566aead</a>
Agro Research Consulting, Poland	PL	ul. Nadburzańska 32, 99-400 Łowicz	Tel: +48 728 458 853 E-mail: -	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566afa4">http://gepcertibase.eu/certificate/download/1d70566afa4</a>
Agrolab A/S, Denmark	DK	Røjleskovvej 18, DK-5500 Middelfart,	Tel: + 45 92445009 E-Mail: agrolab@agrolab.dk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566afb2">http://gepcertibase.eu/certificate/download/1d70566afb2</a>
Agrolab Sverige AB, Sweden	SE	Kölbäck Säteri 1, 59692 Skänninge	Tel: +46 46291822 E-Mail: agrolab@agrolab.se	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566af88">http://gepcertibase.eu/certificate/download/1d70566af88</a>
AgroProspect SRL, Romania	RO	Fantana Nr. 1, Brasov	Tel: +40 74511555 E-Mail: cbotoman@agroprospect.ro	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aec2">http://gepcertibase.eu/certificate/download/1d70566aec2</a>
AgroTest, Revel, France	FR	Forum d'Entreprises Avenue de Castelnaudary 31250 Revel	Phone: 33-05 62 26 80 07 Mail: agrotest@aliceadsl.fr	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566abda">http://gepcertibase.eu/certificate/download/1d70566abda</a>
Anadiag Hungary Kft, Hungary	HU	H2921, Komárom, Széchenyi István út 12	Phone: +36-30-868-03-16 E-mail: david.blasko@anadiag.eu	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566a9c8">http://gepcertibase.eu/certificate/download/1d70566a9c8</a>
BioChem agrar GmbH, Germany	DE	Kupferstraße 6 04827 Machern OT Gerichshain	Phone: +49(0)34292/863-0 Email: biochemagrار@biochemagrار.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566acbb">http://gepcertibase.eu/certificate/download/1d70566acbb</a>
BIOTEK Agriculture Polska Sp. z o o., Poland	PL	Gac 64 55-200 Olawa	Phone: +48(0)713014462 E-mail: contact@biotek-agriculture.pl	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aa62">http://gepcertibase.eu/certificate/download/1d70566aa62</a>
BTL Bio-Test Labor GmbH Sagerheide, Germany	DE	Birkenallee 19 D-18184 Sagerheide	-	Yes	see corresponding document provided in BAD, chapter 3.7

Testing facility	Country	Address	Telephone Fax / E-Mail	Certificate (Yes or No)	Link to GEP Certibase
Central Controlling and Testing Institute of Agriculture, (ÚKSÚP) Bratislava, Slovakia	SK	Matúškova 21 83316 Bratislava	Phone: +421 259 880 200 E-mail: pesticidy@uksup.sk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d7056837a5">http://gepcertibase.eu/certificate/download/1d7056837a5</a>
CPR Europe Kft., Hungary	HU	H-9700 Szombathely, Török Ignác u. 30.	Tel: +36 202404402 E-mail: tbarasits@cprp.eu	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566b00c">http://gepcertibase.eu/certificate/download/1d70566b00c</a>
Essais+, Boyelles, France	FR	1 rue du 8 mai 62128 Boyelles	Phone: +33 (0)3 21 58 37 77 Fax: +33 (0)3 21 58 43 63	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ac9a">http://gepcertibase.eu/certificate/download/1d70566ac9a</a>
Eurofins Agrosience Services Kazmierz Sp. z o.o., Poland	PL	ul. Parkowa 6 64-530 Kazmierz	Tel: +48 694289035 E-Mail: GrzegorzGlowacki@eurofins.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ade6">http://gepcertibase.eu/certificate/download/1d70566ade6</a>
Eurofins Agrosience Services Ltd, United Kingdom	UK	Slade Lane, Wilson DE73 8AG Melbourne, Derbyshire	Tel: +44 7584529033 E-Mail: josephnicholson@eurofins.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ad3a">http://gepcertibase.eu/certificate/download/1d70566ad3a</a>
Eurofins Agrosience Services Sp. z o.o., Szamotuły, Poland	PL	Galowo ul. Wierzbowa 12 64500 Szamotuły	Phone: +48 (0)61 29 27 08 1 E-mail: KrzysztofRozalski@eurofins.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566a907">http://gepcertibase.eu/certificate/download/1d70566a907</a>
Fertico Sp. z o.o., Bledów, Poland	PL	Goliany 43 05-620 Bledów	Phone: + 48 48 66 80 789 E-mail: research@fertico.com.pl	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566b0a8">http://gepcertibase.eu/certificate/download/1d70566b0a8</a>
Field Research Support, Wunstorf, Germany	DE	Potts Kamp 8 31515 Wunstorf	Phone: +49(0)5031 5166999 Fax: +49(0)5031 5166998	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ad0f">http://gepcertibase.eu/certificate/download/1d70566ad0f</a>
Fructika Kft, Hungary	HU	4493 Tiszakanyár Ady Endre utca 7	-	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566b024">http://gepcertibase.eu/certificate/download/1d70566b024</a>
Fyse, s.r.o. AgroLab Koláre, Slovakia	SK	Školská 88 991 09 Koláre	Phone: +421 47 48 994 12 E-mail: fyse@fyse.sk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ac45">http://gepcertibase.eu/certificate/download/1d70566ac45</a>
Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia	SK	Okružná 3771 97901 Rimavská Sobota	Phone: +421 475522178 E-mail: info@gemerprodukt.sk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aa09">http://gepcertibase.eu/certificate/download/1d70566aa09</a>
Ing. Jitka Marečková, Toužim, Czech Republic	CZ	Krásné Údoli 141 36401 Toužim	-	Yes	<a href="http://gepcertibase.eu/certificate/download/1d7056831a5">http://gepcertibase.eu/certificate/download/1d7056831a5</a>
Ing. Ľubica Forgáčová, Boliarov, Slovakia	SK	Boliarov 54 044 47 Boliarov	Phone: +421 905 207 851 E-mail: lubicaef@centrum.sk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d705683251">http://gepcertibase.eu/certificate/download/1d705683251</a>
Ingenieurbüro Hetterich, Schwarzach, Germany	DE	Bambergerstr. 50 97359 Schwarzach am Main	Phone: +49(0)9325902247 E-mail: a.hetterich@hetterich-feldversuche.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566abac">http://gepcertibase.eu/certificate/download/1d70566abac</a>

Testing facility	Country	Address	Telephone Fax / E-Mail	Certificate (Yes or No)	Link to GEP Certibase
Institutul de Cercetare - Dezvoltare pentru Pomicultură (ICDP), Pitești, Romania	RO	Str. Mărului nr. 402 117450 Mărăcineni, Argeș	Phone: +40 248 27 83 98 E-mail: office@icdp-pitesti.ro	Yes	<a href="http://gepcertibase.eu/certificate/download/1d705683693">http://gepcertibase.eu/certificate/download/1d705683693</a>
InTec Agro Trials, s.r.o., Czech Republic	CZ	Blatnicka 179 687 24 Uhersky Os- troh	Tel: +420 776 174 966 E-mail: t.bauer@intec-agro.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aec8">http://gepcertibase.eu/certificate/download/1d70566aec8</a>
Latvian Plant Protection Research Centre Ltd., Latvia	LV	Struktoru 14a Riga LV-1039	Tel: +37125775586 E-mail: kaspars.gulbis@laapc.lv	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ae06">http://gepcertibase.eu/certificate/download/1d70566ae06</a> <a href="http://gepcertibase.eu/certificate/download/1d70583aeff">http://gepcertibase.eu/certificate/download/1d70583aeff</a>
martin Feldversuchswesen, Germany	DE	Im Grund 20 78359 Orsingen- Nenzingen	Phone: +49(0)7771 5863 E-mail: martin-feldver- suchswesen@t-online.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aaa3">http://gepcertibase.eu/certificate/download/1d70566aaa3</a>
National Agricultural R&D Institute (NARDI) - Fundulea, Romania	RO	Nicolae Titulescu, nr.1 915200 Fundulea, Călărași	Phone: +40(0)21-3110722 E-mail: fundulea@ricic.ro	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70568319a">http://gepcertibase.eu/certificate/download/1d70568319a</a>
National Institute of Research and Development for Potato and Sugar Beet, Romania	RO	Fundăturii no 2 500470 Brasov	Phone: +40/0268/476795 E-mail: icpc@potato.ro	Yes (offi- cial)	<a href="http://gepcertibase.eu/certificate/download/1d7056831ae">http://gepcertibase.eu/certificate/download/1d7056831ae</a>
Növénypathyka KFT, Hungary	HU	H-7400 Kaposvár Damjanich u 47	-	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ac95">http://gepcertibase.eu/certificate/download/1d70566ac95</a>
Növénypathyka Kft., Hungary	HU	H-7451 Kaposvár, Dália u. 10	Tel: +36 20 458 8518 E-mail: labantattila@gmail.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d705683870">http://gepcertibase.eu/certificate/download/1d705683870</a>
OSEVA PRO s.r.o., Opava, Czech Republic	CZ	Purkyňova 6 76401 Opava	Phone: +420 553 624 160 E-mail: opava@oseva.cz	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566acbd">http://gepcertibase.eu/certificate/download/1d70566acbd</a>
Oxford Agricultural Trials Ltd, United Kingdom	UK	West Farm Barns Launton Road Stratton Audley Bicester, Oxford- shire OX27 9AS	Tel: +44 (0) 1869 278172 E-mail: chris.kay@oxagtrials.co.uk	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566af2b">http://gepcertibase.eu/certificate/download/1d70566af2b</a>
Plant Protection & Soil Conservation Directorate of County Zala, Hungary	HU	Kinizsi u. 81. 8900 Zalaegerszeg	Tel: +36 (0)6-92-550-160 E-mail: zala-nti@nebih.gov.hu	Yes	<a href="http://gepcertibase.eu/certificate/download/1d705683076">http://gepcertibase.eu/certificate/download/1d705683076</a>
Plant Protection & Soil Conservation Directorate of Nógrád County, Hun- gary	HU	Mártírok útja 78. 2660 Balassagyar- mat	Tel: +36 6 (35) 501-370 E-mail: nograd-nti@nebih.gov.hu	Yes (official)	<a href="http://gepcertibase.eu/certificate/download/1d70568323b">http://gepcertibase.eu/certificate/download/1d70568323b</a> <a href="http://gepcertibase.eu/certificate/download/1d70583a9ea">http://gepcertibase.eu/certificate/download/1d70583a9ea</a>

Testing facility	Country	Address	Telephone Fax / E-Mail	Certificate (Yes or No)	Link to GEP Certibase
Plant Protection & Soil Conservation Directorate of Somogy County, Hungary	HU	Guba Sándor 20. 7400 Kaposvár	Tel: +36(0)682 528 720 E-mail: ntsz@somogy.ontsz.hu	Yes (official)	see corresponding document provided in BAD, chapter 3.7
Plant Protection & Soil Conservation Directorate of Tolna County, Hungary	HU	Keselyúsi út 7. 7100 Szekszárd	Tel: +36 (74) 528-030 E-mail: tolna-nti@nebih.gov.hu	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70568332d">http://gepcertibase.eu/certificate/download/1d70568332d</a>
Plant Protection & Soil Conservation Directorate of Vas County, Hungary	HU	Ambrózy sétány 2 9762 Tanakajd	Tel: +36 (94) 577-410 E-mail: vas-nti@nebih.gov.hu	Yes	see corresponding document provided in BAD, chapter 3.7
plantus-GBR, Germany	DE	Husumer Str.6 26197 Huntlosen	Tel: +49 (441) 38038478 E-mail: t.ommen@plantus-gbr.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566b191">http://gepcertibase.eu/certificate/download/1d70566b191</a>
PP Trial s.r.o., Brno, Czech Republic	CZ	Trávníky 7 61300 Brno	-	Yes	<a href="http://gepcertibase.eu/certificate/download/1d705683239">http://gepcertibase.eu/certificate/download/1d705683239</a>
QUALIPHYT, France	FR	Quartier Puy Petit 26270 Lorient-sur-Drôme	Tel: +33 (0) 681631491 E-mail: aurelie.bersegeay@qualiphyt.fr	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566abca">http://gepcertibase.eu/certificate/download/1d70566abca</a>
SIA Agrolab Baltic, Latvia	LV	Ozoli, Kursišu pagasts Saldus novads LV-3890	Tel: +371 28383405 E-mail: lv@agrolab.lv	Yes	see corresponding document provided in BAD, chapter 3.7
STAPHYT Sp. z o.o., Poland	PL	ul. Ziebiecka 2 60-164 Poznan	-	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ae7e">http://gepcertibase.eu/certificate/download/1d70566ae7e</a>
SynTech Research Hungary Kft, Szombathely, Hungary	HU	Rákóczi u. 4 9761 Táplánszentkereszt	Tel: +36-20-240-4402 E-mail: tbarasits@syntechresearch.com	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566a9c7">http://gepcertibase.eu/certificate/download/1d70566a9c7</a>
U.A.S. Umwelt- und Agrarstudien GmbH, Jena, Germany	DE	Ilmstraße 6 07743 Jena	Phone: +49 (0) 3641 6281700 E-mail: info@uas-jena.de	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ad96">http://gepcertibase.eu/certificate/download/1d70566ad96</a>
VŠÚO Holovousy s.r.o., Hořice, Czech Republic	CZ	Holovousy 1 508 01, Hořice	Phone: +420 493 692 821 - 3 E-mail: info@vsuo.cz	Yes	see corresponding document provided in BAD, chapter 3.7
Zemědělská ZS Kujavy, s.r.o., Czech Republic	CZ	Kujavy 48 74245 Kujavy	Phone: +420 556 741 824	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566a777">http://gepcertibase.eu/certificate/download/1d70566a777</a>
Zemservis ZS Domaninek s.r.o., Czech Republic	CZ	K Zámečku 1231 59301 Bystřice nad Pernštejnem	Phone: +420 566 550 618	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566a9e0">http://gepcertibase.eu/certificate/download/1d70566a9e0</a>
ZS Kluky, spol. s r.o., Czech Republic	CZ	Kluky 200 (PSČ 398 19) 39819 Kluky	Phone: +420 602 666 712 E-mail: zskluky@zskluky.cz	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ab94">http://gepcertibase.eu/certificate/download/1d70566ab94</a>

Testing facility	Country	Address	Telephone Fax / E-Mail	Certificate (Yes or No)	Link to GEP Certibase
ZS Trutnov s.r.o., Czech Republic	CZ	Volanovská 409 54101 Trutnov	Phone: +420 499 813 090 E-mail: zstrutnov@centrum.cz	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566aa6f">http://gepcertibase.eu/certificate/download/1d70566aa6f</a>
ZS* Nechanice, s.r.o., Czech Republic	CZ	Štolbova 319 50315 Nechanice	Phone: +420 495 441 102	Yes	<a href="http://gepcertibase.eu/certificate/download/1d70566ad88">http://gepcertibase.eu/certificate/download/1d70566ad88</a>

## Appendix 1 Lists of data considered in support of the evaluation

### List of data submitted by the applicant and relied on

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.0/01	Anonymous	2023	Biological Assessment Dossier Unpublished	N	Adama
KCP 6.0/02	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendices 2 and 3 Unpublished	N	Adama
KCP 6.0/03	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendix 4.1 Unpublished	N	Adama
KCP 6.0/04	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendix 4.2 Unpublished	N	Adama
KCP 6.0/05	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendices 4.3 - 4.6 Unpublished	N	Adama
KCP 6.0/06	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendices 5 - 8 Unpublished	N	Adama
KCP 6.0/07	Anonymous	2023	Biological Assessment Dossier: Efficacy Data and Information; Appendix 9 Unpublished	N	Adama
KCP 6.2/001	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028A GEP Unpublished	N	Adama
KCP 6.2/002	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/003	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD010A GEP Unpublished	N	Adama
KCP 6.2/004	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD010B GEP Unpublished	N	Adama
KCP 6.2/005	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD010C GEP Unpublished	N	Adama
KCP 6.2/006	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD010D GEP Unpublished	N	Adama
KCP 6.2/007	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD010E GEP Unpublished	N	Adama
KCP 6.2/008	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD011A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/009	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD011B GEP Unpublished	N	Adama
KCP 6.2/010	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD011C GEP Unpublished	N	Adama
KCP 6.2/011	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011D GEP Unpublished	N	Adama
KCP 6.2/012	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011E GEP Unpublished	N	Adama
KCP 6.2/013	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD011F GEP Unpublished	N	Adama
KCP 6.2/014	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD011G GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/015	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012A GEP Unpublished	N	Adama
KCP 6.2/016	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012B GEP Unpublished	N	Adama
KCP 6.2/017	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD012C GEP Unpublished	N	Adama
KCP 6.2/018	Hornik, P.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD001A GEP Unpublished	N	Adama
KCP 6.2/019	Richter, T.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD001B GEP Unpublished	N	Adama
KCP 6.2/020	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/021	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005B GEP Unpublished	N	Adama
KCP 6.2/022	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005C GEP Unpublished	N	Adama
KCP 6.2/023	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005D GEP Unpublished	N	Adama
KCP 6.2/024	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005E GEP Unpublished	N	Adama
KCP 6.2/025	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005F GEP Unpublished	N	Adama
KCP 6.2/026	Hornik, P.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD173A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/027	Hornik, P.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD173B GEP Unpublished	N	Adama
KCP 6.2/028	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0004-1 GEP Unpublished	N	Adama
KCP 6.2/029	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0004-2 GEP Unpublished	N	Adama
KCP 6.2/030	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0005-1 GEP Unpublished	N	Adama
KCP 6.2/031	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0005-2 GEP Unpublished	N	Adama
KCP 6.2/032	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o.o., Błędów, Poland Report no. 072_01_F12_134 GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/033	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o o., Błędów, Poland Report no. 072_02_F12_135 GEP Unpublished	N	Adama
KCP 6.2/034	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206A GEP Unpublished	N	Adama
KCP 6.2/035	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206B GEP Unpublished	N	Adama
KCP 6.2/036	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206C GEP Unpublished	N	Adama
KCP 6.2/037	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206D GEP Unpublished	N	Adama
KCP 6.2/038	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/039	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207B GEP Unpublished	N	Adama
KCP 6.2/040	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207C GEP Unpublished	N	Adama
KCP 6.2/041	Meronka, K.	2013	Efficacy of MCW-2222 SL on aphids (and other insects) in apple tree in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207D GEP Unpublished	N	Adama
KCP 6.2/042	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109A GEP Unpublished	N	Adama
KCP 6.2/043	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109B GEP Unpublished	N	Adama
KCP 6.2/044	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/045	Richter, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 PP Trial s.r.o., Brno, Czech Republic Report no. CZ21IEMABSD173C GEP Unpublished	N	Adama
KCP 6.2/046	Bauer, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 InTec Agro Trials, s.r.o., Uhersky Ostroh, Czech Republic Report no. CZ21IEMABSD173D GEP Unpublished	N	Adama
KCP 6.2/047	Felczak, K.	2015	Efficacy of MCW-2222 in control of green apple aphid <i>Aphis pomi</i> in apple orchard, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEMABSD127A GEP Unpublished	N	Adama
KCP 6.2/048	Felczak, K.	2015	Efficacy of MCW-2222 in control of green apple aphid <i>Aphis pomi</i> in apple orchard, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEMABSD127B GEP Unpublished	N	Adama
KCP 6.2/049	Lindemann, F.	2015	Analysis of efficacy to MCW-2222 on aphids in cereals, Germany 2015 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE15IENNNGW320C GEP Unpublished	N	Adama
KCP 6.2/050	Barasits, T.	2013	Efficacy of MCW-2222 SL on codling moth in apple in Hungary in 2013 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEMABSD631A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/051	Liposits, V.	2013	Efficacy of MCW-2222 SL on codling moth in apple in Hungary in 2013 Government Office of County Zala, Zalaegerszeg, Hungary Report no. HU13IEMABSD631B GEP Unpublished	N	Adama
KCP 6.2/052	Hargitai, C.	2013	Efficacy of MCW-2222 SL on aphids in apple in Hungary in 2013 Government Office of Somogy County, Kaposvár, Hungary Report no. HU13IEMABSD632A GEP Unpublished	N	Adama
KCP 6.2/053	Liposits, V.	2014	Efficacy of MCW-2222 SL on <i>Carpocapsa pomonella</i> in apple in Hungary 2014 Government Office of County Zala, Zalaegerszeg, Hungary Report no. HU14IEMABSD012A GEP Unpublished	N	Adama
KCP 6.2/054	Sumedrea, M.	2012	Efficacy of MCW 2222 in control of <i>Eriosoma lanigerum</i> , compared with local standard ICDP, Pitesti-Maracineni, Romania Report no. MCW 2222 ERISLA GEP Unpublished	N	Adama
KCP 6.2/055	Sumedrea, M.	2012	Efficacy of MCW 2222 against San Jose scale <i>Quadraspidiotus perniciosus</i> ICDP, Pitesti-Maracineni, Romania Report no. MCW 2222 QUADPE GEP Unpublished	N	Adama
KCP 6.2/056	Coman, M.	2013	Efficacy of MCW-2222 SL on wooly aphid <i>Eriosoma lanigerum</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD002A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/057	Coman, M.	2013	Efficacy of MCW-2222 SL on apple codling moth <i>Cydia pomonella</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD003A GEP Unpublished	N	Adama
KCP 6.2/058	Hornik, P.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD538A GEP Unpublished	N	Adama
KCP 6.2/059	Bauer, T.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2021 InTec Agro Trials, s.r.o., Uhersky Ostroh, Czech Republic Report no. CZ21IEMABSD538B GEP Unpublished	N	Adama
KCP 6.2/060	Coman, M.	2014	Efficacy of MCW 2222 SL on green aphid <i>Aphis pomi</i> ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD046A GEP Unpublished	N	Adama
KCP 6.2/061	Coman, M.	2014	Efficacy of MCW 2222 SL on apple wooly aphid <i>Eriosoma lanigerum</i> - Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD047A GEP Unpublished	N	Adama
KCP 6.2/062	Coman, M.	2014	Efficacy of MCW 2222 SL on apple wooly aphid <i>Eriosoma lanigerum</i> - Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD047B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/063	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048A GEP Unpublished	N	Adama
KCP 6.2/064	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048B GEP Unpublished	N	Adama
KCP 6.2/065	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 3 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048C GEP Unpublished	N	Adama
KCP 6.2/066	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 4 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048D GEP Unpublished	N	Adama
KCP 6.2/067	Sumedrea, M.	2015	MCW-2222 efficacy in control of woolly aphid - <i>Eriosoma lanigerum</i> RIFG Pitesti - Maracineni, Romania, 2015 Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO15IEYPOME013A GEP Unpublished	N	Adama
KCP 6.2/068	Sumedrea, M.	2015	MCW-2222 efficacy in control of woolly aphid - <i>Eriosoma lanigerum</i> RIFG Pitesti - Maracineni, Romania, 2015 Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO15IEYPOME013B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/069	Toth, F.	2013	Efficacy of MCW-2222 SL against aphids on apple - Slovakia - Valice 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD001A GEP Unpublished	N	Adama
KCP 6.2/070	Toth, F.	2013	Efficacy of MCW-2222 SL against aphids on apple - Slovakia - Camovec 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD001B GEP Unpublished	N	Adama
KCP 6.2/071	Toth, F.	2013	Efficacy of MCW-2222 SL against codling moth on apple - Slovakia, Valice 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD002A GEP Unpublished	N	Adama
KCP 6.2/072	Toth, F.	2013	Efficacy of MCW-2222 SL against codling moth on apple - Slovakia, Camovce 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD002B GEP Unpublished	N	Adama
KCP 6.2/073	Tóth, F.	2015	Efficacy of MCW-2222 SL on aphids in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD001A GEP Unpublished	N	Adama
KCP 6.2/074	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002A GEP Unpublished	N	Adama
KCP 6.2/075	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/076	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002C GEP Unpublished	N	Adama
KCP 6.2/077	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003A GEP Unpublished	N	Adama
KCP 6.2/078	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003B GEP Unpublished	N	Adama
KCP 6.2/079	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003C GEP Unpublished	N	Adama
KCP 6.2/080	Tóth, F.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD001A GEP Unpublished	N	Adama
KCP 6.2/081	Tóth, F.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in Čamovce- Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD001B GEP Unpublished	N	Adama
KCP 6.2/082	Tóth, F.	2015	Efficacy of MCW-2222 SL on American blight in apple in Valice-Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD005A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/083	Tóth, F.	2015	Efficacy of MCW-2222 SL on American blight in apple in Čamovce-Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD005B GEP Unpublished	N	Adama
KCP 6.2/084	Skalský, M.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2022 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ22IEMABSD500A GEP Unpublished	N	Adama
KCP 6.2/085	Barasits, T.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEZEAMX131A GEP Unpublished	N	Adama
KCP 6.2/086	István, F.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 Government Office of Vas Country, Szombathely, Hungary Report no. HU13IEZEAMX131B GEP Unpublished	N	Adama
KCP 6.2/087	Gabi, G.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 Government Office of Tolna Conunty, Szekszárd, Hungary Report no. HU13IEZEAMX131C GEP Unpublished	N	Adama
KCP 6.2/088	Blaskó, D.	2014	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary in 2014 ANADIAG Hungary Kft., Komárom, Hungary Report no. HU14IEZEAMX001A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/089	Hoffmanné, P.Z.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary in 2014 Növénypathyka Kft., Kaposvár, Hungary Report no. HU14IEZEAMX001B GEP Unpublished	N	Adama
KCP 6.2/090	Varga, A.	2015	Efficacy of MCW-2222 on <i>Ostrinia nubilalis</i> in corn in Hungary in 2015 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU15IEZEAMX102A GEP Unpublished	N	Adama
KCP 6.2/091	Magyar, B.	2015	Efficacy of MCW-2222 on <i>Ostrinia nubilalis</i> in corn in Hungary in 2015 Fructika Kft, Tiszakanyár, Hungary Report no. HU15IEZEAMX102B GEP Unpublished	N	Adama
KCP 6.2/092	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virgifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043A GEP Unpublished	N	Adama
KCP 6.2/093	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virgifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043B GEP Unpublished	N	Adama
KCP 6.2/094	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virgifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/095	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031A GEP Unpublished	N	Adama
KCP 6.2/096	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031B GEP Unpublished	N	Adama
KCP 6.2/097	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031C GEP Unpublished	N	Adama
KCP 6.2/098	Soltesz, J.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEZEAMX001A GEP Unpublished	N	Adama
KCP 6.2/099	Soltesz, J.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEZEAMX001B GEP Unpublished	N	Adama
KCP 6.2/100	Tóth, F.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEZEAMX001C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/101	Hornik, P.	2013	Analysis of efficacy to MCW-2222 SL on colorado beetle in potato in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IESOLTU026A GEP Unpublished	N	Adama
KCP 6.2/102	Laštovičková, H.	2013	Efficacy of MCW-2222 in potato ZS Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ13IESOLTU026B GEP Unpublished	N	Adama
KCP 6.2/103	Heryán, J.	2013	Analysis of efficacy to MCW-2222 SL on aphids and colorado beetle in potato Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ13IESOLTU026C GEP Unpublished	N	Adama
KCP 6.2/104	Hornik, P.	2014	Analysis of efficacy to MCW-2222 SL on Colorado Beetle in Potato in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IESOLTU009A GEP Unpublished	N	Adama
KCP 6.2/105	Daňa, P.	2014	Analysis of efficacy to MCW-2222 SL on Colorado Beetle in Potato in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ14IESOLTU009B GEP Unpublished	N	Adama
KCP 6.2/106	Hruška, J.	2014	Efficacy of MCW-2222 SL on LPTNDE in potato, Czech Republic Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IESOLTU009C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/107	Zickart, U.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2014 BioChem agrar GmbH, Machern, Germany Report no. DE14IESOLTU320M GEP Unpublished	N	Adama
KCP 6.2/108	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320A GEP Unpublished	N	Adama
KCP 6.2/109	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320B GEP Unpublished	N	Adama
KCP 6.2/110	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320C GEP Unpublished	N	Adama
KCP 6.2/111	Hornik, P.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEMABSD500B GEP Unpublished	N	Adama
KCP 6.2/112	Richter, T.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, the Czech Republic, 2022 PP Trial s.r.o., Brno, Czech Republic Report no. CZ22IEMABSD524A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/113	Furman-Fratczak, K.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SI) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL13IESOLTU204A GEP Unpublished	N	Adama
KCP 6.2/114	Furman-Fratczak, K.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL13IESOLTU204B GEP Unpublished	N	Adama
KCP 6.2/115	Pławuszewski, M.	2014	Determination of efficacy of MCW-2222 against colorado potato beetle in potato Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU204C GEP Unpublished	N	Adama
KCP 6.2/116	Pławuszewski, M.	2013	Determination of efficacy of MCW-2222 against Colorado potato beetle on potato Eurofins Agrosience Services Sp. z o. o., Szamotuły, Poland Report no. PL13IESOLTU204D GEP Unpublished	N	Adama
KCP 6.2/117	Głowacki, G.	2013	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/l) against green peach aphid ( <i>Myzus persicae</i> ), on potato. Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU205B GEP Unpublished	N	Adama
KCP 6.2/118	Meronka, K.	2015	Efficacy of MCW-2222 SL applied in the control of Colorado beetle <i>Leptinotarsa decemlineata</i> in potato, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IESOLTU108A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/119	Szemendera, A.	2014	Efficacy of MCW-2222 SL applied in the control of Colorado beetle <i>Leptinotarsa decemlineata</i> in potato, Poland 2014 Fertico Sp. z o.o., Błędów, Poland Report no. PL14IESOLTU108B GEP Unpublished	N	Adama
KCP 6.2/120	Kukula, A.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of pests on potato AGRECO Sp. z o.o., Oława, Poland Report no. PL14IESOLTU108C GEP Unpublished	N	Adama
KCP 6.2/121	Kukula, A.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of pests on potato AGRECO Sp. z o.o., Oława, Poland Report no. PL14IESOLTU108D GEP Unpublished	N	Adama
KCP 6.2/122	Głowacki, G.	2014	Determination of efficacy of MCW-2222 against Colorado potato beetle ( <i>Leptinotarsa decemlineata</i> ) in potato Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IESOLTU108E GEP Unpublished	N	Adama
KCP 6.2/123	Głowacki, G.	2014	Determination of efficacy of MCW-2222 against Colorado potato beetle potato Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IESOLTU108F GEP Unpublished	N	Adama
KCP 6.2/124	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL14IESOLTU118G GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/125	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 5 Sites in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044A GEP Unpublished	N	Adama
KCP 6.2/126	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044B GEP Unpublished	N	Adama
KCP 6.2/127	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044C GEP Unpublished	N	Adama
KCP 6.2/128	Hermeziu, M.	2014	Report on biological evaluation of Product: MCW-2222 SL National Institute of Research and Development for Potato and Sugar Beet, Braşov, Romania Report no. RO14IESOLTU044D Official Unpublished	N	Adama
KCP 6.2/129	Hermeziu, M.	2014	Report on biological evaluation of Product: MCW-2222 SL National Institute of Research and Development for Potato and Sugar Beet, Braşov, Romania Report no. RO14IESOLTU044E Official Unpublished	N	Adama
KCP 6.2/130	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Colorado Potato Beetles in Potato, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IESOLTU012A GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/131	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Colorado Potato Beetles in Potato, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IESOLTU012B GEP Unpublished	N	Adama
KCP 6.2/132	Forgacova, L.	2013	Analysis of efficacy of MCW-2222 SL against Colorado beetle on potato, Slovakia 2013 Ing. L'ubica Forgáčová, Boliarov, Slovakia Report no. SK13IESOLTU001A GEP Unpublished	N	Adama
KCP 6.2/133	Soltesz, J.	2013	Analysis of efficacy of MCW-2222 SL against Colorado beetle on potato, Slovakia 2013 Fyse, s.r.o. AgroLab Kolare, Slovakia Report no. SK13IESOLTU001B GEP Unpublished	N	Adama
KCP 6.2/134	Forgacova, L.	2014	Analysis of efficacy to MCW-2222 SL against Colorado beetle on potato Ing. Lubica Forgacova, Boliarov, Slovakia Report no. SK14IESOLTU001A GEP Unpublished	N	Adama
KCP 6.2/135	Forgacova, L.	2014	Analysis of efficacy to MCW-2222 SL against Colorado beetle on potato Ing. Lubica Forgacova, Boliarov, Slovakia Report no. SK14IESOLTU001B GEP Unpublished	N	Adama
KCP 6.2/136	Ceri, L.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IESOLTU001C GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/137	Čáp, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEYCERE008A GEP Unpublished	N	Adama
KCP 6.2/138	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on aphids in cereals, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEYCERE001A GEP Unpublished	N	Adama
KCP 6.2/139	Rohr, J.	2013	Analysis of efficacy of MCW-2222 SL on aphids in cereals Agrartest GmbH, Aarbergen-Panrod, Germany Report no. FCS12-3111-E01 GEP Unpublished	N	Adama
KCP 6.2/140	Weiß, E.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE13IEYCERE320B GEP Unpublished	N	Adama
KCP 6.2/141	Hetterich, A.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE13IEYCERE320D GEP Unpublished	N	Adama
KCP 6.2/142	Franke, K.	2014	Analysis of efficacy of MCW-2222 on aphids in winter wheat - open field efficacy and selectivity study 2014 Field Research Support, Wunstorf, Germany Report no. DE14IEYCERE320L GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/143	Lindemann, F.	2015	Analysis of efficacy to MCW-2222 SL on Apids in cereals, Germany 2015 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE15IENNGW320B GEP Unpublished	N	Adama
KCP 6.2/144	Martin, T.	2014	Analysis of efficacy to MCW-2222 on virus vector aphids in cereals autumn 2013 martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE13IEYCERE320H GEP Unpublished	N	Adama
KCP 6.2/145	Martin, T.	2015	Analysis of efficacy to MCW-2222 SL on virus vector Apids in cereals Germany autumn 2014 martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE14IEYCERE320N GEP Unpublished	N	Adama
KCP 6.2/146	Roslapil, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ14IEYCERE008B GEP Unpublished	N	Adama
KCP 6.2/147	Fialova, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in Cereals in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Bystrice nad Pernštejnem, Czech Republic Report no. CZ14IEYCERE008C GEP Unpublished	N	Adama
KCP 6.2/148	Roslapil, J.	2015	Analysis of efficacy to MCW-2222 SL on aphids in cereals, Czech Republic 2015 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ15IEYCERE001B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/149	Subr, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEYCERE008D GEP Unpublished	N	Adama
KCP 6.2/150	Zickart, U.	2014	Analysis of efficacy of MCW-2222 on aphids in cereals BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE14IENNNGG320J GEP Unpublished	N	Adama
KCP 6.2/151	Głowacki, G.	2015	Determination of efficacy of MCW-2222 used singly against aphids on winter wheat Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL15IETRZAW013A GEP Unpublished	N	Adama
KCP 6.2/152	Głowacki, G.	2015	Determination of the efficacy of MCW-2222 (acetamiprid 200 g/l) against English grain aphid ( <i>Sitobion arvense</i> ) and apple bud aphid ( <i>Rhopalosiphum padi</i> ) on winter wheat Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL15IETRZAW013B GEP Unpublished	N	Adama
KCP 6.2/153	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of aphids on winter tritcale BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IETTLSS014A GEP Unpublished	N	Adama
KCP 6.2/154	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of aphids on winter tritcale BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IETTLSS014B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/155	Pawlak, A.	2015	Analysis of efficacy to MCW-2222 on aphids in spring barley, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEHORVS015A GEP Unpublished	N	Adama
KCP 6.2/156	Pawlak, A.	2015	Analysis of efficacy to MCW-2222 on aphids in spring barley, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEHORVS015B GEP Unpublished	N	Adama
KCP 6.2/157	Georgescu, E.	2012	Evaluation of MCW 222 SL: vegetation treatment against aphids on wheat (NARDI Fundulea) Institute for R&D in Agriculture, Fundulea, Romania Report no. ROCL0I3002012 GEP Unpublished	N	Adama
KCP 6.2/158	Georgescu, E.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals Academy of Agricultural and Forestry Sciences, Fundulea, Romania Report no. RO13IETRZAW003A GEP Unpublished	N	Adama
KCP 6.2/159	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042A GEP Unpublished	N	Adama
KCP 6.2/160	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042B GEP Unpublished	N	Adama



<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/161	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042C GEP Unpublished	N	Adama
KCP 6.2/162	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042D GEP Unpublished	N	Adama
KCP 6.2/163	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042E GEP Unpublished	N	Adama
KCP 6.2/164	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042F GEP Unpublished	N	Adama
KCP 6.2/165	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042G GEP Unpublished	N	Adama
KCP 6.2/166	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in Cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042H GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/167	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Aphids in cereals, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEYCERE011A GEP Unpublished	N	Adama
KCP 6.2/168	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Aphids in cereals, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEYCERE011B GEP Unpublished	N	Adama
KCP 6.2/169	Zöllner, H.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Germany In 2022 Field Research Support, Wunstorf, Germany Report no. DE22IEMABSD500A GEP Unpublished	N	Adama
KCP 6.2/170	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Germany in 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEMABSD500B GEP Unpublished	N	Adama
KCP 6.2/171	Martin, T.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, Germany, 2022 Martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE22IEMABSD524A GEP Unpublished	N	Adama
KCP 6.2/172	Hakkert, G.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, The Netherlands, 2022 Asperico bv, Enspijk, The Netherlands Report no. NL22IEMABSD010A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/173	Rose-Gray, S.	2022	Efficacy evaluation of ADM.02100.I.1.B and MCW-2222 against <i>Aphis pomi</i> in apple, UK, 2022 Oxford Agricultural Trials Limited, Bicester, United Kingdom Report no. UK22IEMABSD601A GEP Unpublished	N	Adama
KCP 6.2/174	Rose-Gray, S.	2022	Efficacy evaluation of ADM.02100.I.1.B and MCW-2222 against <i>Aphis pomi</i> in apple, UK, 2022 Oxford Agricultural Trials Limited, Bicester, United Kingdom Report no. UK22IEMABSD601B GEP Unpublished	N	Adama
KCP 6.2/175	Ogrodniczek, A.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Poland in 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEMABSD240A GEP Unpublished	N	Adama
KCP 6.2/176	Gajek, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Poland in 2021 Agro Reserach Consulting, Łowicz, Poland Report no. PL21IEMABSD240B GEP Unpublished	N	Adama
KCP 6.2/177	Magyar, B.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> , <i>Dysaphis plantaginea</i> in apple in Hungary 2014 SGS Hungária Kft., Budapest, Hungary Report no. HU14IEMABSD011B GEP Unpublished	N	Adama
KCP 6.2/178	Barasits, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IEMABSD173B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/179	Barasits, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IEMABSD173D GEP Unpublished	N	Adama
KCP 6.2/180	Coman, M.	2013	Efficacy of MCW-2222 SL on San Jose scale <i>Quadraspidiotus perniciosus</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD001A GEP Unpublished	N	Adama
KCP 6.2/181	Botoman, G.	2021	Efficacy and selectivity evaluation of ADM.00900. I.1.C for the control of ( <i>Cydia pomonella</i> ) in apple AgroProspect SRL, Brasov, Romania Report no. RO21IEMABSD233B GEP Unpublished	N	Adama
KCP 6.2/182	Cáp, J.	2014	Efficacy evaluation of MCW-2222 against biting insects on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW005A GEP Unpublished	N	Adama
KCP 6.2/183	Subr, J.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW005B GEP Unpublished	N	Adama
KCP 6.2/184	Cáp, J.	2014	Efficacy evaluation of MCW-2222 against pollen beetle on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW006A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/185	Spurova, R.	2014	Efficacy of MCW-2222 SL on MELIAE in oil seed rape. ZS Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW006B GEP Unpublished	N	Adama
KCP 6.2/186	Cáp, J.	2014	Efficacy evaluation of MCW-2222 on <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW007A GEP Unpublished	N	Adama
KCP 6.2/187	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> in oil seed rape in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW007B GEP Unpublished	N	Adama
KCP 6.2/188	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.2/189	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001B GEP Unpublished	N	Adama
KCP 6.2/190	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/191	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001E GEP Unpublished	N	Adama
KCP 6.2/192	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001G GEP Unpublished	N	Adama
KCP 6.2/193	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001H GEP Unpublished	N	Adama
KCP 6.2/194	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001I GEP Unpublished	N	Adama
KCP 6.2/195	Jozefiak, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Slovakia in 2021 Berberis s.r.o., Boliarov, Slovakia Report no. SK21IEMABSD538A GEP Unpublished	N	Adama
KCP 6.2/196	Jozefiak, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Slovakia in 2021 Berberis s.r.o., Boliarov, Slovakia Report no. SK21IEMABSD538B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/197	Rohr, J.	2014	Analysis of efficacy to MCW-2222 SL on <i>Ceutorhynchus napi/quadridens</i> in winter oil seed rape Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320A GEP Unpublished	N	Adama
KCP 6.2/198	Rohr, J.	2014	Analysis of efficacy to MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320C GEP Unpublished	N	Adama
KCP 6.2/199	Zickart, U.	2014	Analysis of efficacy to MCW-2222 SL on brassica pod midge (DASYBR) in oil seed rape, Germany 2014 BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE14IEBRSNW320H GEP Unpublished	N	Adama
KCP 6.2/200	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on stem weevil in oil seed rape, Germany 2015 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE15IEBRSNW320A GEP Unpublished	N	Adama
KCP 6.2/201	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on pollen beetle in oil seed rape, Germany 2015 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE15IEBRSNW320E GEP Unpublished	N	Adama
KCP 6.2/202	Perner, J.	2015	Efficacy analysis of MCW-2222 SL against pollen beetles ( <i>Meligethes aeneus</i> ) in oil seed rape - Germany, 2015 U.A.S. GmbH, Jena, Germany Report no. DE15IEBRSNW320G GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/203	von Hörsten, D.	2015	Analysis of the efficacy of MCW-2222 SL on pollen beetle in oil seed rape Field Research Support, Wunstorf, Germany Report no. DE15IEBRSNW320H GEP Unpublished	N	Adama
KCP 6.2/204	von Hörsten, D.	2015	Analysis of the efficacy of MCW-2222 SL on cabbage seed weevil and blossom beetle in oil seed rape Field Research Support, Wunstorf, Germany Report no. DE15IEBRSNW320K GEP Unpublished	N	Adama
KCP 6.2/205	Barou, J.-L.	2012	Evaluate the insecticidal action of MCW-2222 used against autumn aphids ( <i>Myzus persicae</i> ) on rape AGROTEST France, Revel, France Report no. E-1277 GEP Unpublished	N	Adama
KCP 6.2/206	Barou, J.-L.	2012	Evaluate the insecticidal action of MCW-2222 used against autumn aphids ( <i>Myzus persicae</i> ) on rape AGROTEST France, Revel, France Report no. E-1278 GEP Unpublished	N	Adama
KCP 6.2/207	Barou, J.-L.	2013	Efficacy of MCW-2222 against aphids ( <i>Myzus persicae</i> ) on rape in France in 2013 AGROTEST France, Revel, France Report no. FR13IEBRNN302C GEP Unpublished	N	Adama
KCP 6.2/208	Rivet, J.; Crepin, D.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 ESSAIS+, Boyelles, France Report no. FR14IEBRNN105A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/209	Rivet, J.; Crepin, D.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 ESSAIS+, Boyelles, France Report no. FR14IEBRSNN105B GEP Unpublished	N	Adama
KCP 6.2/210	Barou, J.-L.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 AGROTEST France, Revel, France Report no. FR14IEBRSNN105C GEP Unpublished	N	Adama
KCP 6.2/211	Barou, J.-L.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 AGROTEST France, Revel, France Report no. FR14IEBRSNN105D GEP Unpublished	N	Adama
KCP 6.2/212	Tuna, V.	2022	Determination of efficacy evaluation of MCW-2222 in corn against <i>Ostrinia nubilalis</i> in Romania in 2022 EUROFINS AGROSCIENCE SERVICES S.R.L., Timiș, Romania Report no. RO22IEZEAMX282A GEP Unpublished	N	Adama
KCP 6.2/213	Jozefiak, D.	2022	Efficacy evaluation of MCW-2222 in corn against <i>Ostrinia nubilalis</i> in (Slovakia) in 2022 Berberis s.r.o., Boliarov, Slovakia Report no. SK22IEZEAMX501A GEP Unpublished	N	Adama
KCP 6.2/214	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in the Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IESOLTU536A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/215	Hetterich, A.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato 2014 Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE14IESOLTU320N GEP Unpublished	N	Adama
KCP 6.2/216	Hetterich, A.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato 2014 Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE14IESOLTU320O GEP Unpublished	N	Adama
KCP 6.2/217	Rohr, J.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 Trialtec GmbH, Haby, Germany Report no. DE22IESOLTU536C GEP Unpublished	N	Adama
KCP 6.2/218	Rohr, J.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 Trialtec GmbH, Haby, Germany Report no. DE22IESOLTU536D GEP Unpublished	N	Adama
KCP 6.2/219	Torkler, K.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 QUINTUS GMBH, Hohen Wangelin OT Liepen, Germany Report no. DE22IESOLTU536E GEP Unpublished	N	Adama
KCP 6.2/220	De Vries, H.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in The Netherlands, 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IESOLTU004B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/221	De Vries, H.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in The Netherlands, 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IESOLTU036C GEP Unpublished	N	Adama
KCP 6.2/222	Armstrong, M.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in UK, 2022 Armstrong Agriculture Ltd, Stamford, United Kingdom Report no. UK22IESOLTU600A GEP Unpublished	N	Adama
KCP 6.2/223	Gajek, D.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IESOLTU108A GEP Unpublished	N	Adama
KCP 6.2/224	Szemendera, A.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU108B GEP Unpublished	N	Adama
KCP 6.2/225	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IESOLTU108C GEP Unpublished	N	Adama
KCP 6.2/226	Kukuła, A.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IESOLTU108D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/227	Gajek, D.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IESOLTU109A GEP Unpublished	N	Adama
KCP 6.2/228	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW301A GEP Unpublished	N	Adama
KCP 6.2/229	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadriens</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW301B GEP Unpublished	N	Adama
KCP 6.2/230	Głowacki, G.	2014	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/L) against cabbage stem weevil ( <i>Ceutorhynchus napi</i> ) on the winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW301C GEP Unpublished	N	Adama
KCP 6.2/231	Głowacki, G.	2014	Determination of efficacy of MCW-2222 (Acetamiprid 200 g/l) used against cabbage seed weevil and cabbage seedstalk curculio in winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW301D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/232	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Meligethes aeneus</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW302A GEP Unpublished	N	Adama
KCP 6.2/233	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Meligethes aeneus</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW302B GEP Unpublished	N	Adama
KCP 6.2/234	Pawlak, A.	2014	Analysis of the efficacy of MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Staphyt Sp. Z o.o., Poznań, Poland Report no. PL14IEBRSNW302C GEP Unpublished	N	Adama
KCP 6.2/235	Pawlak, A.	2014	Analysis of the efficacy of MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Staphyt Sp. Z o.o., Poznań, Poland Report no. PL14IEBRSNW302D GEP Unpublished	N	Adama
KCP 6.2/236	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used singly against blossom beetle on winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW302E GEP Unpublished	N	Adama
KCP 6.2/237	Głowacki, G.	2014	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/L) against blossom beetle ( <i>Meligethes aeneus</i> ) on the winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW302F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/238	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW303A GEP Unpublished	N	Adama
KCP 6.2/239	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW303B GEP Unpublished	N	Adama
KCP 6.2/240	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW303C GEP Unpublished	N	Adama
KCP 6.2/241	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW303D GEP Unpublished	N	Adama
KCP 6.2/242	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/243	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301B GEP Unpublished	N	Adama
KCP 6.2/244	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301C GEP Unpublished	N	Adama
KCP 6.2/245	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus napi</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW301D GEP Unpublished	N	Adama
KCP 6.2/246	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus napi</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW301E GEP Unpublished	N	Adama
KCP 6.2/247	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW302A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/248	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus quadridens</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW302B GEP Unpublished	N	Adama
KCP 6.2/249	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus quadridens</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW302C GEP Unpublished	N	Adama
KCP 6.2/250	Szemendera, A.	2015	Efficacy of MCW - 2222 in the control of cabbage seed weevil <i>Ceutorhynchus assimilis</i> on winter oilseed rape, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEBRSNW303A GEP Unpublished	N	Adama
KCP 6.2/251	Szemendera, A.	2015	Efficacy of MCW - 2222 in the control of cabbage seed weevil <i>Ceutorhynchus assimilis</i> on winter oilseed rape, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEBRSNW303B GEP Unpublished	N	Adama
KCP 6.2/252	Chermuła, Ł.	2015	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape. Eurofins Agrosience Services Sp. z o. o., Kaźmierz, Poland Report no. PL15IEBRSNW304A GEP Unpublished	N	Adama
KCP 6.2/253	Chermuła, Ł.	2015	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape. Eurofins Agrosience Services Sp. z o. o., Kaźmierz, Poland Report no. PL15IEBRSNW304B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/254	Ferenc, S.	2011	Control on rape blossom beetle and cabbage seed weevil in oilseed rape by foliar spraying Government Office of Nógrád County, Balassagyarmat, Hungary Report no. Z 11/1/2011 Official Unpublished	N	Adama
KCP 6.2/255	Csaba, N.	2011	Control of common pollen beetle and cabbage seedpod weevil in oilseed rape Government Office of Somogy County, Kaposvár, Hungary Report no. Z 11/2/2011 Official Unpublished	N	Adama
KCP 6.2/256	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IESOLTU109B GEP Unpublished	N	Adama
KCP 6.2/257	Barasits, T.	2011	Efficacy and selectivity of MCW-2222 on insects of winter oilseed rape SynTech Research Hungary Kft, Táplánszentkereszt, Hungary Report no. SRHU11-098-135IE GEP Unpublished	N	Adama
KCP 6.2/258	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IESOLTU109C GEP Unpublished	N	Adama
KCP 6.2/259	Kukuła, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IESOLTU109D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/260	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109E GEP Unpublished	N	Adama
KCP 6.2/261	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109F GEP Unpublished	N	Adama
KCP 6.2/262	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109G GEP Unpublished	N	Adama
KCP 6.2/263	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109H GEP Unpublished	N	Adama
KCP 6.2/264	Barasits, T.	2013	Analysis of efficacy to MCW-2222 SL on biting insects in oilseed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEBRSNW431A GEP Unpublished	N	Adama
KCP 6.2/265	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2021, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ21IEYCERW566B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/266	Szántóné Veszélka, M.	2013	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2013 Government Office of Nógrád County, Salgótarján, Hungary Report no. HU13IEBRSNW431C GEP Unpublished	N	Adama
KCP 6.2/267	Hornik, P.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in the Czech Republic, 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBEAVA538B GEP Unpublished	N	Adama
KCP 6.2/268	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in the Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IEBEAVA539A GEP Unpublished	N	Adama
KCP 6.2/269	Hornik, P.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in the Czech Republic, 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBEAVA539B GEP Unpublished	N	Adama
KCP 6.2/270	Zöllner, H.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Germany in 2022. Field Research Support, Wunstorf, Germany Report no. DE22IEBEAVA538A GEP Unpublished	N	Adama
KCP 6.2/271	Wönckhaus, S.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugarbeet in Germany in 2022 Agrartest GmbH, Stade, Germany Report no. DE22IEBEAVA701A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/272	Lamers, K.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Myzus persicae</i> in sugarbeet in Germany in 2022 BioChem agrar GmbH, Uedem, Germany Report no. DE22IEBEAVA701B GEP Unpublished	N	Adama
KCP 6.2/273	Rohr, J.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugarbeet in Germany in 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEBEAVA702A GEP Unpublished	N	Adama
KCP 6.2/274	Zickart, U.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugar beet in Germany in 2022 BioChem agrar GmbH, Machern, Germany Report no. DE22IEBEAVA702B GEP Unpublished	N	Adama
KCP 6.2/275	De Vries, H.	2020	Efficacy trials for MCW-2222 to aphids in sugar beet Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEBEAVA023A GEP Unpublished	N	Adama
KCP 6.2/276	De Vries, H.	2020	Efficacy trials for MCW-2222 to aphids in sugar beet Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEBEAVA023B GEP Unpublished	N	Adama
KCP 6.2/277	Semaškienė, R., Almogdad, M.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Aphis fabae</i> ) control in sugarbeets in Lithuania in 2020 Lithuanian Research Centre for Agriculture and Forestry, Kėdainiai, Lithuania Report no. LT20IEBEAVA535A GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/278	István, F.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 Government Office of Vas Country, Szombathely, Hungary Report no. HU14IEBRSNW011A GEP Unpublished	N	Adama
KCP 6.2/279	Ripka, G.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 Government Office of Nógrád County, Salgótarján, Hungary Report no. HU14IEBRSNW011B GEP Unpublished	N	Adama
KCP 6.2/280	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW012A GEP Unpublished	N	Adama
KCP 6.2/281	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW012B GEP Unpublished	N	Adama
KCP 6.2/282	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW013A GEP Unpublished	N	Adama
KCP 6.2/283	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW013B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/284	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW101A GEP Unpublished	N	Adama
KCP 6.2/285	Szántóné Veszélka, M.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Nógrád County, Balassagyarmat, Hungary Report no. HU15IEBRSNW101B GEP Unpublished	N	Adama
KCP 6.2/286	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW102A GEP Unpublished	N	Adama
KCP 6.2/287	Hoffmanné, P.Z.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Növénypathyka Kft., Kaposvár, Hungary Report no. HU15IEBRSNW103A GEP Unpublished	N	Adama
KCP 6.2/288	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103B GEP Unpublished	N	Adama
KCP 6.2/289	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/290	Ritecz, J.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103D GEP Unpublished	N	Adama
KCP 6.2/291	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW104A GEP Unpublished	N	Adama
KCP 6.2/292	Hoffmanné, P.Z.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Növénypathyka Kft., Kaposvár, Hungary Report no. HU15IEBRSNW104B GEP Unpublished	N	Adama
KCP 6.2/293	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW104C GEP Unpublished	N	Adama
KCP 6.2/294	Szántóné Veszélka, M.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Nógrád County, Balassagyarmat, Hungary Report no. HU15IEBRSNW104D GEP Unpublished	N	Adama
KCP 6.2/295	Čáp, J.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ16IEBRSNW005A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/296	Toth, F.	2013	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , quadridens on oil seed rape, Slovakia 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEBRSNW001B GEP Unpublished	N	Adama
KCP 6.2/297	Daňa, P.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 Zemědělská ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ16IEBRSNW005B GEP Unpublished	N	Adama
KCP 6.2/298	Subr, J.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ16IEBRSNW005C GEP Unpublished	N	Adama
KCP 6.2/299	Čáp, J.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ17IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.2/300	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on CEUTNA, CEUTQ in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.2/301	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on Ceuta, Ceutq in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW001B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/302	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on Ceuta, Ceutq in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW001C GEP Unpublished	N	Adama
KCP 6.2/303	Soltesz, J.	2015	Analysis of efficacy to MCW-2222 SL on Ceuta, Ceutq in oil seed rape, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEBRSNW001D GEP Unpublished	N	Adama
KCP 6.2/304	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on MELIAE in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW002A GEP Unpublished	N	Adama
KCP 6.2/305	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on Melia in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW002B GEP Unpublished	N	Adama
KCP 6.2/306	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.2/307	Forgáčová, L.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 Ing. L'ubica Foráčová, Boliarov, Slovakia Report no. SK15IEBRSNW001B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/308	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus assimilis</i> , Dasineura bassicae on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001D GEP Unpublished	N	Adama
KCP 6.2/309	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001I GEP Unpublished	N	Adama
KCP 6.2/310	Zickart, U.	2015	Analysis of efficacy of MCW-2222 on virus vector aphids in cereals, Germany, autumn 2015 BioChem agrar GmbH NL Agroplan, Uedem, Germany Report no. DE15IENNNGW320I GEP Unpublished	N	Adama
KCP 6.2/311	Kay, C.	2015	Registration trials with MCW-2222 for control of aphids ( <i>Myzus persicae</i> ) vectors of Turnip yellows virus/Beet western yellows virus in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEYCERW240A GEP Unpublished	N	Adama
KCP 6.2/312	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240D GEP Unpublished	N	Adama
KCP 6.2/313	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/314	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240G GEP Unpublished	N	Adama
KCP 6.2/315	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on cabbage stem flea beetle / <i>Psylliodes chrysocephala</i> / in oil seed rape Germany autumn 2014 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320I GEP Unpublished	N	Adama
KCP 6.2/316	Kukuła, A., Kostek, T.	2020	Efficacy evaluation of MCW-2222 in sugar beet against <i>Aphis fabae</i> (APHIFA) in Poland in 2020 AGRECO Sp. z o.o., Oława, Poland Report no. PL20IEBEAVA221B GEP Unpublished	N	Adama
KCP 6.2/317	Stognienko, M.	2015	Analysis of efficacy of MCW-2222 on <i>Psylliodes chrysocephala</i> in winter oil seed rape, Germany, autumn 2015 BioChem agrar GmbH NL Agroplan, Uedem, Germany Report no. DE15IEBRSNW320Q GEP Unpublished	N	Adama
KCP 6.2/318	Čáp, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in the Czech Republic, 2020 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ20IEBRSNW511B GEP Unpublished	N	Adama
KCP 6.2/319	Kay, C.	2015	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEBRSNW239A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/320	Kay, C.	2015	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEBRSNW239B GEP Unpublished	N	Adama
KCP 6.2/321	Vašátková Štanclová, I.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IESOLTU175A GEP Unpublished	N	Adama
KCP 6.2/322	Daňa, P.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 Zemědělska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ21IESOLTU175B GEP Unpublished	N	Adama
KCP 6.2/323	Bauer, T.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 InTec Agro Trials, s.r.o., Uherský Ostroh, Czech Republic Report no. CZ21IESOLTU175D GEP Unpublished	N	Adama
KCP 6.2/324	Vilka, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Myzus persicae</i> ) control in potatoes in Sweden in 2020 Agrolab Sverige AB, Skänninge, Sweden Report no. SE20IESOLTU259A GEP Unpublished	N	Adama
KCP 6.2/325	Ozolins-Pole, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for Colorado potato beetle ( <i>Leptinotarsa decemlineata</i> ) control in potatoes in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IESOLTU534A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/326	Chermuła, L.	2014	Determination of the efficacy of MCW-2222 (acetamiprid 200 g/l) against green peach aphid ( <i>Myzus persicae</i> ), on potato. Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU205A GEP Unpublished	N	Adama
KCP 6.2/327	Furman-Frątczak, K.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes, Poland 2021 BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL21IESOLTU245A GEP Unpublished	N	Adama
KCP 6.2/328	Gajek, D.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Poland 2021 MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes Agro Reserach Consulting, Łowicz, Poland Report no. PL21IESOLTU245B GEP Unpublished	N	Adama
KCP 6.2/329	Rusek, K.	2021	Efficacy of ADM.00900.I.1.C in control of <i>Leptinotarsa decemlineata</i> in potato, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IESOLTU245C GEP Unpublished	N	Adama
KCP 6.2/330	Głowacki, G.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Poland 2021 Eurofins Agrosience Services Sp. z o o., Kaźmierz, Poland Report no. PL21IESOLTU245D GEP Unpublished	N	Adama
KCP 6.2/331	Benczés, B.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IESOLTU175A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/332	Olasz, L.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IESOLTU175B GEP Unpublished	N	Adama
KCP 6.2/333	Labant, A.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 Növénypathyka Kft., Kaposvár, Hungary Report no. HU21IESOLTU175D GEP Unpublished	N	Adama
KCP 6.2/334	Botoman, G.	2021	Efficacy of ADM.00900.I.1.C for control of <i>Leptinotarsa decemlineata</i> on potato GEP Trial, Romania, 2021 AgroProspect SRL, Brasov, Romania Report no. RO21IESOLTU234A GEP Unpublished	N	Adama
KCP 6.2/335	Botoman, G.	2021	Efficacy of ADM.00900.I.1.C for control of <i>Leptinotarsa decemlineata</i> on potato GEP Trial, Romania, 2021 AgroProspect SRL, Brasov, Romania Report no. RO21IESOLTU234B GEP Unpublished	N	Adama
KCP 6.2/336	Gulbis, K.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Rhopalosiphum padi</i> ) control in spring wheat in Latvia in 2021 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV21IEYCERE421A GEP Unpublished	N	Adama
KCP 6.2/337	Ozolins-Pole, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Rhopalosiphum padi</i> ) control in spring wheat in Latvia in 2021 Latvian Plant Protection Research Centre Ltd., Riga, Latvia Report no. LV21IEYCERE421B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/338	Torkler, K.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2021, autumn use Quintus GmbH, Hohen Wangelin, Germany Report no. DE21IEYCERW566A GEP Unpublished	N	Adama
KCP 6.2/339	Seifert, M.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2021, autumn use BioChem agrar GmbH, Uedem, Germany Report no. DE21IEYCERW566B GEP Unpublished	N	Adama
KCP 6.2/340	de Vries, H.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in The Netherlands in 2021, autumn use Verify, Zwaagdijk-Oost, the Netherlands Report no. NL21IEHORVW034A GEP Unpublished	N	Adama
KCP 6.2/341	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter barley in Lithuania, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT21IEYCERW408C GEP Unpublished	N	Adama
KCP 6.2/342	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter barley, Poland 2021 /2022 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEHORVW277A GEP Unpublished	N	Adama
KCP 6.2/343	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter barley, Poland 2021 /2022 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEHORVW277B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/344	Safar, J.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2020, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ20IEHORVW507A GEP Unpublished	N	Adama
KCP 6.2/345	Rohr, J.	2017	Efficacy and selectivity of different insecticides for control of aphid virus vectors (BYDV) in winter cereals, Germany 2016 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE16IENNNGW311D GEP Unpublished	N	Adama
KCP 6.2/346	Rohr, J.	2017	Efficacy and selectivity of different insecticides for control of aphid virus vectors (BYDV) in winter cereals, Germany 2016 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE16IENNNGW311F GEP Unpublished	N	Adama
KCP 6.2/347	Ommen, T.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2020, autumn use plantus-GbR, Huntlosen, Germany Report no. DE20IENNNGW507B GEP Unpublished	N	Adama
KCP 6.2/348	Bersegeay, A.	2015	Evaluate the efficacy and selectivity of MCW-2222 and MAVRIK FLO on <i>Rhopalosiphum padi</i> on cereals, in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEYCERE111A GEP Unpublished	N	Adama
KCP 6.2/349	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEHORVW209A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/350	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 in winter barley against aphids (BYDV) in Lithuania, 2020 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT20IEYCERW559B GEP Unpublished	N	Adama
KCP 6.2/351	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEYCERW566A GEP Unpublished	N	Adama
KCP 6.2/352	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter wheat in Lithuania, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT21IEYCERW408B GEP Unpublished	N	Adama
KCP 6.2/353	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter wheat in Latvia, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LV21IEYCERW471A GEP Unpublished	N	Adama
KCP 6.2/354	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter wheat, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IETRZAW278A GEP Unpublished	N	Adama
KCP 6.2/355	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter wheat, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IETRZAW278B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/356	Cap, J.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2020, autumn use ZKUŠEBNÍ STANICE Nechanice S.r.o., Nechanice, Czech Republic Report no. CZ20IETRZAW507B GEP Unpublished	N	Adama
KCP 6.2/357	Cap, J.	2020	Efficacy evaluation of MCW-2222 in winter cereals against <i>Sitobion avenae</i> (MACSAV) in the Czech Republic in 2020, spring use ZKUŠEBNÍ STANICE Nechanice S.r.o., Nechanice, Czech Republic Report no. CZ20IETRZAW508B GEP Unpublished	N	Adama
KCP 6.2/358	Barou, J.	2014	Evaluate the efficacy and selectivity of MCW-2222 on <i>Sitobion avenae</i> on cereals, in France , 2014 Agrotest, Revel, France Report no. FR14IEYCERE108A GEP Unpublished	N	Adama
KCP 6.2/359	Sutherland, J.	2017	Registration trials with MCW-2222 for control of aphids (BYDV) in winter wheat in the UK, 2016 - 2017 Eurofins Agrosience Services, Willand ,UK Report no. UK16IETRZAW269C GEP Unpublished	N	Adama
KCP 6.2/360	Flaviola, J.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2014 Agrovita spol.s r.o., Jesenice, Czech Republic Report no. CZ14IEBRSNW005D GEP Unpublished	N	Adama
KCP 6.2/361	Fialova, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2015 Agrovita spol.s r.o., Jesenice, Czech Republic Report no. CZ15IEBRSNW001F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/362	Čáp, J.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2020, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ20IEBRSNW534B GEP Unpublished	N	Adama
KCP 6.2/363	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW567B GEP Unpublished	N	Adama
KCP 6.2/364	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW568A GEP Unpublished	N	Adama
KCP 6.2/365	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the Czech Republic in 2021, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ21IEBRSNW568B GEP Unpublished	N	Adama
KCP 6.2/366	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW570A GEP Unpublished	N	Adama
KCP 6.2/367	Daňa, P.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2021, autumn use Zemědělska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ21IEBRSNW570B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/368	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in the Czech Republic in 2022 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBRSNW503B GEP Unpublished	N	Adama
KCP 6.2/369	Subr, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in the Czech Republic in 2022 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ22IEBRSNW503C GEP Unpublished	N	Adama
KCP 6.2/370	Čáp, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBRSNW506B GEP Unpublished	N	Adama
KCP 6.2/371	Hruška, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ22IEBRSNW506C GEP Unpublished	N	Adama
KCP 6.2/372	Seidenglanz, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IEBRSNW506D GEP Unpublished	N	Adama
KCP 6.2/373	Rohr, J.	2017	Analysis of efficacy to MCW-2222 SL on pests in oil seed rape, Germany autumn 2015 Agrartest GmbH, Aarbergen, Germany Report no. DE15IEBRSNW320O GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/374	Rohr, J.	2017	Analysis of efficacy to MCW-2222 SL on pests in oil seed rape, Germany autumn 2015 Agrartest GmbH, Aarbergen, Germany Report no. DE15IEBRSNW320P GEP Unpublished	N	Adama
KCP 6.2/375	Kästner, K.	2016	Analysis of efficacy of different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape in Germany 2016 BioChem agrar GmbH, Machern, Germany Report no. DE16IEBRSNW310C GEP Unpublished	N	Adama
KCP 6.2/376	Perner, J.	2017	Efficacy of different insecticides on cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in oil seed winter rape, Germany 2016/17 U.A.S. Umwelt- und Agrarstudien GmbH, Jena, Germany Report no. DE16IEBRSNW312E GEP Unpublished	N	Adama
KCP 6.2/377	Labusch, U.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 BioChem agrar GmbH, Machern, Germany Report no. DE17IEBRSNW310A GEP Unpublished	N	Adama
KCP 6.2/378	Zickart, U.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 BioChem agrar GmbH, Machern, Germany Report no. DE17IEBRSNW310B GEP Unpublished	N	Adama
KCP 6.2/379	Laug, S.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE17IEBRSNW310D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/380	Rohr, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Germany 2020 Trialtec GmbH, Haby, Germany Report no. DE20IEBRSNN511A GEP Unpublished	N	Adama
KCP 6.2/381	Rohr, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Germany 2020 Trialtec GmbH, Haby, Germany Report no. DE20IEBRSNN511B GEP Unpublished	N	Adama
KCP 6.2/382	Rohr, J.	2020	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus picipitarsis</i> in Germany in 2020, autumn use Trialtec GmbH, Haby, Germany Report no. DE20IEBRSNN526A GEP Unpublished	N	Adama
KCP 6.2/383	Rohr, J.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2021 Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW533A GEP Unpublished	N	Adama
KCP 6.2/384	Rohr, J.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2021 Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW533B GEP Unpublished	N	Adama
KCP 6.2/385	Martin, T.	2022	Efficacy evaluation of MCS-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in Germany in 2021, autumn use martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE21IEBRSNW568B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/386	Hetterich, A.	2020	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus pictarisis</i> in Germany in 2021, autumn use Hetterich Fieldwork GbR, Schwarzach am Main, Germany Report no. DE21IEBRSNW569A GEP Unpublished	N	Adama
KCP 6.2/387	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus pictarisis</i> in Germany in 2021, autumn use Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW569B GEP Unpublished	N	Adama
KCP 6.2/388	Wied, H.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus pictarisis</i> in Germany in 2021, autumn use STAPHYT GmbH, Baden-Württemberg, Germany Report no. DE21IEBRSNW569C GEP Unpublished	N	Adama
KCP 6.2/389	Jatczak, J.	2020	Efficacy evaluation of MCW-2222 in sugar beet against <i>Myzus persicae</i> (MYZUPE) and <i>Aphis fabae</i> (APHIFA) in Poland in 2020 ANADIAG SAS, Oddział, Poland Report no. PL20IEBEAVA221C GEP Unpublished	N	Adama
KCP 6.2/390	Zickart, U.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in Germany in 2021, autumn use BioChem agrar GmbH, Machern, Germany Report no. DE21IEBRSNW570A GEP Unpublished	N	Adama
KCP 6.2/391	Rohr, J.	2022	Efficacy of ADM.00900.I.1.C against <i>Ceutorhynchus pictaris</i> on OSR in Germany in 2021 Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW571A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/392	Woenckhaus, S.	2022	Efficacy of ADM.00900.I.1.C against <i>Ceutorhynchus pictaris</i> on OSR in Germany in 2021 Agrartest GmbH, Stade, Germany Report no. DE21IEBRSNW571B GEP Unpublished	N	Adama
KCP 6.2/393	Zöllner, H.	2022	Efficacy evaluation of ADM.00900.I.1.C against adult of <i>Psylliodes chrysocephala</i> on OSR in Germany in 2021 Field Research Support, Wunstorf, Germany Report no. DE21IEBRSNW572B GEP Unpublished	N	Adama
KCP 6.2/394	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in Germany in 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEBRSNW503B GEP Unpublished	N	Adama
KCP 6.2/395	Rohr, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEBRSNW505B GEP Unpublished	N	Adama
KCP 6.2/396	Perner, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2022 U.A.S. Umwelt- und Agrarstudien GmbH, Jena, Germany Report no. DE22IEBRSNW505C GEP Unpublished	N	Adama
KCP 6.2/397	Barou, J.	2014	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2014 Agrotest, Revel, France Report no. FR14IEBRSNW101D GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/398	Villeton, C.	2014	Efficacy of PYRINEX ME, MAVRIK FLO and MCW-2222 against pollen beetles on rape in France in 2014 ANADIAG, Ruy, France Report no. FR14IEBRSNN102B GEP Unpublished	N	Adama
KCP 6.2/399	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN107C GEP Unpublished	N	Adama
KCP 6.2/400	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN107D GEP Unpublished	N	Adama
KCP 6.2/401	Hons, E.	2015	Efficacy evaluation of MCW-2222, Mavrik Flo and Pyrinex ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 PROMO-VERT, Serres-Castet, France Report no. FR14IEBRSNN108A GEP Unpublished	N	Adama
KCP 6.2/402	Hons, E.	2015	Efficacy evaluation of MCW-2222, Mavrik Flo and Pyrinex ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 PROMO-VERT, Serres-Castet, France Report no. FR14IEBRSNN108B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/403	Tartier, J.; Percheron, M.	2014	Efficacy evaluation of MCW-2222, MAVRIK FLO and PYRINEX ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 BIOTEK Agriculture, Saint Pouange, France Report no. FR14IEBRSNN108E GEP Unpublished	N	Adama
KCP 6.2/404	Tartier, J.	2015	Efficacy evaluation of MCW-2222, MAVRIK FLO and PYRINEX ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 BIOTEK Agriculture, Saint Pouange, France Report no. FR14IEBRSNN108F GEP Unpublished	N	Adama
KCP 6.2/405	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Ceutorhynchus piciparsis</i> and <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN113A GEP Unpublished	N	Adama
KCP 6.2/406	Hons, E.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 PROMO-VERT, Serres-Castet, France Report no. FR15IEBRSNN101C GEP Unpublished	N	Adama
KCP 6.2/407	Hons, E.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 PROMO-VERT, Serres-Castet, France Report no. FR15IEBRSNN101D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/408	Bersegeay, A.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 QUALIPHYT, Lorient Sur Drôme, France Report no. FR15IEBRSNN101E GEP Unpublished	N	Adama
KCP 6.2/409	Bersegeay, A.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 QUALIPHYT, Lorient Sur Drôme, France Report no. FR15IEBRSNN101F GEP Unpublished	N	Adama
KCP 6.2/410	Voisin, J. F	2015	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2015 Agrotest, Revel, France Report no. FR15IEBRSNN103C GEP Unpublished	N	Adama
KCP 6.2/411	Voisin, J. F	2015	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2015 Agrotest, Revel, France Report no. FR15IEBRSNN103D GEP Unpublished	N	Adama
KCP 6.2/412	Rouane, W.	2016	Efficacy of MCW-3031, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2016 ANADIAG, Ruy, France Report no. FR16IEBRSNN103D GEP Unpublished	N	Adama
KCP 6.2/413	Gressard, M.	2019	Analysis of efficacy of different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape in France in 2018 QUALIPHYT, Lorient Sur Drôme, France Report no. FR18IEBRSNN101A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/414	Vilka, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus assimilis</i> ) control in WOSR in Sweden in 2020 Agrolab Sverige AB, Skänninge, Sweden Report no. SE20IEBRSNW258A GEP Unpublished	N	Adama
KCP 6.2/415	Lamers, K.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Germany in 2020, autumn use BioChem agrar GmbH, Machern, Germany Report no. DE20IEBRSNN509B GEP Unpublished	N	Adama
KCP 6.2/416	Howkins, L.	2017	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape, UK, 2016 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK16IEBRSNW254C GEP Unpublished	N	Adama
KCP 6.2/417	Howkins, L.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in oil seed rape, UK, 2017 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK17IEBRSNN272B GEP Unpublished	N	Adama
KCP 6.2/418	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW206A GEP Unpublished	N	Adama
KCP 6.2/419	Stokes, L.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in the UK 2021 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK21IEBRSNW218A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/420	Stokes, L.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNS) in the UK 2021 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK21IEBRSNW219A GEP Unpublished	N	Adama
KCP 6.2/421	Stokes, L.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK, in 2021, autumn use Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK21IEBRSNW234B GEP Unpublished	N	Adama
KCP 6.2/422	Stokes, L.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK, in 2021, autumn use Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK21IEBRSNW234C GEP Unpublished	N	Adama
KCP 6.2/423	Stokes, L.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in UK 2022 Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK22IEBRSNW602B GEP Unpublished	N	Adama
KCP 6.2/424	Ozolins-Pole, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus obstrictus</i> ) control in winter OSR in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IEBRSNW527A_2 GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/425	Gulbis, K.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus obstrictus</i> ) control in winter OSR in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IEBRSNN527B GEP Unpublished	N	Adama
KCP 6.2/426	Furman-Frątczak, K.	2017	The evaluation of efficacy and selectivity of insecticides product for the control of pests on winter oilseed rape BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL16IEBRSNW309A GEP Unpublished	N	Adama
KCP 6.2/427	Zielińska, W.	2016	Efficacy of insecticides MCW-5023 and MCW-2222 for controlling pollen beetle ( <i>Meligethes aeneus</i> F.) in winter oilseed rape Institute of Plant Protection - National Research Institute, Poznań, Poland Report no. PL16IEBRSNW309B GEP Unpublished	N	Adama
KCP 6.2/428	Zielińska, W.	2016	Efficacy of insecticides MCW-5023 and MCW-2222 for controlling pollen beetle ( <i>Meligethes aeneus</i> F.) in winter oilseed rape Institute of Plant Protection - National Research Institute, Poznań, Poland Report no. PL16IEBRSNW309C GEP Unpublished	N	Adama
KCP 6.2/429	Furman-Frątczak, K.	2017	The evaluation of efficacy and selectivity of insecticides product for the control of pests on winter oilseed rape BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL17IEBRSNW047B GEP Unpublished	N	Adama
KCP 6.2/430	Potocka, E.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape SynTech Research Poland Sp. z o.o., Bydgoszcz, Poland Report no. PL17IEBRSNW047C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/431	Kukuła, A.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in Poland in 2020, autumn use AGRECO Sp. z o.o., Gać, Poland Report no. PL20IEBRSNW219B GEP Unpublished	N	Adama
KCP 6.2/432	Gajek, D.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Poland 2020 Agro Reserach Consulting, Łowicz, Poland Report no. PL20IEBRSNW220A GEP Unpublished	N	Adama
KCP 6.2/433	Pawlak, A.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Poland 2020 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL20IEBRSNW225B GEP Unpublished	N	Adama
KCP 6.2/434	Szymańczyk, M.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland. 2021 Institute of Plant Protecion - National Research Institute, Poznań, Poland Report no. PL21IEBRSNW237A GEP Unpublished	N	Adama
KCP 6.2/435	Gajek, D.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland 2021 Agro Reserach Consulting, Łowicz, Poland Report no. PL21IEBRSNW239A GEP Unpublished	N	Adama
KCP 6.2/436	Pszczółkowski, M.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland 2021 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL21IEBRSNW239B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/437	Pszczółkowski, M.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Poland in 2021, autumn use Staphyt Sp. Z o.o., Poznań, Poland Report no. PL21IEBRSNW241A GEP Unpublished	N	Adama
KCP 6.2/438	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Psylliodes chrysocephala</i> in winter oilseed rape, Poland 2021 Fertico Sp. z o.o., Błędów, Poland Report no. PL21IEBRSNW241B GEP Unpublished	N	Adama
KCP 6.2/439	Jaczak, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Poland in 2021, autumn use ANADIAG SAS Oddział w Polsce, Zgierz, Poland Report no. PL21IEBRSNW241C GEP Unpublished	N	Adama
KCP 6.2/440	Głowacki, G.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> (Cabbage stem flea beetle) in Poland. 2021. autumn use. Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL21IEBRSNW241D GEP Unpublished	N	Adama
KCP 6.2/441	PSZCZÓLKOWSKI, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNS) in Poland in 2022. Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBRSNW113A GEP Unpublished	N	Adama
KCP 6.2/442	PSZCZÓLKOWSKI, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland in 2022. Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBRSNW113B GEP Unpublished	N	Adama



<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/443	Gajek, D.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IEBRSNW113C GEP Unpublished	N	Adama
KCP 6.2/444	Szemendera, A.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland in 2022. Fertico Sp. z o.o. Błędów, Poland Report no. PL22IEBRSNW113D GEP Unpublished	N	Adama
KCP 6.2/445	Veszeka, M.S.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW102B GEP Unpublished	N	Adama
KCP 6.2/446	Barasits, T.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2015 SynTech Research Hungary Kft., Szombathely, Hungary Report no. HU15IEBRSNW104E GEP Unpublished	N	Adama
KCP 6.2/447	Farkas, I.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Pannon Helyi Termék Kft , Oszkó, Hungary Report no. HU16IEBRSNW002A GEP Unpublished	N	Adama
KCP 6.2/448	Szántóné Veszeka, M.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Government Office of Nógrád County, Plant Prot. Dir., Salgótarján, Hungary Report no. HU16IEBRSNW002B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/449	Hoffmanné Pathy, S.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Növénypathyka KFT, Somogy, Hungary Report no. HU16IEBRSNW002D GEP Unpublished	N	Adama
KCP 6.2/450	Kodor, G.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU16IEBRSNW002E GEP Unpublished	N	Adama
KCP 6.2/451	Barasits, T.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU17IEBRSNW101A GEP Unpublished	N	Adama
KCP 6.2/452	Hoffmanné Pathy, Z.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Növénypathyka KFT, Kaposvár, Hungary Report no. HU17IEBRSNW101B GEP Unpublished	N	Adama
KCP 6.2/453	Magyar, B.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Fructika Kft, Tiszakanyár, Hungary Report no. HU17IEBRSNW101C GEP Unpublished	N	Adama
KCP 6.2/454	Szántóné Veszélka, M.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Government Office of Nógrád County, Plant Prot. Dir., Salgótarján, Hungary Report no. HU17IEBRSNW101D GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.2/455	Fekete, A.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Pannon Helyi Termék Kft , Oszkó, Hungary Report no. HU17IEBRSNW101E GEP Unpublished	N	Adama
KCP 6.2/456	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on CEUTAS, DASYBR in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW003A GEP Unpublished	N	Adama
KCP 6.2/457	Ceri, L.	2015	Analysis of efficacy to MCW-2222 SL on CEUTAS, DASYBR oil seed rape, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEBRSNW003B GEP Unpublished	N	Adama
KCP 6.2/458	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001E GEP Unpublished	N	Adama
KCP 6.2/459	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001F GEP Unpublished	N	Adama
KCP 6.2/460	Soltész, J.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 Fyse, Ltd., Dep. AgroLab, Koláre, Slovak Republic Report no. SK15IEBRSNW001G GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/461	Soltész, J.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 Fyse, Ltd., Dep. AgroLab, Koláre, Slovak Republic Report no. SK15IEBRSNW001H GEP Unpublished	N	Adama
KCP 6.2/462	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001J GEP Unpublished	N	Adama
KCP 6.2/463	Kolník, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in [Slovakia] 2022 InTec Agro Trials Slovakia s.r.o., Bratislava, Slovakia Report no. SK22IEBRSNW505A GEP Unpublished	N	Adama
KCP 6.2/464	Kolník, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in [Slovakia] 2022 InTec Agro Trials Slovakia s.r.o., Bratislava, Slovakia Report no. SK22IEBRSNW505B GEP Unpublished	N	Adama
KCP 6.2/465	Jatczak, J.	2021	Evaluation of ADM.02100.I.1.B against <i>Myzus persicae</i> in sugarbeet in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA233B GEP Unpublished	N	Adama
KCP 6.2/466	Rusek, K.	2021	Efficacy of ADM.02100.I.1.B in control of aphids in sugar beet, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEBEAVA233D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/467	Jatczak, J.	2021	Evaluation of ADM.02100.I.1.B against <i>Aphis fabae</i> in Sugarbeet in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA233E GEP Unpublished	N	Adama
KCP 6.2/468	Rusek, K.	2021	Efficacy of ADM.02100.I.1.B in control of aphids in sugar beet, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEBEAVA233F GEP Unpublished	N	Adama
KCP 6.2/469	Furman-Frątczak, K.	2021	Efficacy evaluation of MCW-2222 in sugar beet against aphids, Poland 2021 BIOTEK Agriculture Polska Sp. Z o.o., Oława, Poland Report no. PL21IEBEAVA238A GEP Unpublished	N	Adama
KCP 6.2/470	Jatczak, J.	2021	Efficacy evaluation of MCW-2222 in sugar beet against <i>Myzus persicae</i> (MYZUPE) and <i>Aphis fabae</i> (APHIFA) in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA238B GEP Unpublished	N	Adama
KCP 6.2/471	Głowacki, G.	2021	Efficacy evaluation of MCW-2222 in sugar beet against <i>Aphis fabae</i> (APHIFA) in Poland, 2021 Eurofins Agroscience Services Sp. z. o.o., Kaźmierz, Poland Report no. PL21IEBEAVA238C GEP Unpublished	N	Adama
KCP 6.2/472	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA110A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/473	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBEAVA110B GEP Unpublished	N	Adama
KCP 6.2/474	Kukuła, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IEBEAVA110C GEP Unpublished	N	Adama
KCP 6.2/475	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110D GEP Unpublished	N	Adama
KCP 6.2/476	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110E GEP Unpublished	N	Adama
KCP 6.2/477	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110F GEP Unpublished	N	Adama
KCP 6.2/478	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA111A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/479	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111B GEP Unpublished	N	Adama
KCP 6.2/480	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111C GEP Unpublished	N	Adama
KCP 6.2/481	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111D GEP Unpublished	N	Adama
KCP 6.2/482	Torkler, K.	2021	Evaluation of ADM.02100.I.1.B against <i>Aphis fabae</i> in sugarbeet in Germany in 2021 Quintus GmbH, Liepen, Germany Report no. DE21IEBEAVA530A GEP Unpublished	N	Adama
KCP 6.2/483	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW207A GEP Unpublished	N	Adama
KCP 6.2/484	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW207B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/485	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis fabae</i> (APHIFA) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEYORNA027A GEP Unpublished	N	Adama
KCP 6.2/486	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in Ornamentals against <i>Myzus persicae</i> (MYZUPE) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, The Netherlands Report no. NL20IEYORNA027B GEP Unpublished	N	Adama
KCP 6.2/487	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEYORNA028A GEP Unpublished	N	Adama
KCP 6.2/488	Kohrman, E.J.M.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2020 Cultus Crop Research BV, Lottum, The Netherlands Report no. NL20IEYORNA028B GEP Unpublished	N	Adama
KCP 6.2/489	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA031A GEP Unpublished	N	Adama
KCP 6.2/490	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) and <i>Myzus persicae</i> (MYZUPE) in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA031B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/491	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031D GEP Unpublished	N	Adama
KCP 6.2/492	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031E GEP Unpublished	N	Adama
KCP 6.2/493	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031F GEP Unpublished	N	Adama
KCP 6.2/494	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 against Green peach aphid (MYZUPE) and bean aphid (APHIFA) in ornamentals in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA032A GEP Unpublished	N	Adama
KCP 6.2/495	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against Green peach aphid (MYZUPE), bean aphid (APHIFA) or potato aphid (MACSEU) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA032B GEP Unpublished	N	Adama
KCP 6.2/496	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Phyllaphis fagi</i> (PHYAFA) beech in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA033A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/497	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Phyllaphis fagi</i> (PHYAFA) beech in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA033B GEP Unpublished	N	Adama
KCP 6.2/498	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009A GEP Unpublished	N	Adama
KCP 6.2/499	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009B GEP Unpublished	N	Adama
KCP 6.2/500	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009C GEP Unpublished	N	Adama
KCP 6.2/501	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005A GEP Unpublished	N	Adama
KCP 6.2/502	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2/503	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005C GEP Unpublished	N	Adama
KCP 6.2/504	Oostingh, C.	2022	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IEYORNA005D GEP Unpublished	N	Adama
KCP 6.2/505	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (MACSEU) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA007A GEP Unpublished	N	Adama
KCP 6.2/506	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (MACSEU) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA007B GEP Unpublished	N	Adama
KCP 6.2/507	Toth, F.	2015	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001C GEP Unpublished	N	Adama
KCP 6.3/001	Thieme, T.	2021	Relative susceptibility of aphid populations ( <i>Myzus persicae</i> , <i>M. cerasi</i> , <i>Aphis nasturtii</i> and <i>Dysaphis plantaginea</i> ) collected 2020 in Europe to the insecticides Mavrik Vita, Karate Zeon, Pirimor, MCW 2222 and Biscaya BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.3/002	Thieme, T.	2022	Relative susceptibility of aphid populations ( <i>Myzus persicae</i> , <i>Aphis nasturtii</i> and <i>Dysaphis plantaginea</i> ) collected 2021 in Europe to the insecticides Mavrik Vita, Karate Zeon, Pirimor and MCW 2222 BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/003	Thieme, T.	2022	Relative susceptibility of aphid populations ( <i>Myzus persicae</i> and <i>Dysaphis plantaginea</i> ) collected 2022 in Europe to the insecticides Karate Zeon and MCW 2222 BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/004	Thieme, T.	2021	Relative susceptibility of field populations of the cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) collected 2020 in the Germany, Poland and the U.K. to the insecticides Mavrik Vita, Karate Zeon and MCW 2222 BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/005	Thieme, T.	2022	Relative susceptibility of field populations of the cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) collected 2021 in Germany and Poland to the insecticides lambda-cyhalothrin, tau-fluvalinate and acetamiprid BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/006	Thieme, T.	2013	Relative susceptibility of field populations of the oilseed rape pollen beetle ( <i>Meligethes aeneus</i> ) collected 2013 in Austria, the Czech Republic, France, Germany, Hungary, Poland and GB to the insecticides Biscaya, chlorpyrifosethyl, tau-fluvalinate and acetamiprid, in comparison to lambda-cyhalothrin BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.3/007	Thieme, T.	2014	Relative susceptibility of field populations of the oilseed rape pollen beetle ( <i>Meligethes aeneus</i> ) collected 2014 in Austria, Czech Republic, France, Germany, Hungary, Poland and UK to the insecticides Biscaya, chlorpyrifosethyl, tau-fluvalinate and acetamiprid, in comparison to Iambda-cyhalothrin BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/008	Thieme, T.	2021	Relative susceptibility of field populations of the oilseed rape pollen beetle ( <i>Brassicogethes aeneus</i> ) collected 2020 in the Czech Republic, France, Germany and Poland to the insecticides Iambda-cyhalothrin, tau-fluvalinate and acetamiprid BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.3/009	Thieme, T.	2022	Relative susceptibility of field populations of the oilseed rape pollen beetle ( <i>Brassicogethes aeneus</i> ) collected 2021 in France, Germany and Poland to the insecticides Iambda-cyhalothrin, tau-fluvalinate and acetamiprid BTL Bio-Test Labor GmbH Sagerheide, Sagerheide, Germany Report no. GEP Unpublished	N	Adama
KCP 6.4.1/001 Submitted under KCP 6.2/001	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028A GEP Unpublished	N	Adama
KCP 6.4.1/002 Submitted under KCP 6.2/002	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/003 Submitted under KCP 6.2/003	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD010A GEP Unpublished	N	Adama
KCP 6.4.1/004 Submitted under KCP 6.2/004	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD010B GEP Unpublished	N	Adama
KCP 6.4.1/005 Submitted under KCP 6.2/005	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD010C GEP Unpublished	N	Adama
KCP 6.4.1/006 Submitted under KCP 6.2/006	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD010D GEP Unpublished	N	Adama
KCP 6.4.1/007 Submitted under KCP 6.2/007	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD010E GEP Unpublished	N	Adama
KCP 6.4.1/008 Submitted under KCP 6.2/008	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD011A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/009 Submitted under KCP 6.2/009	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD011B GEP Unpublished	N	Adama
KCP 6.4.1/010 Submitted under KCP 6.2/010	Kloutvorová, J.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ14IEMABSD011C GEP Unpublished	N	Adama
KCP 6.4.1/011 Submitted under KCP 6.2/011	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011D GEP Unpublished	N	Adama
KCP 6.4.1/012 Submitted under KCP 6.2/012	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011E GEP Unpublished	N	Adama
KCP 6.4.1/013 Submitted under KCP 6.2/013	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD011F GEP Unpublished	N	Adama
KCP 6.4.1/014 Submitted under KCP 6.2/014	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD011G GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/015 Submitted under KCP 6.2/015	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012A GEP Unpublished	N	Adama
KCP 6.4.1/016 Submitted under KCP 6.2/016	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012B GEP Unpublished	N	Adama
KCP 6.4.1/017 Submitted under KCP 6.2/017	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD012C GEP Unpublished	N	Adama
KCP 6.4.1/018 Submitted under KCP 6.2/018	Hornik, P.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD001A GEP Unpublished	N	Adama
KCP 6.4.1/019 Submitted under KCP 6.2/019	Richter, T.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD001B GEP Unpublished	N	Adama
KCP 6.4.1/020 Submitted under KCP 6.2/020	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/021 Submitted under KCP 6.2/021	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005B GEP Unpublished	N	Adama
KCP 6.4.1/022 Submitted under KCP 6.2/022	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005C GEP Unpublished	N	Adama
KCP 6.4.1/023 Submitted under KCP 6.2/023	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005D GEP Unpublished	N	Adama
KCP 6.4.1/024 Submitted under KCP 6.2/024	Richter, T.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 PP Trial s.r.o., Brno, Czech Republic Report no. CZ15IEMABSD005E GEP Unpublished	N	Adama
KCP 6.4.1/025 Submitted under KCP 6.2/025	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005F GEP Unpublished	N	Adama
KCP 6.4.1/026 Submitted under KCP 6.2/026	Hornik, P.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD173A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/027 Submitted under KCP 6.2/027	Hornik, P.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD173B GEP Unpublished	N	Adama
KCP 6.4.1/028 Submitted under KCP 6.2/028	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0004-1 GEP Unpublished	N	Adama
KCP 6.4.1/029 Submitted under KCP 6.2/029	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0004-2 GEP Unpublished	N	Adama
KCP 6.4.1/030 Submitted under KCP 6.2/030	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0005-1 GEP Unpublished	N	Adama
KCP 6.4.1/031 Submitted under KCP 6.2/031	Gramza, H.	2012	The evaluation of efficacy and selectivity of MCW-2222 SL (Acetamiprid 200 SL) for the control of <i>Cydia pomonella</i> on apple AGRECO Sp. z o.o., Oława, Poland Report no. 11MAP0005-2 GEP Unpublished	N	Adama
KCP 6.4.1/032 Submitted under KCP 6.2/032	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o.o., Błędów, Poland Report no. 072_01_F12_134 GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/033 Submitted under KCP 6.2/033	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o o., Błędów, Poland Report no. 072_02_F12_135 GEP Unpublished	N	Adama
KCP 6.4.1/034 Submitted under KCP 6.2/034	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206A GEP Unpublished	N	Adama
KCP 6.4.1/035 Submitted under KCP 6.2/035	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206B GEP Unpublished	N	Adama
KCP 6.4.1/036 Submitted under KCP 6.2/036	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206C GEP Unpublished	N	Adama
KCP 6.4.1/037 Submitted under KCP 6.2/037	Meronka, K.	2013	Efficacy of MCW-2222 SL on codling moth ( <i>Cydia pomonella</i> ) in apple in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD206D GEP Unpublished	N	Adama
KCP 6.4.1/038 Submitted under KCP 6.2/038	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/039 Submitted under KCP 6.2/039	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207B GEP Unpublished	N	Adama
KCP 6.4.1/040 Submitted under KCP 6.2/040	Meronka, K.	2013	Efficacy of MCW-2222 SL against aphids (and other insects) in apple trees in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207C GEP Unpublished	N	Adama
KCP 6.4.1/041 Submitted under KCP 6.2/041	Meronka, K.	2013	Efficacy of MCW-2222 SL on aphids (and other insects) in apple tree in Poland Fertico Sp. z o o., Błędów, Poland Report no. PL13IEMABSD207D GEP Unpublished	N	Adama
KCP 6.4.1/042 Submitted under KCP 6.2/042	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109A GEP Unpublished	N	Adama
KCP 6.4.1/043 Submitted under KCP 6.2/043	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109B GEP Unpublished	N	Adama
KCP 6.4.1/044 Submitted under KCP 6.2/044	Ogrodniczek, A.	2014	Efficacy of MCW-2222 in control of <i>Aphis pomi</i> and other pests in case of their occurrence in apple orchard, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IEMABSD109C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/045 Submitted under KCP 6.2/045	Richter, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 PP Trial s.r.o., Brno, Czech Republic Report no. CZ21IEMABSD173C GEP Unpublished	N	Adama
KCP 6.4.1/046 Submitted under KCP 6.2/046	Bauer, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Czech Republic, 2021 InTec Agro Trials, s.r.o., Uhersky Ostroh, Czech Republic Report no. CZ21IEMABSD173D GEP Unpublished	N	Adama
KCP 6.4.1/047 Submitted under KCP 6.2/047	Felczak, K.	2015	Efficacy of MCW-2222 in control of green apple aphid <i>Aphis pomi</i> in apple orchard, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEMABSD127A GEP Unpublished	N	Adama
KCP 6.4.1/048 Submitted under KCP 6.2/048	Felczak, K.	2015	Efficacy of MCW-2222 in control of green apple aphid <i>Aphis pomi</i> in apple orchard, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEMABSD127B GEP Unpublished	N	Adama
KCP 6.4.1/049 Submitted under KCP 6.2/049	Lindemann, F.	2015	Analysis of efficacy to MCW-2222 on aphids in cereals, Germany 2015 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE15IENNNGW320C GEP Unpublished	N	Adama
KCP 6.4.1/050 Submitted under KCP 6.2/050	Barasits, T.	2013	Efficacy of MCW-2222 SL on codling moth in apple in Hungary in 2013 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEMABSD631A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/051 Submitted under KCP 6.2/051	Liposits, V.	2013	Efficacy of MCW-2222 SL on codling moth in apple in Hungary in 2013 Government Office of County Zala, Zalaegerszeg, Hungary Report no. HU13IEMABSD631B GEP Unpublished	N	Adama
KCP 6.4.1/052 Submitted under KCP 6.2/052	Hargitai, C.	2013	Efficacy of MCW-2222 SL on aphids in apple in Hungary in 2013 Government Office of Somogy County, Kaposvár, Hungary Report no. HU13IEMABSD632A GEP Unpublished	N	Adama
KCP 6.4.1/053 Submitted under KCP 6.2/053	Liposits, V.	2014	Efficacy of MCW-2222 SL on <i>Carpocapsa pomonella</i> in apple in Hungary 2014 Government Office of County Zala, Zalaegerszeg, Hungary Report no. HU14IEMABSD012A GEP Unpublished	N	Adama
KCP 6.4.1/054 Submitted under KCP 6.2/054	Sumedrea, M.	2012	Efficacy of MCW 2222 in control of <i>Eriosoma lanigerum</i> , compared with local standard ICDP, Pitesti-Maracineni, Romania Report no. MCW 2222 ERISLA GEP Unpublished	N	Adama
KCP 6.4.1/055 Submitted under KCP 6.2/055	Sumedrea, M.	2012	Efficacy of MCW 2222 against San Jose scale <i>Quadraspidiotus perniciosus</i> ICDP, Pitesti-Maracineni, Romania Report no. MCW 2222 QUADPE GEP Unpublished	N	Adama
KCP 6.4.1/056 Submitted under KCP 6.2/056	Coman, M.	2013	Efficacy of MCW-2222 SL on wooly aphid <i>Eriosoma lanigerum</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD002A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/057 Submitted under KCP 6.2/057	Coman, M.	2013	Efficacy of MCW-2222 SL on apple codling moth <i>Cydia pomonella</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD003A GEP Unpublished	N	Adama
KCP 6.4.1/058 Submitted under KCP 6.2/058	Hornik, P.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEMABSD538A GEP Unpublished	N	Adama
KCP 6.4.1/059 Submitted under KCP 6.2/059	Bauer, T.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2021 InTec Agro Trials, s.r.o., Uhersky Ostroh, Czech Republic Report no. CZ21IEMABSD538B GEP Unpublished	N	Adama
KCP 6.4.1/060 Submitted under KCP 6.2/060	Coman, M.	2014	Efficacy of MCW 2222 SL on green aphid <i>Aphis pomi</i> ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD046A GEP Unpublished	N	Adama
KCP 6.4.1/061 Submitted under KCP 6.2/061	Coman, M.	2014	Efficacy of MCW 2222 SL on apple wooly aphid <i>Eriosoma lanigerum</i> - Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD047A GEP Unpublished	N	Adama
KCP 6.4.1/062 Submitted under KCP 6.2/062	Coman, M.	2014	Efficacy of MCW 2222 SL on apple wooly aphid <i>Eriosoma lanigerum</i> - Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD047B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/063 Submitted under KCP 6.2/063	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048A GEP Unpublished	N	Adama
KCP 6.4.1/064 Submitted under KCP 6.2/064	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048B GEP Unpublished	N	Adama
KCP 6.4.1/065 Submitted under KCP 6.2/065	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 3 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048C GEP Unpublished	N	Adama
KCP 6.4.1/066 Submitted under KCP 6.2/066	Coman, M.	2014	Efficacy of MCW 2222 SL on San José scale - <i>Quadraspidiotus perniciosus</i> - Location 4 ICDP, Pitesti-Maracineni, Romania Report no. RO14IEMABSD048D GEP Unpublished	N	Adama
KCP 6.4.1/067 Submitted under KCP 6.2/067	Sumedrea, M.	2015	MCW-2222 efficacy in control of woolly aphid - <i>Eriosoma lanigerum</i> RIFG Pitesti - Maracineni, Romania, 2015 Location 1 ICDP, Pitesti-Maracineni, Romania Report no. RO15IEYPOME013A GEP Unpublished	N	Adama
KCP 6.4.1/068 Submitted under KCP 6.2/068	Sumedrea, M.	2015	MCW-2222 efficacy in control of woolly aphid - <i>Eriosoma lanigerum</i> RIFG Pitesti - Maracineni, Romania, 2015 Location 2 ICDP, Pitesti-Maracineni, Romania Report no. RO15IEYPOME013B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/069 Submitted under KCP 6.2/069	Toth, F.	2013	Efficacy of MCW-2222 SL against aphids on apple - Slovakia - Valice 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD001A GEP Unpublished	N	Adama
KCP 6.4.1/070 Submitted under KCP 6.2/070	Toth, F.	2013	Efficacy of MCW-2222 SL against aphids on apple - Slovakia - Camovec 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD001B GEP Unpublished	N	Adama
KCP 6.4.1/071 Submitted under KCP 6.2/071	Toth, F.	2013	Efficacy of MCW-2222 SL against codling moth on apple - Slovakia, Valice 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD002A GEP Unpublished	N	Adama
KCP 6.4.1/072 Submitted under KCP 6.2/072	Toth, F.	2013	Efficacy of MCW-2222 SL against codling moth on apple - Slovakia, Camovce 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEMABSD002B GEP Unpublished	N	Adama
KCP 6.4.1/073 Submitted under KCP 6.2/073	Tóth, F.	2015	Efficacy of MCW-2222 SL on aphids in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD001A GEP Unpublished	N	Adama
KCP 6.4.1/074 Submitted under KCP 6.2/074	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002A GEP Unpublished	N	Adama
KCP 6.4.1/075 Submitted under KCP 6.2/075	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/076 Submitted under KCP 6.2/076	Tóth, F.	2015	Efficacy of MCW-2222 SL on <i>Eriosoma lanigerum</i> in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD002C GEP Unpublished	N	Adama
KCP 6.4.1/077 Submitted under KCP 6.2/077	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003A GEP Unpublished	N	Adama
KCP 6.4.1/078 Submitted under KCP 6.2/078	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003B GEP Unpublished	N	Adama
KCP 6.4.1/079 Submitted under KCP 6.2/079	Tóth, F.	2015	Efficacy of MCW-2222 SL on QUADPE, Scales in apple, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEMABSD003C GEP Unpublished	N	Adama
KCP 6.4.1/080 Submitted under KCP 6.2/080	Tóth, F.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD001A GEP Unpublished	N	Adama
KCP 6.4.1/081 Submitted under KCP 6.2/081	Tóth, F.	2015	Efficacy of MCW-2222 SL on green apple aphid in apple in Čamovce- Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD001B GEP Unpublished	N	Adama
KCP 6.4.1/082 Submitted under KCP 6.2/082	Tóth, F.	2015	Efficacy of MCW-2222 SL on American blight in apple in Valice-Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD005A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/083 Submitted under KCP 6.2/083	Tóth, F.	2015	Efficacy of MCW-2222 SL on American blight in apple in Čamovce-Slovakia 2015 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEMABSD005B GEP Unpublished	N	Adama
KCP 6.4.1/084 Submitted under KCP 6.2/084	Skalský, M.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2022 VŠÚO Holovousy s.r.o., Hořice, Czech Republic Report no. CZ22IEMABSD500A GEP Unpublished	N	Adama
KCP 6.4.1/085 Submitted under KCP 6.2/085	Barasits, T.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEZEAMX131A GEP Unpublished	N	Adama
KCP 6.4.1/086 Submitted under KCP 6.2/086	István, F.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 Government Office of Vas Country, Szombathely, Hungary Report no. HU13IEZEAMX131B GEP Unpublished	N	Adama
KCP 6.4.1/087 Submitted under KCP 6.2/087	Gabi, G.	2013	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary 2013 Government Office of Tolna Conunty, Szekszárd, Hungary Report no. HU13IEZEAMX131C GEP Unpublished	N	Adama
KCP 6.4.1/088 Submitted under KCP 6.2/088	Blaskó, D.	2014	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary in 2014 ANADIAG Hungary Kft., Komárom, Hungary Report no. HU14IEZEAMX001A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/089 Submitted under KCP 6.2/089	Hoffmanné, P.Z.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn in Hungary in 2014 Növénypathyka Kft., Kaposvár, Hungary Report no. HU14IEZEAMX001B GEP Unpublished	N	Adama
KCP 6.4.1/090 Submitted under KCP 6.2/090	Varga, A.	2015	Efficacy of MCW-2222 on <i>Ostrinia nubilalis</i> in corn in Hungary in 2015 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU15IEZEAMX102A GEP Unpublished	N	Adama
KCP 6.4.1/091 Submitted under KCP 6.2/091	Magyar, B.	2015	Efficacy of MCW-2222 on <i>Ostrinia nubilalis</i> in corn in Hungary in 2015 Fructika Kft, Tiszakanyár, Hungary Report no. HU15IEZEAMX102B GEP Unpublished	N	Adama
KCP 6.4.1/092 Submitted under KCP 6.2/092	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virgifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043A GEP Unpublished	N	Adama
KCP 6.4.1/093 Submitted under KCP 6.2/093	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virginiifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043B GEP Unpublished	N	Adama
KCP 6.4.1/094 Submitted under KCP 6.2/094	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against <i>Diabrotica virgifera virginiifera</i> in maize, 1 site in Romania 2014 Eurofins Agrosience Services SRL, Timisoara, Romania Report no. RO14IEZEAMX043C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/095 Submitted under KCP 6.2/095	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031A GEP Unpublished	N	Adama
KCP 6.4.1/096 Submitted under KCP 6.2/096	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031B GEP Unpublished	N	Adama
KCP 6.4.1/097 Submitted under KCP 6.2/097	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against <i>Ostrinia nubilalis</i> in Corn, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEZEAMX031C GEP Unpublished	N	Adama
KCP 6.4.1/098 Submitted under KCP 6.2/098	Soltesz, J.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEZEAMX001A GEP Unpublished	N	Adama
KCP 6.4.1/099 Submitted under KCP 6.2/099	Soltesz, J.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEZEAMX001B GEP Unpublished	N	Adama
KCP 6.4.1/100 Submitted under KCP 6.2/100	Tóth, F.	2015	Efficacy of MCW-2222 on <i>Diabrotica virgifera virgifera</i> in corn, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEZEAMX001C GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/101 Submitted under KCP 6.2/101	Hornik, P.	2013	Analysis of efficacy to MCW-2222 SL on colorado beetle in potato in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IESOLTU026A GEP Unpublished	N	Adama
KCP 6.4.1/102 Submitted under KCP 6.2/102	Laštovičková, H.	2013	Efficacy of MCW-2222 in potato ZS Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ13IESOLTU026B GEP Unpublished	N	Adama
KCP 6.4.1/103 Submitted under KCP 6.2/103	Heryán, J.	2013	Analysis of efficacy to MCW-2222 SL on aphids and colorado beetle in potato Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ13IESOLTU026C GEP Unpublished	N	Adama
KCP 6.4.1/104 Submitted under KCP 6.2/104	Hornik, P.	2014	Analysis of efficacy to MCW-2222 SL on Colorado Beetle in Potato in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IESOLTU009A GEP Unpublished	N	Adama
KCP 6.4.1/105 Submitted under KCP 6.2/105	Daňa, P.	2014	Analysis of efficacy to MCW-2222 SL on Colorado Beetle in Potato in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ14IESOLTU009B GEP Unpublished	N	Adama
KCP 6.4.1/106 Submitted under KCP 6.2/106	Hruška, J.	2014	Efficacy of MCW-2222 SL on LPTNDE in potato, Czech Republic Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IESOLTU009C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/107 Submitted under KCP 6.2/107	Zickart, U.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2014 BioChem agrar GmbH, Machern, Germany Report no. DE14IESOLTU320M GEP Unpublished	N	Adama
KCP 6.4.1/108 Submitted under KCP 6.2/108	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320A GEP Unpublished	N	Adama
KCP 6.4.1/109 Submitted under KCP 6.2/109	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320B GEP Unpublished	N	Adama
KCP 6.4.1/110 Submitted under KCP 6.2/110	Zickart, U.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Germany 2015 BioChem agrar GmbH, Machern, Germany Report no. DE15IESOLTU320C GEP Unpublished	N	Adama
KCP 6.4.1/111 Submitted under KCP 6.2/111	Hornik, P.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in the Czech Republic in 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEMABSD500B GEP Unpublished	N	Adama
KCP 6.4.1/112 Submitted under KCP 6.2/112	Richter, T.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, the Czech Republic, 2022 PP Trial s.r.o., Brno, Czech Republic Report no. CZ22IEMABSD524A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/113 Submitted under KCP 6.2/113	Furman-Fratczak, K.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SI) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL13IESOLTU204A GEP Unpublished	N	Adama
KCP 6.4.1/114 Submitted under KCP 6.2/114	Furman-Fratczak, K.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL13IESOLTU204B GEP Unpublished	N	Adama
KCP 6.4.1/115 Submitted under KCP 6.2/115	Pławuszcwski, M.	2014	Determination of efficacy of MCW-2222 against colorado potato beetle in potato Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU204C GEP Unpublished	N	Adama
KCP 6.4.1/116 Submitted under KCP 6.2/116	Pławuszcwski, M.	2013	Determination of efficacy of MCW-2222 against Colorado potato beetle on potato Eurofins Agrosience Services Sp. z o. o., Szamotuły, Poland Report no. PL13IESOLTU204D GEP Unpublished	N	Adama
KCP 6.4.1/117 Submitted under KCP 6.2/117	Głowacki, G.	2013	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/l) against green peach aphid ( <i>Myzus persicae</i> ), on potato. Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU205B GEP Unpublished	N	Adama
KCP 6.4.1/118 Submitted under KCP 6.2/118	Meronka, K.	2015	Efficacy of MCW-2222 SL applied in the control of Colorado beetle <i>Leptinotarsa decemlineata</i> in potato, Poland 2014 Fertico Sp. z o o., Błędów, Poland Report no. PL14IESOLTU108A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/119 Submitted under KCP 6.2/119	Szemendera, A.	2014	Efficacy of MCW-2222 SL applied in the control of Colorado beetle <i>Leptinotarsa decemlineata</i> in potato, Poland 2014 Fertico Sp. z o.o., Błędów, Poland Report no. PL14IESOLTU108B GEP Unpublished	N	Adama
KCP 6.4.1/120 Submitted under KCP 6.2/120	Kukula, A.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of pests on potato AGRECO Sp. z o.o., Oława, Poland Report no. PL14IESOLTU108C GEP Unpublished	N	Adama
KCP 6.4.1/121 Submitted under KCP 6.2/121	Kukula, A.	2014	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of pests on potato AGRECO Sp. z o.o., Oława, Poland Report no. PL14IESOLTU108D GEP Unpublished	N	Adama
KCP 6.4.1/122 Submitted under KCP 6.2/122	Głowacki, G.	2014	Determination of efficacy of MCW-2222 against Colorado potato beetle ( <i>Leptinotarsa decemlineata</i> ) in potato Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IESOLTU108E GEP Unpublished	N	Adama
KCP 6.4.1/123 Submitted under KCP 6.2/123	Głowacki, G.	2014	Determination of efficacy of MCW-2222 against Colorado potato beetle potato Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IESOLTU108F GEP Unpublished	N	Adama
KCP 6.4.1/124 Submitted under KCP 6.2/124	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Leptinotarsa decemlineata</i> on potato BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL14IESOLTU118G GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/125 Submitted under KCP 6.2/125	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 5 Sites in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044A GEP Unpublished	N	Adama
KCP 6.4.1/126 Submitted under KCP 6.2/126	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044B GEP Unpublished	N	Adama
KCP 6.4.1/127 Submitted under KCP 6.2/127	Eberhart, A.	2014	Determination of efficacy of MCW-2222 SL against Colorado Beetle and/or Aphids in Potatoes, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IESOLTU044C GEP Unpublished	N	Adama
KCP 6.4.1/128 Submitted under KCP 6.2/128	Hermeziu, M.	2014	Report on biological evaluation of Product: MCW-2222 SL National Institute of Research and Development for Potato and Sugar Beet, Braşov, Romania Report no. RO14IESOLTU044D Official Unpublished	N	Adama
KCP 6.4.1/129 Submitted under KCP 6.2/129	Hermeziu, M.	2014	Report on biological evaluation of Product: MCW-2222 SL National Institute of Research and Development for Potato and Sugar Beet, Braşov, Romania Report no. RO14IESOLTU044E Official Unpublished	N	Adama
KCP 6.4.1/130 Submitted under KCP 6.2/130	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Colorado Potato Beetles in Potato, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IESOLTU012A GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/131 Submitted under KCP 6.2/131	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against Colorado Potato Beetles in Potato, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IESOLTU012B GEP Unpublished	N	Adama
KCP 6.4.1/132 Submitted under KCP 6.2/132	Forgacova, L.	2013	Analysis of efficacy of MCW-2222 SL against Colorado beetle on potato, Slovakia 2013 Ing. L'ubica Forgáčová, Boliarov, Slovakia Report no. SK13IESOLTU001A GEP Unpublished	N	Adama
KCP 6.4.1/133 Submitted under KCP 6.2/133	Soltész, J.	2013	Analysis of efficacy of MCW-2222 SL against Colorado beetle on potato, Slovakia 2013 Fyše, s.r.o. AgroLab Kolare, Slovakia Report no. SK13IESOLTU001B GEP Unpublished	N	Adama
KCP 6.4.1/134 Submitted under KCP 6.2/134	Forgacova, L.	2014	Analysis of efficacy to MCW-2222 SL against Colorado beetle on potato Ing. Lubica Forgacova, Boliarov, Slovakia Report no. SK14IESOLTU001A GEP Unpublished	N	Adama
KCP 6.4.1/135 Submitted under KCP 6.2/135	Forgacova, L.	2014	Analysis of efficacy to MCW-2222 SL against Colorado beetle on potato Ing. Lubica Forgacova, Boliarov, Slovakia Report no. SK14IESOLTU001B GEP Unpublished	N	Adama
KCP 6.4.1/136 Submitted under KCP 6.2/136	Ceri, L.	2015	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato, Slovakia 2014 Fyše, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IESOLTU001C GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/137 Submitted under KCP 6.2/137	Čáp, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEYCERE008A GEP Unpublished	N	Adama
KCP 6.4.1/138 Submitted under KCP 6.2/138	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on aphids in cereals, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEYCERE001A GEP Unpublished	N	Adama
KCP 6.4.1/139 Submitted under KCP 6.2/139	Rohr, J.	2013	Analysis of efficacy of MCW-2222 SL on aphids in cereals Agrartest GmbH, Aarbergen-Panrod, Germany Report no. FCS12-3111-E01 GEP Unpublished	N	Adama
KCP 6.4.1/140 Submitted under KCP 6.2/140	Weiß, E.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE13IEYCERE320B GEP Unpublished	N	Adama
KCP 6.4.1/141 Submitted under KCP 6.2/141	Hetterich, A.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE13IEYCERE320D GEP Unpublished	N	Adama
KCP 6.4.1/142 Submitted under KCP 6.2/142	Franke, K.	2014	Analysis of efficacy of MCW-2222 on aphids in winter wheat - open field efficacy and selectivity study 2014 Field Research Support, Wunstorf, Germany Report no. DE14IEYCERE320L GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/143 Submitted under KCP 6.2/143	Lindemann, F.	2015	Analysis of efficacy to MCW-2222 SL on aphids in cereals, Germany 2015 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE15IENNGW320B GEP Unpublished	N	Adama
KCP 6.4.1/144 Submitted under KCP 6.2/144	Martin, T.	2014	Analysis of efficacy to MCW-2222 on virus vector aphids in cereals autumn 2013 martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE13IEYCERE320H GEP Unpublished	N	Adama
KCP 6.4.1/145 Submitted under KCP 6.2/145	Martin, T.	2015	Analysis of efficacy to MCW-2222 SL on virus vector aphids in cereals Germany autumn 2014 martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE14IEYCERE320N GEP Unpublished	N	Adama
KCP 6.4.1/146 Submitted under KCP 6.2/146	Roslapil, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ14IEYCERE008B GEP Unpublished	N	Adama
KCP 6.4.1/147 Submitted under KCP 6.2/147	Fialova, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in Cereals in the Czech Republic in 2014 Zemedelska ZS Kujavy, s.r.o., Bystrice nad Pernštejnem, Czech Republic Report no. CZ14IEYCERE008C GEP Unpublished	N	Adama
KCP 6.4.1/148 Submitted under KCP 6.2/148	Roslapil, J.	2015	Analysis of efficacy to MCW-2222 SL on aphids in cereals, Czech Republic 2015 Zemedelska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ15IEYCERE001B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/149 Submitted under KCP 6.2/149	Subr, J.	2014	Analysis of efficacy to MCW-2222 SL on aphids in cereals in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEYCERE008D GEP Unpublished	N	Adama
KCP 6.4.1/150 Submitted under KCP 6.2/150	Zickart, U.	2014	Analysis of efficacy of MCW-2222 on aphids in cereals BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE14IENNNGG320J GEP Unpublished	N	Adama
KCP 6.4.1/151 Submitted under KCP 6.2/151	Głowacki, G.	2015	Determination of efficacy of MCW-2222 used singly against aphids on winter wheat Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL15IETRZAW013A GEP Unpublished	N	Adama
KCP 6.4.1/152 Submitted under KCP 6.2/152	Głowacki, G.	2015	Determination of the efficacy of MCW-2222 (acetamiprid 200 g/l) against English grain aphid ( <i>Sitobion arvense</i> ) and apple bud aphid ( <i>Rhopalosiphum padi</i> ) on winter wheat Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL15IETRZAW013B GEP Unpublished	N	Adama
KCP 6.4.1/153 Submitted under KCP 6.2/153	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of aphids on winter tritcale BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IETTLSS014A GEP Unpublished	N	Adama
KCP 6.4.1/154 Submitted under KCP 6.2/154	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of aphids on winter tritcale BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IETTLSS014B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/155 Submitted under KCP 6.2/155	Pawlak, A.	2015	Analysis of efficacy to MCW-2222 on aphids in spring barley, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEHORVS015A GEP Unpublished	N	Adama
KCP 6.4.1/156 Submitted under KCP 6.2/156	Pawlak, A.	2015	Analysis of efficacy to MCW-2222 on aphids in spring barley, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEHORVS015B GEP Unpublished	N	Adama
KCP 6.4.1/157 Submitted under KCP 6.2/157	Georgescu, E.	2012	Evaluation of MCW 222 SL: vegetation treatment against aphids on wheat (NARDI Fundulea) Institute for R&D in Agriculture, Fundulea, Romania Report no. ROCL0I3002012 GEP Unpublished	N	Adama
KCP 6.4.1/158 Submitted under KCP 6.2/158	Georgescu, E.	2013	Analysis of efficacy to MCW-2222 on aphids in cereals Academy of Agricultural and Forestry Sciences, Fundulea, Romania Report no. RO13IETRZAW003A GEP Unpublished	N	Adama
KCP 6.4.1/159 Submitted under KCP 6.2/159	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042A GEP Unpublished	N	Adama
KCP 6.4.1/160 Submitted under KCP 6.2/160	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/161 Submitted under KCP 6.2/161	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042C GEP Unpublished	N	Adama
KCP 6.4.1/162 Submitted under KCP 6.2/162	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042D GEP Unpublished	N	Adama
KCP 6.4.1/163 Submitted under KCP 6.2/163	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042E GEP Unpublished	N	Adama
KCP 6.4.1/164 Submitted under KCP 6.2/164	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042F GEP Unpublished	N	Adama
KCP 6.4.1/165 Submitted under KCP 6.2/165	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042G GEP Unpublished	N	Adama
KCP 6.4.1/166 Submitted under KCP 6.2/166	Eberhart, A.	2014	Determination of efficacy of MCW-2222SL against aphids in cereals, 1 Site in Romania 2014 Eurofins Agrosience Service GmbH, Stade, Germany Report no. RO14IETRZAW042H GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/167 Submitted under KCP 6.2/167	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against aphids in cereals, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEYCERE011A GEP Unpublished	N	Adama
KCP 6.4.1/168 Submitted under KCP 6.2/168	Eberhart, A.	2015	Determination of efficacy of MCW-2222 SL against aphids in cereals, 1 Site in Romania 2015 Eurofins Agrosience Services S.R.L., Timișoara, Romania Report no. RO15IEYCERE011B GEP Unpublished	N	Adama
KCP 6.4.1/169 Submitted under KCP 6.2/169	Zöllner, H.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Germany In 2022 Field Research Support, Wunstorf, Germany Report no. DE22IEMABSD500A GEP Unpublished	N	Adama
KCP 6.4.1/170 Submitted under KCP 6.2/170	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Germany in 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEMABSD500B GEP Unpublished	N	Adama
KCP 6.4.1/171 Submitted under KCP 6.2/171	Martin, T.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, Germany, 2022 Martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE22IEMABSD524A GEP Unpublished	N	Adama
KCP 6.4.1/172 Submitted under KCP 6.2/172	Hakkert, G.	2022	Efficacy evaluation of ADM.02100.I formulations and MCW-2222 against <i>Aphis pomi</i> in apple, The Netherlands, 2022 Asperico bv, Enspijk, The Netherlands Report no. NL22IEMABSD010A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/173 Submitted under KCP 6.2/173	Rose-Gray, S.	2022	Efficacy evaluation of ADM.02100.I.1.B and MCW-2222 against <i>Aphis pomi</i> in apple, UK, 2022 Oxford Agricultural Trials Limited, Bicester, United Kingdom Report no. UK22IEMABSD601A GEP Unpublished	N	Adama
KCP 6.4.1/174 Submitted under KCP 6.2/174	Rose-Gray, S.	2022	Efficacy evaluation of ADM.02100.I.1.B and MCW-2222 against <i>Aphis pomi</i> in apple, UK, 2022 Oxford Agricultural Trials Limited, Bicester, United Kingdom Report no. UK22IEMABSD601B GEP Unpublished	N	Adama
KCP 6.4.1/175 Submitted under KCP 6.2/175	Ogrodniczek, A.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Poland in 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEMABSD240A GEP Unpublished	N	Adama
KCP 6.4.1/176 Submitted under KCP 6.2/176	Gajek, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Poland in 2021 Agro Reserach Consulting, Łowicz, Poland Report no. PL21IEMABSD240B GEP Unpublished	N	Adama
KCP 6.4.1/177 Submitted under KCP 6.2/177	Magyar, B.	2014	Efficacy of MCW-2222 SL on <i>Aphis pomi</i> , <i>Dysaphis plantaginea</i> in apple in Hungary 2014 SGS Hungária Kft., Budapest, Hungary Report no. HU14IEMABSD011B GEP Unpublished	N	Adama
KCP 6.4.1/178 Submitted under KCP 6.2/178	Barasits, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IEMABSD173B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/179 Submitted under KCP 6.2/179	Barasits, T.	2021	Efficacy and selectivity evaluation of ADM.00900.I.1.C for the control of <i>Cydia pomonella</i> in apple, Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IEMABSD173D GEP Unpublished	N	Adama
KCP 6.4.1/180 Submitted under KCP 6.2/180	Coman, M.	2013	Efficacy of MCW-2222 SL on San Jose scale <i>Quadraspidiotus perniciosus</i> (RIFG Pitesti, Romania, 2013) ICDP, Pitesti-Maracineni, Romania Report no. RO13IEMABSD001A GEP Unpublished	N	Adama
KCP 6.4.1/181 Submitted under KCP 6.2/181	Botoman, G.	2021	Efficacy and selectivity evaluation of ADM.00900. I.1.C for the control of ( <i>Cydia pomonella</i> ) in apple AgroProspect SRL, Brasov, Romania Report no. RO21IEMABSD233B GEP Unpublished	N	Adama
KCP 6.4.1/182 Submitted under KCP 6.2/182	Cáp, J.	2014	Efficacy evaluation of MCW-2222 against biting insects on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW005A GEP Unpublished	N	Adama
KCP 6.4.1/183 Submitted under KCP 6.2/183	Subr, J.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW005B GEP Unpublished	N	Adama
KCP 6.4.1/184 Submitted under KCP 6.2/184	Cáp, J.	2014	Efficacy evaluation of MCW-2222 against pollen beetle on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW006A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/185 Submitted under KCP 6.2/185	Spurova, R.	2014	Efficacy of MCW-2222 SL on MELIAE in oil seed rape. ZS Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW006B GEP Unpublished	N	Adama
KCP 6.4.1/186 Submitted under KCP 6.2/186	Čáp, J.	2014	Efficacy evaluation of MCW-2222 on <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on oil seed rape in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEBRSNW007A GEP Unpublished	N	Adama
KCP 6.4.1/187 Submitted under KCP 6.2/187	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> in oil seed rape in the Czech Republic in 2014 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ14IEBRSNW007B GEP Unpublished	N	Adama
KCP 6.4.1/188 Submitted under KCP 6.2/188	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.4.1/189 Submitted under KCP 6.2/189	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001B GEP Unpublished	N	Adama
KCP 6.4.1/190 Submitted under KCP 6.2/190	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/191 Submitted under KCP 6.2/191	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001E GEP Unpublished	N	Adama
KCP 6.4.1/192 Submitted under KCP 6.2/192	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001G GEP Unpublished	N	Adama
KCP 6.4.1/193 Submitted under KCP 6.2/193	Subr, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 Zkusebni stanice Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ15IEBRSNW001H GEP Unpublished	N	Adama
KCP 6.4.1/194 Submitted under KCP 6.2/194	Čáp, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape, Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEBRSNW001I GEP Unpublished	N	Adama
KCP 6.4.1/195 Submitted under KCP 6.2/195	Jozefiak, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Slovakia in 2021 Berberis s.r.o., Boliarov, Slovakia Report no. SK21IEMABSD538A GEP Unpublished	N	Adama
KCP 6.4.1/196 Submitted under KCP 6.2/196	Jozefiak, D.	2021	Efficacy evaluation of MCW-2222 in apple against <i>Cydia pomonella</i> in Slovakia in 2021 Berberis s.r.o., Boliarov, Slovakia Report no. SK21IEMABSD538B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/197 Submitted under KCP 6.2/197	Rohr, J.	2014	Analysis of efficacy to MCW-2222 SL on <i>Ceutorhynchus napi/quadridens</i> in winter oil seed rape Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320A GEP Unpublished	N	Adama
KCP 6.4.1/198 Submitted under KCP 6.2/198	Rohr, J.	2014	Analysis of efficacy to MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320C GEP Unpublished	N	Adama
KCP 6.4.1/199 Submitted under KCP 6.2/199	Zickart, U.	2014	Analysis of efficacy to MCW-2222 SL on brassica pod midge (DASYBR) in oil seed rape, Germany 2014 BioChem agrar GmbH, Goch-Nierswalde, Germany Report no. DE14IEBRSNW320H GEP Unpublished	N	Adama
KCP 6.4.1/200 Submitted under KCP 6.2/200	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on stem weevil in oil seed rape, Germany 2015 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE15IEBRSNW320A GEP Unpublished	N	Adama
KCP 6.4.1/201 Submitted under KCP 6.2/201	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on pollen beetle in oil seed rape, Germany 2015 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE15IEBRSNW320E GEP Unpublished	N	Adama
KCP 6.4.1/202 Submitted under KCP 6.2/202	Perner, J.	2015	Efficacy analysis of MCW-2222 SL against pollen beetles ( <i>Meligethes aeneus</i> ) in oil seed rape - Germany, 2015 U.A.S. GmbH, Jena, Germany Report no. DE15IEBRSNW320G GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/203 Submitted under KCP 6.2/203	von Hörsten, D.	2015	Analysis of the efficacy of MCW-2222 SL on pollen beetle in oil seed rape Field Research Support, Wunstorf, Germany Report no. DE15IEBRSNW320H GEP Unpublished	N	Adama
KCP 6.4.1/204 Submitted under KCP 6.2/204	von Hörsten, D.	2015	Analysis of the efficacy of MCW-2222 SL on cabbage seed weevil and blossom beetle in oil seed rape Field Research Support, Wunstorf, Germany Report no. DE15IEBRSNW320K GEP Unpublished	N	Adama
KCP 6.4.1/205 Submitted under KCP 6.2/205	Barou, J.-L.	2012	Evaluate the insecticidal action of MCW-2222 used against autumn aphids ( <i>Myzus persicae</i> ) on rape AGROTEST France, Revel, France Report no. E-1277 GEP Unpublished	N	Adama
KCP 6.4.1/206 Submitted under KCP 6.2/206	Barou, J.-L.	2012	Evaluate the insecticidal action of MCW-2222 used against autumn aphids ( <i>Myzus persicae</i> ) on rape AGROTEST France, Revel, France Report no. E-1278 GEP Unpublished	N	Adama
KCP 6.4.1/207 Submitted under KCP 6.2/207	Barou, J.-L.	2013	Efficacy of MCW-2222 against aphids ( <i>Myzus persicae</i> ) on rape in France in 2013 AGROTEST France, Revel, France Report no. FR13IEBRNN302C GEP Unpublished	N	Adama
KCP 6.4.1/208 Submitted under KCP 6.2/208	Rivet, J.; Crepin, D.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 ESSAIS+, Boyelles, France Report no. FR14IEBRNN105A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/209 Submitted under KCP 6.2/209	Rivet, J.; Crepin, D.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 ESSAIS+, Boyelles, France Report no. FR14IEBRSNN105B GEP Unpublished	N	Adama
KCP 6.4.1/210 Submitted under KCP 6.2/210	Barou, J.-L.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 AGROTEST France, Revel, France Report no. FR14IEBRSNN105C GEP Unpublished	N	Adama
KCP 6.4.1/211 Submitted under KCP 6.2/211	Barou, J.-L.	2014	Efficacy evaluation of MCW-2222, Mavrik flo and Pyrinex ME against autumn aphids <i>Myzus persicae</i> (MYZUPE) on oil seed rape in France in 2014 AGROTEST France, Revel, France Report no. FR14IEBRSNN105D GEP Unpublished	N	Adama
KCP 6.4.1/212 Submitted under KCP 6.2/212	Tuna, V.	2022	Determination of efficacy evaluation of MCW-2222 in corn against <i>Ostrinia nubilalis</i> in Romania in 2022 EUROFINS AGROSCIENCE SERVICES S.R.L., Timiș, Romania Report no. RO22IEZEAMX282A GEP Unpublished	N	Adama
KCP 6.4.1/213 Submitted under KCP 6.2/213	Jozefiak, D.	2022	Efficacy evaluation of MCW-2222 in corn against <i>Ostrinia nubilalis</i> in (Slovakia) in 2022 Berberis s.r.o., Boliarov, Slovakia Report no. SK22IEZEAMX501A GEP Unpublished	N	Adama
KCP 6.4.1/214 Submitted under KCP 6.2/214	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in the Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IESOLTU536A GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/215 Submitted under KCP 6.2/215	Hetterich, A.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato 2014 Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE14IESOLTU320N GEP Unpublished	N	Adama
KCP 6.4.1/216 Submitted under KCP 6.2/216	Hetterich, A.	2014	Analysis of efficacy to MCW-2222 SL on Colorado beetle in potato 2014 Ingenieurbüro Andreas Hetterich, Schwarzach, Germany Report no. DE14IESOLTU320O GEP Unpublished	N	Adama
KCP 6.4.1/217 Submitted under KCP 6.2/217	Rohr, J.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 Trialtec GmbH, Haby, Germany Report no. DE22IESOLTU536C GEP Unpublished	N	Adama
KCP 6.4.1/218 Submitted under KCP 6.2/218	Rohr, J.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 Trialtec GmbH, Haby, Germany Report no. DE22IESOLTU536D GEP Unpublished	N	Adama
KCP 6.4.1/219 Submitted under KCP 6.2/219	Torkler, K.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Germany, 2022 QUINTUS GMBH, Hohen Wangelin OT Liepen, Germany Report no. DE22IESOLTU536E GEP Unpublished	N	Adama
KCP 6.4.1/220 Submitted under KCP 6.2/220	De Vries, H.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in The Netherlands, 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IESOLTU004B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/221 Submitted under KCP 6.2/221	De Vries, H.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in The Netherlands, 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IESOLTU036C GEP Unpublished	N	Adama
KCP 6.4.1/222 Submitted under KCP 6.2/222	Armstrong, M.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in UK, 2022 Armstrong Agriculture Ltd, Stamford, United Kingdom Report no. UK22IESOLTU600A GEP Unpublished	N	Adama
KCP 6.4.1/223 Submitted under KCP 6.2/223	Gajek, D.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IESOLTU108A GEP Unpublished	N	Adama
KCP 6.4.1/224 Submitted under KCP 6.2/224	Szemendera, A.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU108B GEP Unpublished	N	Adama
KCP 6.4.1/225 Submitted under KCP 6.2/225	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IESOLTU108C GEP Unpublished	N	Adama
KCP 6.4.1/226 Submitted under KCP 6.2/226	Kukuła, A.	2022	Efficacy evaluation MCW-2222 against <i>Myzus persicae</i> in potato in Poland, 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IESOLTU108D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/227 Submitted under KCP 6.2/227	Gajek, D.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IESOLTU109A GEP Unpublished	N	Adama
KCP 6.4.1/228 Submitted under KCP 6.2/228	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW301A GEP Unpublished	N	Adama
KCP 6.4.1/229 Submitted under KCP 6.2/229	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadriens</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW301B GEP Unpublished	N	Adama
KCP 6.4.1/230 Submitted under KCP 6.2/230	Głowacki, G.	2014	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/L) against cabbage stem weevil ( <i>Ceutorhynchus napi</i> ) on the winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW301C GEP Unpublished	N	Adama
KCP 6.4.1/231 Submitted under KCP 6.2/231	Głowacki, G.	2014	Determination of efficacy of MCW-2222 (Acetamiprid 200 g/l) used against cabbage seed weevil and cabbage seedstalk curculio in winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW301D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/232 Submitted under KCP 6.2/232	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Meligethes aeneus</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW302A GEP Unpublished	N	Adama
KCP 6.4.1/233 Submitted under KCP 6.2/233	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Meligethes aeneus</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW302B GEP Unpublished	N	Adama
KCP 6.4.1/234 Submitted under KCP 6.2/234	Pawlak, A.	2014	Analysis of the efficacy of MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Staphyt Sp. Z o.o., Poznań, Poland Report no. PL14IEBRSNW302C GEP Unpublished	N	Adama
KCP 6.4.1/235 Submitted under KCP 6.2/235	Pawlak, A.	2014	Analysis of the efficacy of MCW-2222 SL on <i>Meligethes aeneus</i> in oil seed rape Staphyt Sp. Z o.o., Poznań, Poland Report no. PL14IEBRSNW302D GEP Unpublished	N	Adama
KCP 6.4.1/236 Submitted under KCP 6.2/236	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used singly against blossom beetle on winter rape Eurofins Agroscience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW302E GEP Unpublished	N	Adama
KCP 6.4.1/237 Submitted under KCP 6.2/237	Głowacki, G.	2014	Determination of the efficacy of MCW-2222 (Acetamiprid 200 g/L) against blossom beetle ( <i>Meligethes aeneus</i> ) on the winter rape Eurofins Agroscience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW302F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/238 Submitted under KCP 6.2/238	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW303A GEP Unpublished	N	Adama
KCP 6.4.1/239 Submitted under KCP 6.2/239	Furman-Fratczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (Acetamiprid 200 SL) for the control of <i>Ceutorhynchus assimilis</i> and <i>Dasineura brassicae</i> on winter oil seed rape BIOTEK Agriculture Polska Sp. z o o., Oława, Poland Report no. PL14IEBRSNW303B GEP Unpublished	N	Adama
KCP 6.4.1/240 Submitted under KCP 6.2/240	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW303C GEP Unpublished	N	Adama
KCP 6.4.1/241 Submitted under KCP 6.2/241	Głowacki, G.	2014	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL14IEBRSNW303D GEP Unpublished	N	Adama
KCP 6.4.1/242 Submitted under KCP 6.2/242	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/243 Submitted under KCP 6.2/243	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301B GEP Unpublished	N	Adama
KCP 6.4.1/244 Submitted under KCP 6.2/244	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW301C GEP Unpublished	N	Adama
KCP 6.4.1/245 Submitted under KCP 6.2/245	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus napi</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW301D GEP Unpublished	N	Adama
KCP 6.4.1/246 Submitted under KCP 6.2/246	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus napi</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW301E GEP Unpublished	N	Adama
KCP 6.4.1/247 Submitted under KCP 6.2/247	Furman-Frątczak, K.	2015	The evaluation of efficacy and selectivity of MCW-2222 (acetamiprid 200 SL) for the control of <i>Ceutorhynchus napi</i> and <i>Ceutorhynchus quadridens</i> on winter oilseed rape BIOTEK Agriculture Polska Sp. Z o.o., Oława, Polska Report no. PL15IEBRSNW302A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/248 Submitted under KCP 6.2/248	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus quadridens</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW302B GEP Unpublished	N	Adama
KCP 6.4.1/249 Submitted under KCP 6.2/249	Pawlak, A.	2015	Analysis of the efficacy to MCW-222 on <i>Ceutorhynchus quadridens</i> in oil seed rape, Poland 2015 Staphyt Sp. z o.o., Poznań, Poland Report no. PL15IEBRSNW302C GEP Unpublished	N	Adama
KCP 6.4.1/250 Submitted under KCP 6.2/250	Szemendera, A.	2015	Efficacy of MCW - 2222 in the control of cabbage seed weevil <i>Ceutorhynchus assimilis</i> on winter oilseed rape, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEBRSNW303A GEP Unpublished	N	Adama
KCP 6.4.1/251 Submitted under KCP 6.2/251	Szemendera, A.	2015	Efficacy of MCW - 2222 in the control of cabbage seed weevil <i>Ceutorhynchus assimilis</i> on winter oilseed rape, Poland 2015 Fertico Sp. z o o., Błędów, Poland Report no. PL15IEBRSNW303B GEP Unpublished	N	Adama
KCP 6.4.1/252 Submitted under KCP 6.2/252	Chermuła, Ł.	2015	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape. Eurofins Agrosience Services Sp. z o. o., Kaźmierz, Poland Report no. PL15IEBRSNW304A GEP Unpublished	N	Adama
KCP 6.4.1/253 Submitted under KCP 6.2/253	Chermuła, Ł.	2015	Determination of efficacy of MCW-2222 used against cabbage seed weevil and Brassica pod midge on winter rape. Eurofins Agrosience Services Sp. z o. o., Kaźmierz, Poland Report no. PL15IEBRSNW304B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/254 Submitted under KCP 6.2/254	Ferenc, S.	2011	Control on rape blossom beetle and cabbage seed weevil in oilseed rape by foliar spraying Government Office of Nógrád County, Balassagyarmat, Hungary Report no. Z 11/1/2011 Official Unpublished	N	Adama
KCP 6.4.1/255 Submitted under KCP 6.2/255	Csaba, N.	2011	Control of common pollen beetle and cabbage seedpod weevil in oilseed rape Government Office of Somogy County, Kaposvár, Hungary Report no. Z 11/2/2011 Official Unpublished	N	Adama
KCP 6.4.1/256 Submitted under KCP 6.2/256	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IESOLTU109B GEP Unpublished	N	Adama
KCP 6.4.1/257 Submitted under KCP 6.2/257	Barasits, T.	2011	Efficacy and selectivity of MCW-2222 on insects of winter oilseed rape SynTech Research Hungary Kft, Táplánszentkereszt, Hungary Report no. SRHU11-098-135IE GEP Unpublished	N	Adama
KCP 6.4.1/258 Submitted under KCP 6.2/258	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IESOLTU109C GEP Unpublished	N	Adama
KCP 6.4.1/259 Submitted under KCP 6.2/259	Kukuła, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IESOLTU109D GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/260 Submitted under KCP 6.2/260	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109E GEP Unpublished	N	Adama
KCP 6.4.1/261 Submitted under KCP 6.2/261	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109F GEP Unpublished	N	Adama
KCP 6.4.1/262 Submitted under KCP 6.2/262	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109G GEP Unpublished	N	Adama
KCP 6.4.1/263 Submitted under KCP 6.2/263	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (Potato aphid) in potato in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IESOLTU109H GEP Unpublished	N	Adama
KCP 6.4.1/264 Submitted under KCP 6.2/264	Barasits, T.	2013	Analysis of efficacy to MCW-2222 SL on biting insects in oilseed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU13IEBRSNW431A GEP Unpublished	N	Adama
KCP 6.4.1/265 Submitted under KCP 6.2/265	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2021, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ21IEYCERW566B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/266 Submitted under KCP 6.2/266	Szántóné Veszélka, M.	2013	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2013 Government Office of Nógrád County, Salgótarján, Hungary Report no. HU13IEBRSNW431C GEP Unpublished	N	Adama
KCP 6.4.1/267 Submitted under KCP 6.2/267	Hornik, P.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in the Czech Republic, 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBEAVA538B GEP Unpublished	N	Adama
KCP 6.4.1/268 Submitted under KCP 6.2/268	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in the Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IEBEAVA539A GEP Unpublished	N	Adama
KCP 6.4.1/269 Submitted under KCP 6.2/269	Hornik, P.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in the Czech Republic, 2022. ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBEAVA539B GEP Unpublished	N	Adama
KCP 6.4.1/270 Submitted under KCP 6.2/270	Zöllner, H.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Germany in 2022. Field Research Support, Wunstorf, Germany Report no. DE22IEBEAVA538A GEP Unpublished	N	Adama
KCP 6.4.1/271 Submitted under KCP 6.2/271	Wönckhaus, S.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugarbeet in Germany in 2022 Agrartest GmbH, Stade, Germany Report no. DE22IEBEAVA701A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/272 Submitted under KCP 6.2/272	Lamers, K.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Myzus persicae</i> in sugarbeet in Germany in 2022 BioChem agrar GmbH, Uedem, Germany Report no. DE22IEBEAVA701B GEP Unpublished	N	Adama
KCP 6.4.1/273 Submitted under KCP 6.2/273	Rohr, J.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugarbeet in Germany in 2022 Trialtex GmbH, Haby, Germany Report no. DE22IEBEAVA702A GEP Unpublished	N	Adama
KCP 6.4.1/274 Submitted under KCP 6.2/274	Zickart, U.	2022	Evaluation of ADM.02100.I.1.B, ADM.02100.I.1.C, ADM.02100.I.3.A, ADM.02100.I.5.A prototypes against <i>Aphis fabae</i> in sugar beet in Germany in 2022 BioChem agrar GmbH, Machern, Germany Report no. DE22IEBEAVA702B GEP Unpublished	N	Adama
KCP 6.4.1/275 Submitted under KCP 6.2/275	De Vries, H.	2020	Efficacy trials for MCW-2222 to aphids in sugar beet Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEBEAVA023A GEP Unpublished	N	Adama
KCP 6.4.1/276 Submitted under KCP 6.2/276	De Vries, H.	2020	Efficacy trials for MCW-2222 to aphids in sugar beet Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEBEAVA023B GEP Unpublished	N	Adama
KCP 6.4.1/277 Submitted under KCP 6.2/277	Semaškienė, R., Almogdad, M.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Aphis fabae</i> ) control in sugarbeets in Lithuania in 2020 Lithuanian Research Centre for Agriculture and Forestry, Kėdainiai, Lithuania Report no. LT20IEBEAVA535A GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/278 Submitted under KCP 6.2/278	István, F.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 Government Office of Vas Country, Szombathely, Hungary Report no. HU14IEBRSNW011A GEP Unpublished	N	Adama
KCP 6.4.1/279 Submitted under KCP 6.2/279	Ripka, G.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 Government Office of Nógrád County, Salgótarján, Hungary Report no. HU14IEBRSNW011B GEP Unpublished	N	Adama
KCP 6.4.1/280 Submitted under KCP 6.2/280	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW012A GEP Unpublished	N	Adama
KCP 6.4.1/281 Submitted under KCP 6.2/281	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2014 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW012B GEP Unpublished	N	Adama
KCP 6.4.1/282 Submitted under KCP 6.2/282	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW013A GEP Unpublished	N	Adama
KCP 6.4.1/283 Submitted under KCP 6.2/283	Barasits, T.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU14IEBRSNW013B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/284 Submitted under KCP 6.2/284	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW101A GEP Unpublished	N	Adama
KCP 6.4.1/285 Submitted under KCP 6.2/285	Szántóné Veszélka, M.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Nógrád County, Balassagyarmat, Hungary Report no. HU15IEBRSNW101B GEP Unpublished	N	Adama
KCP 6.4.1/286 Submitted under KCP 6.2/286	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW102A GEP Unpublished	N	Adama
KCP 6.4.1/287 Submitted under KCP 6.2/287	Hoffmanné, P.Z.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Növénypathyka Kft., Kaposvár, Hungary Report no. HU15IEBRSNW103A GEP Unpublished	N	Adama
KCP 6.4.1/288 Submitted under KCP 6.2/288	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103B GEP Unpublished	N	Adama
KCP 6.4.1/289 Submitted under KCP 6.2/289	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/290 Submitted under KCP 6.2/290	Ritecz, J.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW103D GEP Unpublished	N	Adama
KCP 6.4.1/291 Submitted under KCP 6.2/291	Barasits, T.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 SynTech Research Hungay, Táplánszentkereszt, Hungary Report no. HU15IEBRSNW104A GEP Unpublished	N	Adama
KCP 6.4.1/292 Submitted under KCP 6.2/292	Hoffmanné, P.Z.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Növénypathyka Kft., Kaposvár, Hungary Report no. HU15IEBRSNW104B GEP Unpublished	N	Adama
KCP 6.4.1/293 Submitted under KCP 6.2/293	István, F.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW104C GEP Unpublished	N	Adama
KCP 6.4.1/294 Submitted under KCP 6.2/294	Szántóné Veszélka, M.	2015	Analysis of the efficacy of MCW-2222 SL on biting insects and in oil seed rape in Hungary 2015 Government Office of Nógrád County, Balassagyarmat, Hungary Report no. HU15IEBRSNW104D GEP Unpublished	N	Adama
KCP 6.4.1/295 Submitted under KCP 6.2/295	Čáp, J.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ16IEBRSNW005A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/296 Submitted under KCP 6.2/296	Toth, F.	2013	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , quadridens on oil seed rape, Slovakia 2013 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK13IEBRSNW001B GEP Unpublished	N	Adama
KCP 6.4.1/297 Submitted under KCP 6.2/297	Daňa, P.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 Zemědělská ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ16IEBRSNW005B GEP Unpublished	N	Adama
KCP 6.4.1/298 Submitted under KCP 6.2/298	Subr, J.	2016	Analysis of efficacy to MAVRIK and further insecticides on pyrethroid-resistant pollen beetle ( <i>Meligethes aeneus</i> ) in the Czech Republic in 2016 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ16IEBRSNW005C GEP Unpublished	N	Adama
KCP 6.4.1/299 Submitted under KCP 6.2/299	Čáp, J.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ17IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.4.1/300 Submitted under KCP 6.2/300	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on CEUTNA, CEUTQ in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.4.1/301 Submitted under KCP 6.2/301	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on CEUTNA, CEUTQ in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW001B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/302 Submitted under KCP 6.2/302	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on CEUTNA, CEUTQ in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW001C GEP Unpublished	N	Adama
KCP 6.4.1/303 Submitted under KCP 6.2/303	Soltesz, J.	2015	Analysis of efficacy to MCW-2222 SL on CEUTNA, CEUTQ in oil seed rape, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEBRSNW001D GEP Unpublished	N	Adama
KCP 6.4.1/304 Submitted under KCP 6.2/304	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on MELIAE in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW002A GEP Unpublished	N	Adama
KCP 6.4.1/305 Submitted under KCP 6.2/305	Tóth, F.	2015	Analysis of efficacy to MCW-2222 SL on MELIAE in oil seed rape, Slovakia 2014 Gemerprodukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK14IEBRSNW002B GEP Unpublished	N	Adama
KCP 6.4.1/306 Submitted under KCP 6.2/306	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001A GEP Unpublished	N	Adama
KCP 6.4.1/307 Submitted under KCP 6.2/307	Forgáčová, L.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 Ing. L'ubica Foráčová, Boliarov, Slovakia Report no. SK15IEBRSNW001B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/308 Submitted under KCP 6.2/308	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus assimilis</i> , Dasineura bassicae on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001D GEP Unpublished	N	Adama
KCP 6.4.1/309 Submitted under KCP 6.2/309	Jozefiak, D.	2015	Analysis of the efficacy of MCW-2222 SL against <i>Ceutorhynchus napi</i> , on oil seed rape, Slovakia 2015 UKSUP Bratislava branch office Kosice, Kosice, Slovakia Report no. SK15IEBRSNW001I GEP Unpublished	N	Adama
KCP 6.4.1/310 Submitted under KCP 6.2/310	Zickart, U.	2015	Analysis of efficacy of MCW-2222 on virus vector aphids in cereals, Germany, autumn 2015 BioChem agrar GmbH NL Agroplan, Uedem, Germany Report no. DE15IENNGW320I GEP Unpublished	N	Adama
KCP 6.4.1/311 Submitted under KCP 6.2/311	Kay, C.	2015	Registration trials with MCW-2222 for control of aphids ( <i>Myzus persicae</i> ) vectors of Turnip yellows virus/Beet western yellows virus in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEYCERW240A GEP Unpublished	N	Adama
KCP 6.4.1/312 Submitted under KCP 6.2/312	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240D GEP Unpublished	N	Adama
KCP 6.4.1/313 Submitted under KCP 6.2/313	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/314 Submitted under KCP 6.2/314	Lines, J.	2015	Registration trials with MCW-2222 for control of aphids (BYDV) in winter cereals - 1 site in the UK, 2015 Eurofins Agrosience service Ltd., Melbourne, UK Report no. UK15IEYCERW240G GEP Unpublished	N	Adama
KCP 6.4.1/315 Submitted under KCP 6.2/315	Rohr, J.	2015	Analysis of efficacy to MCW-2222 SL on cabbage stem flea beetle <i>Psylliodes chrysocephala</i> in oil seed rape Germany autumn 2014 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE14IEBRSNW320I GEP Unpublished	N	Adama
KCP 6.4.1/316 Submitted under KCP 6.2/316	Kukuła, A., Kostek, T.	2020	Efficacy evaluation of MCW-2222 in sugar beet against <i>Aphis fabae</i> (APHIFA) in Poland in 2020 AGRECO Sp. z o.o., Oława, Poland Report no. PL20IEBEAVA221B GEP Unpublished	N	Adama
KCP 6.4.1/317 Submitted under KCP 6.2/317	Stognienko, M.	2015	Analysis of efficacy of MCW-2222 on <i>Psylliodes chrysocephala</i> in winter oil seed rape, Germany, autumn 2015 BioChem agrar GmbH NL Agroplan, Uedem, Germany Report no. DE15IEBRSNW320Q GEP Unpublished	N	Adama
KCP 6.4.1/318 Submitted under KCP 6.2/318	Čáp, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in the Czech Republic, 2020 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ20IEBRSNW511B GEP Unpublished	N	Adama
KCP 6.4.1/319 Submitted under KCP 6.2/319	Kay, C.	2015	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEBRSNW239A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/320 Submitted under KCP 6.2/320	Kay, C.	2015	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape – UK, 2015. Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK15IEBRSNW239B GEP Unpublished	N	Adama
KCP 6.4.1/321 Submitted under KCP 6.2/321	Vašátková Štanclová, I.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IESOLTU175A GEP Unpublished	N	Adama
KCP 6.4.1/322 Submitted under KCP 6.2/322	Daňa, P.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 Zemědělska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ21IESOLTU175B GEP Unpublished	N	Adama
KCP 6.4.1/323 Submitted under KCP 6.2/323	Bauer, T.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes in the Czech Republic, 2021 InTec Agro Trials, s.r.o., Uherský Ostroh, Czech Republic Report no. CZ21IESOLTU175D GEP Unpublished	N	Adama
KCP 6.4.1/324 Submitted under KCP 6.2/324	Vilka, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Myzus persicae</i> ) control in potatoes in Sweden in 2020 Agrolab Sverige AB, Skänninge, Sweden Report no. SE20IESOLTU259A GEP Unpublished	N	Adama
KCP 6.4.1/325 Submitted under KCP 6.2/325	Ozolina-Pole, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for Colorado potato beetle ( <i>Leptinotarsa decemlineata</i> ) control in potatoes in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IESOLTU534A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/326 Submitted under KCP 6.2/326	Chermuła, L.	2014	Determination of the efficacy of MCW-2222 (acetamiprid 200 g/l) against green peach aphid ( <i>Myzus persicae</i> ), on potato. Eurofins Agrosience Services Sp. z o o., Szamotuły, Poland Report no. PL13IESOLTU205A GEP Unpublished	N	Adama
KCP 6.4.1/327 Submitted under KCP 6.2/327	Furman-Frątczak, K.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes, Poland 2021 BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL21IESOLTU245A GEP Unpublished	N	Adama
KCP 6.4.1/328 Submitted under KCP 6.2/328	Gajek, D.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Poland 2021 MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes Agro Reserach Consulting, Łowicz, Poland Report no. PL21IESOLTU245B GEP Unpublished	N	Adama
KCP 6.4.1/329 Submitted under KCP 6.2/329	Rusek, K.	2021	Efficacy of ADM.00900.I.1.C in control of <i>Leptinotarsa decemlineata</i> in potato, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IESOLTU245C GEP Unpublished	N	Adama
KCP 6.4.1/330 Submitted under KCP 6.2/330	Głowacki, G.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Poland 2021 Eurofins Agrosience Services Sp. z o o., Kaźmierz, Poland Report no. PL21IESOLTU245D GEP Unpublished	N	Adama
KCP 6.4.1/331 Submitted under KCP 6.2/331	Benczés, B.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IESOLTU175A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/332 Submitted under KCP 6.2/332	Olasz, L.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 CPR Europe Kft., Szombathely, Hungary Report no. HU21IESOLTU175B GEP Unpublished	N	Adama
KCP 6.4.1/333 Submitted under KCP 6.2/333	Labant, A.	2021	Efficacy trials with ADM.00900.I.1.C for the control of <i>Leptinotarsa decemlineata</i> in potatoes Hungary, 2021 Növénypathyka Kft., Kaposvár, Hungary Report no. HU21IESOLTU175D GEP Unpublished	N	Adama
KCP 6.4.1/334 Submitted under KCP 6.2/334	Botoman, G.	2021	Efficacy of ADM.00900.I.1.C for control of <i>Leptinotarsa decemlineata</i> on potato GEP Trial, Romania, 2021 AgroProspect SRL, Brasov, Romania Report no. RO21IESOLTU234A GEP Unpublished	N	Adama
KCP 6.4.1/335 Submitted under KCP 6.2/335	Botoman, G.	2021	Efficacy of ADM.00900.I.1.C for control of <i>Leptinotarsa decemlineata</i> on potato GEP Trial, Romania, 2021 AgroProspect SRL, Brasov, Romania Report no. RO21IESOLTU234B GEP Unpublished	N	Adama
KCP 6.4.1/336 Submitted under KCP 6.2/336	Gulbis, K.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Rhopalosiphum padi</i> ) control in spring wheat in Latvia in 2021 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV21IEYCERE421A GEP Unpublished	N	Adama
KCP 6.4.1/337 Submitted under KCP 6.2/337	Ozolins-Pole, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid ( <i>Rhopalosiphum padi</i> ) control in spring wheat in Latvia in 2021 Latvian Plant Protection Research Centre Ltd., Riga, Latvia Report no. LV21IEYCERE421B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/338 Submitted under KCP 6.2/338	Torkler, K.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2021, autumn use Quintus GmbH, Hohen Wangelin, Germany Report no. DE21IEYCERW566A GEP Unpublished	N	Adama
KCP 6.4.1/339 Submitted under KCP 6.2/339	Seifert, M.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2021, autumn use BioChem agrar GmbH, Uedem, Germany Report no. DE21IEYCERW566B GEP Unpublished	N	Adama
KCP 6.4.1/340 Submitted under KCP 6.2/340	de Vries, H.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in The Netherlands in 2021, autumn use Verify, Zwaagdijk-Oost, the Netherlands Report no. NL21IEHORVW034A GEP Unpublished	N	Adama
KCP 6.4.1/341 Submitted under KCP 6.2/341	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter barley in Lithuania, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT21IEYCERW408C GEP Unpublished	N	Adama
KCP 6.4.1/342 Submitted under KCP 6.2/342	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter barley, Poland 2021 /2022 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEHORVW277A GEP Unpublished	N	Adama
KCP 6.4.1/343 Submitted under KCP 6.2/343	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter barley, Poland 2021 /2022 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEHORVW277B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/344 Submitted under KCP 6.2/344	Safar, J.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2020, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ20IEHORVW507A GEP Unpublished	N	Adama
KCP 6.4.1/345 Submitted under KCP 6.2/345	Rohr, J.	2017	Efficacy and selectivity of different insecticides for control of aphid virus vectors (BYDV) in winter cereals, Germany 2016 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE16IENNNGW311D GEP Unpublished	N	Adama
KCP 6.4.1/346 Submitted under KCP 6.2/346	Rohr, J.	2017	Efficacy and selectivity of different insecticides for control of aphid virus vectors (BYDV) in winter cereals, Germany 2016 Agrartest GmbH, Aarbergen-Panrod, Germany Report no. DE16IENNNGW311F GEP Unpublished	N	Adama
KCP 6.4.1/347 Submitted under KCP 6.2/347	Ommen, T.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in Germany in 2020, autumn use plantus-GbR, Huntlosen, Germany Report no. DE20IENNNGW507B GEP Unpublished	N	Adama
KCP 6.4.1/348 Submitted under KCP 6.2/348	Bersegeay, A.	2015	Evaluate the efficacy and selectivity of MCW-2222 and MAVRIK FLO on <i>Rhopalosiphum padi</i> on cereals, in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEYCERE111A GEP Unpublished	N	Adama
KCP 6.4.1/349 Submitted under KCP 6.2/349	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEHORVW209A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/350 Submitted under KCP 6.2/350	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 in winter barley against aphids (BYDV) in Lithuania, 2020 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT20IEYCERW559B GEP Unpublished	N	Adama
KCP 6.4.1/351 Submitted under KCP 6.2/351	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEYCERW566A GEP Unpublished	N	Adama
KCP 6.4.1/352 Submitted under KCP 6.2/352	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter wheat in Lithuania, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LT21IEYCERW408B GEP Unpublished	N	Adama
KCP 6.4.1/353 Submitted under KCP 6.2/353	Vilka, L.	2021	Efficacy and selectivity testing of insecticide MCW-2222 for aphid (BYDV) control in winter wheat in Latvia, 2021 SIA Agrolab Baltic, Saldus Municipality, Latvia Report no. LV21IEYCERW471A GEP Unpublished	N	Adama
KCP 6.4.1/354 Submitted under KCP 6.2/354	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter wheat, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IETRZAW278A GEP Unpublished	N	Adama
KCP 6.4.1/355 Submitted under KCP 6.2/355	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Rhopalosiphum padi</i> in winter wheat, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IETRZAW278B GEP Unpublished	N	Adama



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KCP 6.4.1/356 Submitted under KCP 6.2/356	Cap, J.	2021	Efficacy evaluation of MCW-2222 in winter cereals against <i>Rhopalosiphum padi</i> (aphids virus control) in the Czech Republic in 2020, autumn use ZKUŠEBNÍ STANICE Nechanice S.r.o., Nechanice, Czech Republic Report no. CZ20IETRZAW507B GEP Unpublished	N	Adama
KCP 6.4.1/357 Submitted under KCP 6.2/357	Cap, J.	2020	Efficacy evaluation of MCW-2222 in winter cereals against <i>Sitobion avenae</i> (MACSAV) in the Czech Republic in 2020, spring use ZKUŠEBNÍ STANICE Nechanice S.r.o., Nechanice, Czech Republic Report no. CZ20IETRZAW508B GEP Unpublished	N	Adama
KCP 6.4.1/358 Submitted under KCP 6.2/358	Barou, J.	2014	Evaluate the efficacy and selectivity of MCW-2222 on <i>Sitobion avenae</i> on cereals, in France , 2014 Agrotest, Revel, France Report no. FR14IEYCERE108A GEP Unpublished	N	Adama
KCP 6.4.1/359 Submitted under KCP 6.2/359	Sutherland, J.	2017	Registration trials with MCW-2222 for control of aphids (BYDV) in winter wheat in the UK, 2016 - 2017 Eurofins Agrosience Services, Willand ,UK Report no. UK16IETRZAW269C GEP Unpublished	N	Adama
KCP 6.4.1/360 Submitted under KCP 6.2/360	Flaviola, J.	2014	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2014 Agrovita spol.s r.o., Jesenice, Czech Republic Report no. CZ14IEBRSNW005D GEP Unpublished	N	Adama
KCP 6.4.1/361 Submitted under KCP 6.2/361	Fialova, J.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in the Czech Republic in 2015 Agrovita spol.s r.o., Jesenice, Czech Republic Report no. CZ15IEBRSNW001F GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/362 Submitted under KCP 6.2/362	Čáp, J.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2020, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ20IEBRSNW534B GEP Unpublished	N	Adama
KCP 6.4.1/363 Submitted under KCP 6.2/363	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW567B GEP Unpublished	N	Adama
KCP 6.4.1/364 Submitted under KCP 6.2/364	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW568A GEP Unpublished	N	Adama
KCP 6.4.1/365 Submitted under KCP 6.2/365	Seidenglanz, M.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the Czech Republic in 2021, autumn use AGRITEC, Research, Breeding & Services, Ltd., Šumperk, Czech Republic Report no. CZ21IEBRSNW568B GEP Unpublished	N	Adama
KCP 6.4.1/366 Submitted under KCP 6.2/366	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2021, autumn use ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ21IEBRSNW570A GEP Unpublished	N	Adama
KCP 6.4.1/367 Submitted under KCP 6.2/367	Daňa, P.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in the Czech Republic in 2021, autumn use Zemědělska ZS Kujavy, s.r.o., Kujavy, Czech Republic Report no. CZ21IEBRSNW570B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/368 Submitted under KCP 6.2/368	Čáp, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in the Czech Republic in 2022 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBRSNW503B GEP Unpublished	N	Adama
KCP 6.4.1/369 Submitted under KCP 6.2/369	Subr, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in the Czech Republic in 2022 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ22IEBRSNW503C GEP Unpublished	N	Adama
KCP 6.4.1/370 Submitted under KCP 6.2/370	Čáp, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ22IEBRSNW506B GEP Unpublished	N	Adama
KCP 6.4.1/371 Submitted under KCP 6.2/371	Hruška, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 ZKUŠEBNÍ STANICE Trutnov s.r.o., Trutnov, Czech Republic Report no. CZ22IEBRSNW506C GEP Unpublished	N	Adama
KCP 6.4.1/372 Submitted under KCP 6.2/372	Seidenglanz, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Czech Republic, 2022 AGRITEC výzkum šlechtění a služby s.r.o., Šumperk, Czech Republic Report no. CZ22IEBRSNW506D GEP Unpublished	N	Adama
KCP 6.4.1/373 Submitted under KCP 6.2/373	Rohr, J.	2017	Analysis of efficacy to MCW-2222 SL on pests in oil seed rape, Germany autumn 2015 Agrartest GmbH, Aarbergen, Germany Report no. DE15IEBRSNW320O GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/374 Submitted under KCP 6.2/374	Rohr, J.	2017	Analysis of efficacy to MCW-2222 SL on pests in oil seed rape, Germany autumn 2015 Agrartest GmbH, Aarbergen, Germany Report no. DE15IEBRSNW320P GEP Unpublished	N	Adama
KCP 6.4.1/375 Submitted under KCP 6.2/375	Kästner, K.	2016	Analysis of efficacy of different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape in Germany 2016 BioChem agrar GmbH, Machern, Germany Report no. DE16IEBRSNW310C GEP Unpublished	N	Adama
KCP 6.4.1/376 Submitted under KCP 6.2/376	Perner, J.	2017	Efficacy of different insecticides on cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in oil seed winter rape, Germany 2016/17 U.A.S. Umwelt- und Agrarstudien GmbH, Jena, Germany Report no. DE16IEBRSNW312E GEP Unpublished	N	Adama
KCP 6.4.1/377 Submitted under KCP 6.2/377	Labusch, U.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 BioChem agrar GmbH, Machern, Germany Report no. DE17IEBRSNW310A GEP Unpublished	N	Adama
KCP 6.4.1/378 Submitted under KCP 6.2/378	Zickart, U.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 BioChem agrar GmbH, Machern, Germany Report no. DE17IEBRSNW310B GEP Unpublished	N	Adama
KCP 6.4.1/379 Submitted under KCP 6.2/379	Laug, S.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape, Germany, 2017 Hetterich Fieldwork GbR, Schwarzach, Germany Report no. DE17IEBRSNW310D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/380 Submitted under KCP 6.2/380	Rohr, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Germany 2020 Trialtex GmbH, Haby, Germany Report no. DE20IEBRSNN511A GEP Unpublished	N	Adama
KCP 6.4.1/381 Submitted under KCP 6.2/381	Rohr, J.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Germany 2020 Trialtex GmbH, Haby, Germany Report no. DE20IEBRSNN511B GEP Unpublished	N	Adama
KCP 6.4.1/382 Submitted under KCP 6.2/382	Rohr, J.	2020	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus picipitarsis</i> in Germany in 2020, autumn use Trialtex GmbH, Haby, Germany Report no. DE20IEBRSNN526A GEP Unpublished	N	Adama
KCP 6.4.1/383 Submitted under KCP 6.2/383	Rohr, J.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2021 Trialtex GmbH, Haby, Germany Report no. DE21IEBRSNW533A GEP Unpublished	N	Adama
KCP 6.4.1/384 Submitted under KCP 6.2/384	Rohr, J.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2021 Trialtex GmbH, Haby, Germany Report no. DE21IEBRSNW533B GEP Unpublished	N	Adama
KCP 6.4.1/385 Submitted under KCP 6.2/385	Martin, T.	2022	Efficacy evaluation of MCS-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in Germany in 2021, autumn use Martin Feldversuchswesen, Orsingen-Nenzingen, Germany Report no. DE21IEBRSNW568B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/386 Submitted under KCP 6.2/386	Hetterich, A.	2020	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus picipitarsis</i> in Germany in 2021, autumn use Hetterich Fieldwork GbR, Schwarzach am Main, Germany Report no. DE21IEBRSNW569A GEP Unpublished	N	Adama
KCP 6.4.1/387 Submitted under KCP 6.2/387	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus picipitarsis</i> in Germany in 2021, autumn use Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW569B GEP Unpublished	N	Adama
KCP 6.4.1/388 Submitted under KCP 6.2/388	Wied, H.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Ceutorhynchus picipitarsis</i> in Germany in 2021, autumn use STAPHYT GmbH, Baden-Württemberg, Germany Report no. DE21IEBRSNW569C GEP Unpublished	N	Adama
KCP 6.4.1/389 Submitted under KCP 6.2/389	Jatczak, J.	2020	Efficacy evaluation of MCW-2222 in sugar beet against <i>Myzus persicae</i> (MYZUPE) and <i>Aphis fabae</i> (APHIFA) in Poland in 2020 ANADIAG SAS, Oddział, Poland Report no. PL20IEBEAVA221C GEP Unpublished	N	Adama
KCP 6.4.1/390 Submitted under KCP 6.2/390	Zickart, U.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in Germany in 2021, autumn use BioChem agrar GmbH, Machern, Germany Report no. DE21IEBRSNW570A GEP Unpublished	N	Adama
KCP 6.4.1/391 Submitted under KCP 6.2/391	Rohr, J.	2022	Efficacy of ADM.00900.I.1.C against <i>Ceutorhynchus picipitarsis</i> on OSR in Germany in 2021 Trialtec GmbH, Haby, Germany Report no. DE21IEBRSNW571A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/392 Submitted under KCP 6.2/392	Woenckhaus, S.	2022	Efficacy of ADM.00900.I.1.C against <i>Ceutorhynchus picitarsis</i> on OSR in Germany in 2021 Agrartest GmbH, Stade, Germany Report no. DE21IEBRSNW571B GEP Unpublished	N	Adama
KCP 6.4.1/393 Submitted under KCP 6.2/393	Zöllner, H.	2022	Efficacy evaluation of ADM.00900.I.1.C against adult of <i>Psylliodes chrysocephala</i> on OSR in Germany in 2021 Field Research Support, Wunstorf, Germany Report no. DE21IEBRSNW572B GEP Unpublished	N	Adama
KCP 6.4.1/394 Submitted under KCP 6.2/394	Rohr, J.	2022	Efficacy evaluation of MCW-2222 in rape against <i>Ceutorhynchus pallidactylus</i> (CEUTQU) in Germany in 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEBRSNW503B GEP Unpublished	N	Adama
KCP 6.4.1/395 Submitted under KCP 6.2/395	Rohr, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2022 Trialtec GmbH, Haby, Germany Report no. DE22IEBRSNW505B GEP Unpublished	N	Adama
KCP 6.4.1/396 Submitted under KCP 6.2/396	Perner, J.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Germany 2022 U.A.S. Umwelt- und Agrarstudien GmbH, Jena, Germany Report no. DE22IEBRSNW505C GEP Unpublished	N	Adama
KCP 6.4.1/397 Submitted under KCP 6.2/397	Barou, J.	2014	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2014 Agrotest, Revel, France Report no. FR14IEBRSNW101D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/398 Submitted under KCP 6.2/398	Villeton, C.	2014	Efficacy of PYRINEX ME, MAVRIK FLO and MCW-2222 against pollen beetles on rape in France in 2014 ANADIAG, Ruy, France Report no. FR14IEBRSNN102B GEP Unpublished	N	Adama
KCP 6.4.1/399 Submitted under KCP 6.2/399	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN107C GEP Unpublished	N	Adama
KCP 6.4.1/400 Submitted under KCP 6.2/400	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN107D GEP Unpublished	N	Adama
KCP 6.4.1/401 Submitted under KCP 6.2/401	Hons, E.	2015	Efficacy evaluation of MCW-2222, Mavrik Flo and Pyrinex ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 PROMO-VERT, Serres-Castet, France Report no. FR14IEBRSNN108A GEP Unpublished	N	Adama
KCP 6.4.1/402 Submitted under KCP 6.2/402	Hons, E.	2015	Efficacy evaluation of MCW-2222, Mavrik Flo and Pyrinex ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 PROMO-VERT, Serres-Castet, France Report no. FR14IEBRSNN108B GEP Unpublished	N	Adama



Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/403 Submitted under KCP 6.2/403	Tartier, J.; Percheron, M.	2014	Efficacy evaluation of MCW-2222, MAVRIK FLO and PYRINEX ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 BIOTEK Agriculture, Saint Pouange, France Report no. FR14IEBRSNN108E GEP Unpublished	N	Adama
KCP 6.4.1/404 Submitted under KCP 6.2/404	Tartier, J.	2015	Efficacy evaluation of MCW-2222, MAVRIK FLO and PYRINEX ME against <i>Phyllotreta</i> sp. ( <i>Phyllotreta atra</i> or <i>Phyllotreta nemorum</i> ) on oilseed rape in France in 2014 BIOTEK Agriculture, Saint Pouange, France Report no. FR14IEBRSNN108F GEP Unpublished	N	Adama
KCP 6.4.1/405 Submitted under KCP 6.2/405	Bersegeay, A.	2015	Efficacy evaluation of MCW-2222 against <i>Ceutorhynchus piciparsis</i> and <i>Psylliodes chrysocephala</i> on oilseed rape in France in 2014 QUALIPHYT, Lorient Sur Drôme, France Report no. FR14IEBRSNN113A GEP Unpublished	N	Adama
KCP 6.4.1/406 Submitted under KCP 6.2/406	Hons, E.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 PROMO-VERT, Serres-Castet, France Report no. FR15IEBRSNN101C GEP Unpublished	N	Adama
KCP 6.4.1/407 Submitted under KCP 6.2/407	Hons, E.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 PROMO-VERT, Serres-Castet, France Report no. FR15IEBRSNN101D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/408 Submitted under KCP 6.2/408	Bersegeay, A.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 QUALIPHYT, Lorient Sur Drôme, France Report no. FR15IEBRSNN101E GEP Unpublished	N	Adama
KCP 6.4.1/409 Submitted under KCP 6.2/409	Bersegeay, A.	2015	Efficacy of PYRINEX ME, MAVRIK FLO, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2015 QUALIPHYT, Lorient Sur Drôme, France Report no. FR15IEBRSNN101F GEP Unpublished	N	Adama
KCP 6.4.1/410 Submitted under KCP 6.2/410	Voisin, J. F	2015	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2015 Agrotest, Revel, France Report no. FR15IEBRSNN103C GEP Unpublished	N	Adama
KCP 6.4.1/411 Submitted under KCP 6.2/411	Voisin, J. F	2015	Efficacy evaluation of MCW-2222 against rape stem weevils ( <i>Ceutorhynchus napi</i> ) on oilseed rape in France in 2015 Agrotest, Revel, France Report no. FR15IEBRSNN103D GEP Unpublished	N	Adama
KCP 6.4.1/412 Submitted under KCP 6.2/412	Rouane, W.	2016	Efficacy of MCW-3031, MCW-5023 and MCW-2222 against pollen beetles on rape in France in 2016 ANADIAG, Ruy, France Report no. FR16IEBRSNN103D GEP Unpublished	N	Adama
KCP 6.4.1/413 Submitted under KCP 6.2/413	Gressard, M.	2019	Analysis of efficacy of different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape in France in 2018 QUALIPHYT, Lorient Sur Drôme, France Report no. FR18IEBRSNN101A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/414 Submitted under KCP 6.2/414	Vilka, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus assimilis</i> ) control in WOSR in Sweden in 2020 Agrolab Sverige AB, Skänninge, Sweden Report no. SE20IEBRSNW258A GEP Unpublished	N	Adama
KCP 6.4.1/415 Submitted under KCP 6.2/415	Lamers, K.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Germany in 2020, autumn use BioChem agrar GmbH, Machern, Germany Report no. DE20IEBRSNW509B GEP Unpublished	N	Adama
KCP 6.4.1/416 Submitted under KCP 6.2/416	Howkins, L.	2017	Registration trials with MCW-2222 for control of cabbage stem flea beetle ( <i>Psylliodes chrysocephala</i> ) in winter oilseed rape, UK, 2016 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK16IEBRSNW254C GEP Unpublished	N	Adama
KCP 6.4.1/417 Submitted under KCP 6.2/417	Howkins, L.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in oil seed rape, UK, 2017 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK17IEBRSNW272B GEP Unpublished	N	Adama
KCP 6.4.1/418 Submitted under KCP 6.2/418	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW206A GEP Unpublished	N	Adama
KCP 6.4.1/419 Submitted under KCP 6.2/419	Stokes, L.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in the UK 2021 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK21IEBRSNW218A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/420 Submitted under KCP 6.2/420	Stokes, L.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNS) in the UK 2021 Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK21IEBRSNW219A GEP Unpublished	N	Adama
KCP 6.4.1/421 Submitted under KCP 6.2/421	Stokes, L.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK, in 2021, autumn use Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK21IEBRSNW234B GEP Unpublished	N	Adama
KCP 6.4.1/422 Submitted under KCP 6.2/422	Stokes, L.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in the UK, in 2021, autumn use Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK21IEBRSNW234C GEP Unpublished	N	Adama
KCP 6.4.1/423 Submitted under KCP 6.2/423	Stokes, L.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in UK 2022 Oxford Agricultural Trials Ltd., Stratton Audley, UK Report no. UK22IEBRSNW602B GEP Unpublished	N	Adama
KCP 6.4.1/424 Submitted under KCP 6.2/424	Ozolins-Pole, L.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus obstrictus</i> ) control in winter OSR in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IEBRSNW527A_2 GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/425 Submitted under KCP 6.2/425	Gulbis, K.	2020	Efficacy and selectivity testing of insecticide MCW-2222 for brassica pod midge ( <i>Dasineura brassicae</i> ) and cabbage seedpod weevil ( <i>Ceutorhynchus obstrictus</i> ) control in winter OSR in Latvia in 2020 Latvian Plant Protection Research Centre Ltd, Riga, Latvia Report no. LV20IEBRSNN527B GEP Unpublished	N	Adama
<del>KCP 6.4.1/426 Submitted under KCP 6.2/426</del>	<del>Furman-Frątczak, K.</del>	<del>2017</del>	<del>The evaluation of efficacy and selectivity of insecticides product for the control of pests on winter oilseed rape BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL16IEBRSNW309A GEP Unpublished</del>	<del>N</del>	<del>Adama</del>
KCP 6.4.1/427 Submitted under KCP 6.2/427	Zielińska, W.	2016	Efficacy of insecticides MCW-5023 and MCW-2222 for controlling pollen beetle ( <i>Meligethes aeneus</i> F.) in winter oilseed rape Institute of Plant Protection - National Research Institute, Poznań, Poland Report no. PL16IEBRSNW309B GEP Unpublished	N	Adama
KCP 6.4.1/428 Submitted under KCP 6.2/428	Zielińska, W.	2016	Efficacy of insecticides MCW-5023 and MCW-2222 for controlling pollen beetle ( <i>Meligethes aeneus</i> F.) in winter oilseed rape Institute of Plant Protection - National Research Institute, Poznań, Poland Report no. PL16IEBRSNW309C GEP Unpublished	N	Adama
KCP 6.4.1/429 Submitted under KCP 6.2/429	Furman-Frątczak, K.	2017	The evaluation of efficacy and selectivity of insecticides product for the control of pests on winter oilseed rape BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL17IEBRSNW047B GEP Unpublished	N	Adama
KCP 6.4.1/430 Submitted under KCP 6.2/430	Potocka, E.	2017	Analysis of efficacy to different insecticides on <i>Meligethes aeneus</i> in winter oil seed rape SynTech Research Poland Sp. z o.o., Bydgoszcz, Poland Report no. PL17IEBRSNW047C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/431 Submitted under KCP 6.2/431	Kukuła, A.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Phyllotreta cruciferae</i> in Poland in 2020, autumn use AGRECO Sp. z o.o., Gać, Poland Report no. PL20IEBRSNW219B GEP Unpublished	N	Adama
KCP 6.4.1/432 Submitted under KCP 6.2/432	Gajek, D.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Poland 2020 Agro Reserach Consulting, Łowicz, Poland Report no. PL20IEBRSNW220A GEP Unpublished	N	Adama
KCP 6.4.1/433 Submitted under KCP 6.2/433	Pawlak, A.	2020	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNN) in Poland 2020 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL20IEBRSNW225B GEP Unpublished	N	Adama
KCP 6.4.1/434 Submitted under KCP 6.2/434	Szymańczyk, M.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland. 2021 Institute of Plant Protecion - National Research Institute, Poznań, Poland Report no. PL21IEBRSNW237A GEP Unpublished	N	Adama
KCP 6.4.1/435 Submitted under KCP 6.2/435	Gajek, D.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland 2021 Agro Reserach Consulting, Łowicz, Poland Report no. PL21IEBRSNW239A GEP Unpublished	N	Adama
KCP 6.4.1/436 Submitted under KCP 6.2/436	Pszczółkowski, M.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland 2021 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL21IEBRSNW239B GEP Unpublished	N	Adama

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KCP 6.4.1/437 Submitted under KCP 6.2/437	Pszczółkowski, M.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Poland in 2021, autumn use Staphyt Sp. Z o.o., Poznań, Poland Report no. PL21IEBRSNW241A GEP Unpublished	N	Adama
KCP 6.4.1/438 Submitted under KCP 6.2/438	Rusek, K.	2022	Efficacy of MCW -2222 in control of <i>Psylliodes chrysocephala</i> in winter oilseed rape, Poland 2021 Fertico Sp. z o.o., Błędów, Poland Report no. PL21IEBRSNW241B GEP Unpublished	N	Adama
KCP 6.4.1/439 Submitted under KCP 6.2/439	Jaczak, J.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> in Poland in 2021, autumn use ANADIAG SAS Oddział w Polsce, Zgierz, Poland Report no. PL21IEBRSNW241C GEP Unpublished	N	Adama
KCP 6.4.1/440 Submitted under KCP 6.2/440	Głowacki, G.	2022	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Psylliodes chrysocephala</i> (Cabbage stem flea beetle) in Poland. 2021. autumn use. Eurofins Agrosience Services Sp. z o.o., Kaźmierz, Poland Report no. PL21IEBRSNW241D GEP Unpublished	N	Adama
KCP 6.4.1/441 Submitted under KCP 6.2/441	PSZCZÓLKOWSKI, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNS) in Poland in 2022. Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBRSNW113A GEP Unpublished	N	Adama
KCP 6.4.1/442 Submitted under KCP 6.2/442	PSZCZÓLKOWSKI, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland in 2022. Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBRSNW113B GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/443 Submitted under KCP 6.2/443	Gajek, D.	2021	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland, 2022 AGRO RESEARCH CONSULTING, Łowicz, Poland Report no. PL22IEBRSNW113C GEP Unpublished	N	Adama
KCP 6.4.1/444 Submitted under KCP 6.2/444	Szemendera, A.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in Poland in 2022. Fertico Sp. z o.o. Błędów, Poland Report no. PL22IEBRSNW113D GEP Unpublished	N	Adama
KCP 6.4.1/445 Submitted under KCP 6.2/445	Veszeka, M.S.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2015 Government Office of Vas Country, Szombathely, Hungary Report no. HU15IEBRSNW102B GEP Unpublished	N	Adama
KCP 6.4.1/446 Submitted under KCP 6.2/446	Barasits, T.	2015	Analysis of efficacy to MCW-2222 SL on biting insects in oil seed rape in Hungary 2015 SynTech Research Hungary Kft., Szombathely, Hungary Report no. HU15IEBRSNW104E GEP Unpublished	N	Adama
KCP 6.4.1/447 Submitted under KCP 6.2/447	Farkas, I.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Pannon Helyi Termék Kft , Oszkó, Hungary Report no. HU16IEBRSNW002A GEP Unpublished	N	Adama
KCP 6.4.1/448 Submitted under KCP 6.2/448	Szántóné Veszeka, M.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Government Office of Nógrád County, Plant Prot. Dir., Salgótarján, Hungary Report no. HU16IEBRSNW002B GEP Unpublished	N	Adama



<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/449 Submitted under KCP 6.2/449	Hoffmanné Pathy, S.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 Növénypathyka KFT, Somogy, Hungary Report no. HU16IEBRSNW002D GEP Unpublished	N	Adama
KCP 6.4.1/450 Submitted under KCP 6.2/450	Kodor, G.	2016	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2016 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU16IEBRSNW002E GEP Unpublished	N	Adama
KCP 6.4.1/451 Submitted under KCP 6.2/451	Barasits, T.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 SynTech Research Hungary Kft, Szombathely, Hungary Report no. HU17IEBRSNW101A GEP Unpublished	N	Adama
KCP 6.4.1/452 Submitted under KCP 6.2/452	Hoffmanné Pathy, Z.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Növénypathyka KFT, Kaposvár, Hungary Report no. HU17IEBRSNW101B GEP Unpublished	N	Adama
KCP 6.4.1/453 Submitted under KCP 6.2/453	Magyar, B.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Fructika Kft, Tiszakanyár, Hungary Report no. HU17IEBRSNW101C GEP Unpublished	N	Adama
KCP 6.4.1/454 Submitted under KCP 6.2/454	Szántóné Veszélka, M.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Government Office of Nógrád County, Plant Prot. Dir., Salgótarján, Hungary Report no. HU17IEBRSNW101D GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/455 Submitted under KCP 6.2/455	Fekete, A.	2017	Efficacy of Mavrik 24EW against pollen beetle in winter oilseed rape in Hungary in 2017 Pannon Helyi Termék Kft , Oszkó, Hungary Report no. HU17IEBRSNW101E GEP Unpublished	N	Adama
KCP 6.4.1/456 Submitted under KCP 6.2/456	Jozefiak, D.	2014	Analysis of efficacy to MCW-2222 SL on CEUTAS, DASYBR in oil seed rape, Slovakia 2014 UKSUP, Košice, Slovakia Report no. SK14IEBRSNW003A GEP Unpublished	N	Adama
KCP 6.4.1/457 Submitted under KCP 6.2/457	Ceri, L.	2015	Analysis of efficacy to MCW-2222 SL on CEUTAS, DASYBR oil seed rape, Slovakia 2014 Fyse, s.r.o. AgroLab, Kolare, Slovakia Report no. SK14IEBRSNW003B GEP Unpublished	N	Adama
KCP 6.4.1/458 Submitted under KCP 6.2/458	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001E GEP Unpublished	N	Adama
KCP 6.4.1/459 Submitted under KCP 6.2/459	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001F GEP Unpublished	N	Adama
KCP 6.4.1/460 Submitted under KCP 6.2/460	Soltesz, J.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 Fyse, Ltd., Dep. AgroLab, Koláre, Slovak Republic Report no. SK15IEBRSNW001G GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/461 Submitted under KCP 6.2/461	Soltész, J.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 Fyse, Ltd., Dep. AgroLab, Koláre, Slovak Republic Report no. SK15IEBRSNW001H GEP Unpublished	N	Adama
KCP 6.4.1/462 Submitted under KCP 6.2/462	Toth, F.	2016	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001J GEP Unpublished	N	Adama
KCP 6.4.1/463 Submitted under KCP 6.2/463	Kolník, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in [Slovakia] 2022 InTec Agro Trials Slovakia s.r.o., Bratislava, Slovakia Report no. SK22IEBRSNW505A GEP Unpublished	N	Adama
KCP 6.4.1/464 Submitted under KCP 6.2/464	Kolník, M.	2022	Evaluation of a range of insecticides against pollen beetle (MELIAE) on oilseed rape (BRSNW) in [Slovakia] 2022 InTec Agro Trials Slovakia s.r.o., Bratislava, Slovakia Report no. SK22IEBRSNW505B GEP Unpublished	N	Adama
KCP 6.4.1/465 Submitted under KCP 6.2/465	Jatczak, J.	2021	Evaluation of ADM.02100.I.1.B against <i>Myzus persicae</i> in sugarbeet in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA233B GEP Unpublished	N	Adama
KCP 6.4.1/466 Submitted under KCP 6.2/466	Rusek, K.	2021	Efficacy of ADM.02100.I.1.B in control of aphids in sugar beet, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEBEAVA233D GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/467 Submitted under KCP 6.2/467	Jatczak, J.	2021	Evaluation of ADM.02100.I.1.B against <i>Aphis fabae</i> in Sugarbeet in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA233E GEP Unpublished	N	Adama
KCP 6.4.1/468 Submitted under KCP 6.2/468	Rusek, K.	2021	Efficacy of ADM.02100.I.1.B in control of aphids in sugar beet, Poland 2021 Fertico Sp. z o o., Błędów, Poland Report no. PL21IEBEAVA233F GEP Unpublished	N	Adama
KCP 6.4.1/469 Submitted under KCP 6.2/469	Furman-Frątczak, K.	2021	Efficacy evaluation of MCW-2222 in sugar beet against aphids, Poland 2021 BIOTEK Agriculture Polska Sp. Z o.o., Oława, Poland Report no. PL21IEBEAVA238A GEP Unpublished	N	Adama
KCP 6.4.1/470 Submitted under KCP 6.2/470	Jatczak, J.	2021	Efficacy evaluation of MCW-2222 in sugar beet against <i>Myzus persicae</i> (MYZUPE) and <i>Aphis fabae</i> (APHIFA) in Poland in 2021 ANADIAG SAS, Oddział, Poland Report no. PL21IEBEAVA238B GEP Unpublished	N	Adama
KCP 6.4.1/471 Submitted under KCP 6.2/471	Głowacki, G.	2021	Efficacy evaluation of MCW-2222 in sugar beet against <i>Aphis fabae</i> (APHIFA) in Poland, 2021 Eurofins Agrosience Services Sp. z. o.o., Kaźmierz, Poland Report no. PL21IEBEAVA238C GEP Unpublished	N	Adama
KCP 6.4.1/472 Submitted under KCP 6.2/472	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA110A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/473 Submitted under KCP 6.2/473	PSZCZÓLKOWSKI, M.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland. 2022 Staphyt Sp. Z o.o., Poznań, Poland Report no. PL22IEBEAVA110B GEP Unpublished	N	Adama
KCP 6.4.1/474 Submitted under KCP 6.2/474	Kukuła, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland. 2022 AGRECO Sp. z o.o., Oława, Poland Report no. PL22IEBEAVA110C GEP Unpublished	N	Adama
KCP 6.4.1/475 Submitted under KCP 6.2/475	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110D GEP Unpublished	N	Adama
KCP 6.4.1/476 Submitted under KCP 6.2/476	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110E GEP Unpublished	N	Adama
KCP 6.4.1/477 Submitted under KCP 6.2/477	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis fabae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA110F GEP Unpublished	N	Adama
KCP 6.4.1/478 Submitted under KCP 6.2/478	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o.o., Błędów, Poland Report no. PL22IEBEAVA111A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/479 Submitted under KCP 6.2/479	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111B GEP Unpublished	N	Adama
KCP 6.4.1/480 Submitted under KCP 6.2/480	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111C GEP Unpublished	N	Adama
KCP 6.4.1/481 Submitted under KCP 6.2/481	Szemendera, A.	2022	Efficacy evaluation of MCW-2222 against <i>Myzus persicae</i> in sugar beet in Poland, 2022 Fertico Sp. z o o., Błędów, Poland Report no. PL22IEBEAVA111D GEP Unpublished	N	Adama
KCP 6.4.1/482 Submitted under KCP 6.2/482	Torkler, K.	2021	Evaluation of ADM.02100.I.1.B against <i>Aphis fabae</i> in sugarbeet in Germany in 2021 Quintus GmbH, Liepen, Germany Report no. DE21IEBEAVA530A GEP Unpublished	N	Adama
KCP 6.4.1/483 Submitted under KCP 6.2/483	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW207A GEP Unpublished	N	Adama
KCP 6.4.1/484 Submitted under KCP 6.2/484	Erb, H.	2021	Efficacy evaluation of MCW-2222 in winter oilseed rape against <i>Myzus persicae</i> (virus vector) in the UK in 2020, autumn use Oxford Agricultural Trials Ltd, Stratton Audley, UK Report no. UK20IEBRSNW207B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/485 Submitted under KCP 6.2/485	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis fabae</i> (APHIFA) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEYORNA027A GEP Unpublished	N	Adama
KCP 6.4.1/486 Submitted under KCP 6.2/486	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in Ornamentals against <i>Myzus persicae</i> (MYZUPE) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, The Netherlands Report no. NL20IEYORNA027B GEP Unpublished	N	Adama
KCP 6.4.1/487 Submitted under KCP 6.2/487	Oostingh, C.	2020	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2020 Proeftuin Zwaagdijk, Zwaagdijk-Oost, the Netherlands Report no. NL20IEYORNA028A GEP Unpublished	N	Adama
KCP 6.4.1/488 Submitted under KCP 6.2/488	Kohrman, E.J.M.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2020 Cultus Crop Research BV, Lottum, The Netherlands Report no. NL20IEYORNA028B GEP Unpublished	N	Adama
KCP 6.4.1/489 Submitted under KCP 6.2/489	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA031A GEP Unpublished	N	Adama
KCP 6.4.1/490 Submitted under KCP 6.2/490	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) and <i>Myzus persicae</i> (MYZUPE) in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA031B GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.1/491 Submitted under KCP 6.2/491	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031D GEP Unpublished	N	Adama
KCP 6.4.1/492 Submitted under KCP 6.2/492	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031E GEP Unpublished	N	Adama
KCP 6.4.1/493 Submitted under KCP 6.2/493	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA031F GEP Unpublished	N	Adama
KCP 6.4.1/494 Submitted under KCP 6.2/494	Oostingh, C.	2021	Efficacy evaluation of MCW-2222 against Green peach aphid (MYZUPE) and bean aphid (APHIFA) in ornamentals in The Netherlands in 2021 Vertify, Zwaagdijk-Oost, The Netherlands Report no. NL21IEYORNA032A GEP Unpublished	N	Adama
KCP 6.4.1/495 Submitted under KCP 6.2/495	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against Green peach aphid (MYZUPE), bean aphid (APHIFA) or potato aphid (MACSEU) in ornamentals in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA032B GEP Unpublished	N	Adama
KCP 6.4.1/496 Submitted under KCP 6.2/496	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Phyllaphis fagi</i> (PHYAFA) beech in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA033A GEP Unpublished	N	Adama



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KCP 6.4.1/497 Submitted under KCP 6.2/497	Van Der Voort, C.	2021	Efficacy evaluation of MCW-2222 against <i>Phyllaphis fagi</i> (PHYAFA) beech in The Netherlands in 2021 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL21IEYORNA033B GEP Unpublished	N	Adama
KCP 6.4.1/498 Submitted under KCP 6.2/498	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009A GEP Unpublished	N	Adama
KCP 6.4.1/499 Submitted under KCP 6.2/499	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009B GEP Unpublished	N	Adama
KCP 6.4.1/500 Submitted under KCP 6.2/500	Kreuk, F.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in Lily in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IELILSS009C GEP Unpublished	N	Adama
KCP 6.4.1/501 Submitted under KCP 6.2/501	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005A GEP Unpublished	N	Adama
KCP 6.4.1/502 Submitted under KCP 6.2/502	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005B GEP Unpublished	N	Adama

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KCP 6.4.1/503 Submitted under KCP 6.2/503	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Aphis gossypii</i> (APHIGO) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA005C GEP Unpublished	N	Adama
KCP 6.4.1/504 Submitted under KCP 6.2/504	Oostingh, C.	2022	Efficacy evaluation of MCW-2222 in ornamentals against <i>Aphis gossypii</i> (APHIGO) in The Netherlands in 2022 Verify, Zwaagdijk-Oost, The Netherlands Report no. NL22IEYORNA005D GEP Unpublished	N	Adama
KCP 6.4.1/505 Submitted under KCP 6.2/505	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (MACSEU) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA007A GEP Unpublished	N	Adama
KCP 6.4.1/506 Submitted under KCP 6.2/506	Van Der Voort, C.	2022	Efficacy evaluation of MCW-2222 against <i>Macrosiphum euphorbiae</i> (MACSEU) in ornamentals in The Netherlands in 2022 Cultus Crop Research BV, NC Melderslo, The Netherlands Report no. NL22IEYORNA007B GEP Unpublished	N	Adama
KCP 6.4.1/507 Submitted under KCP 6.2/507	Toth, F.	2015	Analysis of efficacy of MCW-2222 SL on biting insects in oil seed rape, Slovakia 2015 GemerProdukt Valice OVD, Rimavská Sobota, Slovakia Report no. SK15IEBRSNW001C GEP Unpublished	N	Adama
KCP 6.4.2/001 Submitted under KCP 6.2/001	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028A GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.2/002 Submitted under KCP 6.2/002	Hornik, P.	2013	Efficacy evaluation of MCW-2222 SL on aphids and apple sawfly in apple in the Czech Republic in 2013 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ13IEMABSD028B GEP Unpublished	N	Adama
KCP 6.4.2/011 Submitted under KCP 6.2/011	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011D GEP Unpublished	N	Adama
KCP 6.4.2/012 Submitted under KCP 6.2/012	Tvaruzek, L.	2014	Efficacy of MCW 2222 SL on <i>Cydia pomonella</i> in apple in the Czech Republic in 2014. Zemedelsky vyzkumny ustav Kromeriz, s.r.o., Havlickova, Czech Republic Report no. CZ14IEMABSD011E GEP Unpublished	N	Adama
KCP 6.4.2/015 Submitted under KCP 6.2/015	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012A GEP Unpublished	N	Adama
KCP 6.4.2/016 Submitted under KCP 6.2/016	Hornik, P.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ14IEMABSD012B GEP Unpublished	N	Adama
KCP 6.4.2/017 Submitted under KCP 6.2/017	Richter, T.	2014	Efficacy of MCW-2222 SL on <i>Quadraspidiotus perniciosus</i> in apple in the Czech Republic in 2014 PP Trial s.r.o., Brno, Czech Republic Report no. CZ14IEMABSD012C GEP Unpublished	N	Adama

Data point	Author(s)	Year	Title Source (where different from company) Report No. GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.4.2/020 Submitted under KCP 6.2/020	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005A GEP Unpublished	N	Adama
KCP 6.4.2/021 Submitted under KCP 6.2/021	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005B GEP Unpublished	N	Adama
KCP 6.4.2/025 Submitted under KCP 6.2/025	Hornik, P.	2015	Efficacy of MCW-2222 SL on Californian scale in apple in the Czech Republic 2015 ZS Nechanice, s.r.o., Nechanice, Czech Republic Report no. CZ15IEMABSD005F GEP Unpublished	N	Adama
KCP 6.4.2/032 Submitted under KCP 6.2/032	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o o., Błędów, Poland Report no. 072_01_F12_134 GEP Unpublished	N	Adama
KCP 6.4.2/033 Submitted under KCP 6.2/033	Gajek, D.	2012	Efficacy of MCW 2222 SL in the control of green apple aphid <i>Aphis pomi</i> on apple, Poland 2012 Fertico Sp. z o o., Błędów, Poland Report no. 072_02_F12_135 GEP Unpublished	N	Adama
KCP 6.4.4/001	Kukula, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0139-6 GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.4/002	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. DE15IESOLTU320C GEP Unpublished	N	Adama
KCP 6.4.4/003	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. DE15IESOLTU320A GEP Unpublished	N	Adama
KCP 6.4.4/004	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. DE15IESOLTU320B GEP Unpublished	N	Adama
KCP 6.4.4/005	Kukuła, A.	2015	Sensory evaluation – the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. PL15IPMABSD100A GEP Unpublished	N	Adama
KCP 6.4.4/006	Kukuła, A.	2015	Sensory evaluation – the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. PL15IPMABSD100B GEP Unpublished	N	Adama
KCP 6.4.4/007	Kukuła, A.	2015	Sensory evaluation – the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. PL15IPMABSD100C GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Source (where different from company) Report No. GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.4/008	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. RO15IESOLTU012A GEP Unpublished	N	Adama
KCP 6.4.4/009	Kukuła, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0138-4 GEP Unpublished	N	Adama
KCP 6.4.4/010	Kukuła, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0138-5 GEP Unpublished	N	Adama
KCP 6.4.4/011	Kukuła, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0138-1 GEP Unpublished	N	Adama
KCP 6.4.4/012	Kukuła, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0138-2 GEP Unpublished	N	Adama
KCP 6.4.4/013	Kukuła, A.	2014	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of fresh and processing apples AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0138-3 GEP Unpublished	N	Adama

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title</b> <b>Source (where different from company)</b> <b>Report No.</b> <b>GLP or GEP status</b> <b>Published or not</b>	<b>Vertebrate study</b> <b>Y/N</b>	<b>Owner</b>
KCP 6.4.4/014	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0139-1 GEP Unpublished	N	Adama
KCP 6.4.4/015	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0139-2 GEP Unpublished	N	Adama
KCP 6.4.4/016	Kukuła, A.	2015	Sensory evaluation - the influence of the plant protection product MCW-2222 (Acetamiprid 200 SL) on taint of processing potatoes AGRECO Sp. z o.o., Oława, Poland Report no. 15ADA0139-3 GEP Unpublished	N	Adama

**List of data submitted or referred to by the applicant and relied on, but already evaluated at EU peer review**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title</b> <b>Company Report No.</b> <b>Source (where different from company)</b> <b>GLP or GEP status</b> <b>Published or not</b>	<b>Vertebrate study</b> <b>Y/N</b>	<b>Owner</b>
-	-	-	-	-	-

**List of data submitted by the applicant and not relied on**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
KCP 6.4.1/426 Submitted under KCP 6.2/426	Furman-Frątczak, K.	2017	The evaluation of efficacy and selectivity of insecticides product for the control of pests on winter oilseed rape BIOTEK Agriculture Polska Sp. z o. o., Oława, Poland Report no. PL16IEBRSNW309A GEPUnpublished	N	Adama

**List of data relied on not submitted by the applicant but not necessary for evaluation**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
6.2 6.4.1		2013	The report of the trial HU13IEBRSNW431B, quoted as KCP 6.2/265 in the Appendix 4.2 (p. 155), has not been submitted. KCP 6.2/265 is a cereal trial from CZ.		
6.2 6.4.1		2013	The report of the trial SK13IEBRSNW001A, quoted as KCP 6.2/295 in the Appendix 4.2 (p. 157), has not been submitted. KCP 6.2/295 is a Pollen beetle trial from CZ.		

**List of data submitted or referred to by the applicant and relied on, but already evaluated at EU peer review**

<b>Data point</b>	<b>Author(s)</b>	<b>Year</b>	<b>Title Company Report No. Source (where different from company) GLP or GEP status Published or not</b>	<b>Vertebrate study Y/N</b>	<b>Owner</b>
-	-	-	-	-	-