

FINAL REGISTRATION REPORT

Part B

Section 3

Efficacy Data and Information

Concise summary

Product code: AKO 600 SC

Product name(s): Tanger 600 SC, Libretto 600 SC

Chemical active substances:

aclonifen, 600 g/L

Central Zone

Zonal Rapporteur Member State: Poland

Core dossier Poland
(authorization)

Applicant: Innvigo Sp. z o.o.

Submission date: 18.11.2024

zRMS Assessment : 28/06/2025

Following commenting period: 01/10/2025

Final Version : 29/06/2026

Version history

When	What
October 2024	Dossier sent for evaluation
February 2025	Update of data – highlighted in yellow
April 2025	Update of data – highlighted in green
April 2025	Update of succeeding crops data – highlighted in blue
June 2025	zRMS evaluation
October 2025	Following commenting period
June 2026	Final version

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

Transformation of the dRR (applicant version) into the RR (zRMS version)

Comments of zRMS:	Conclusions from the assessment were prepared using grey commenting boxes placed at the end of each chapter. The parts of the text amended or added by the zRMS evaluator are highlighted in grey and the parts struck off are visibly marked with the grey font.
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3.1 Summary and conclusions of zRMS on Section 3: Efficacy (KCP 6)

Abstract

ZRMS conclusion: The overall assessment was performed according to the uniform principles. Due to the indicated risk in the ecotoxicology section for doses higher than 2,0 l/ha, it was necessary to modify the dose also in the efficacy section to 2,0 l/ha. Finally, the dossier was evaluated with the 2,0 l/ha of AKO 600 SC. <u>the NE EPPO climate zone (Poland)</u> ZRMS considers that the data provided support the following uses: 1, 3 presented in the GAP table. The label should contain the information that solo application of the product may cause transient, minor symptoms of phytotoxicity (delay in reaching various growth stages, stunting, chlorosis) - especially on the variety Skawa- without negative effect on yield. For mixture, the label should also contain the information that the application of the of AKO 600 SC with Boa Pro 480 SC may cause transient, minor symptoms of phytotoxicity (stunting, chlorosis) - especially on the variety Skawa- without negative effect on yield. <u>the Maritime EPPO climate zone</u> Minimum effective dose, efficacy and selectivity of AKO 600 SC were no tested in the Maritime EPPO climate zone. CMS is invited to decide whether data carried out in PL are acceptable for DE. Efficacy data are not acceptable for DE CMS as no data from the Maritime climate zone has been provided in the dossier. <u>the SE EPPO climate zone</u> Minimum effective dose, efficacy and selectivity of AKO 600 SC were no tested in the SE EPPO climate zone. CMSs are invited to decide whether data carried out in PL are acceptable for DE. Efficacy data are not acceptable for HU CMS as no data from the SE climate zone has been provided in the dossier.

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

GAP rev. , date: 2024-10-09

PPP (product name/code): AKO 600 SC/ Tanger 600 SC/ Libretto 600 SC Formulation type: SC ^(a, b)
Active substance 1: aclonifen Conc. of as 1: 600 g/L ^(c)
Active substance 2: Conc. of as 2: ^(c)
Active substance 3: Conc. of as 3: ^(c)
Safener: - Conc. of safener: - ^(c)
Synergist: - Conc. of synergist: - ^(c)
Applicant: Innvigo Sp. z o.o. Professional use: ☒
Zone(s): Central ^(d) Non professional use: ☐
Verified by MS: no
Field of use: herbicide

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use -No. (^e)	Member state(s)	Crop and/ or situation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/syne rgist per ha (ⁱ)	Conclusion Groundwa- ter
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. inter- val between applications (days)	kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg 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)														
1	PL	Potato <i>Solanum tuberosum</i> SOLTU	F	Mono and dicots weeds	Spray	BBCH 01-09	a) 1 b) 1	n/a	a) 1.95- 3.0 L/ha b) 1.95- 3.0 L/ha a) 2.0 l/ha b) 2.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha a) 1.2 kg as/ha b) 1.2 kg as/ha	200- 400 300	40		
2	DE	Potato <i>Solanum tuberosum</i> SOLTU	F	Mono and dicots weeds	Spray	BBCH 01-09	a) 1 b) 1	n/a	a) 1.95 L/ha b) 1.95 L/ha a) 2.0 l/ha b) 2.0 L/ha	a) 1.17 kg as/ha b) 1.17 kg as/ha a) 1.2 kg as/ha b) 1.2 kg as/ha	200- 400 300	40		
3	PL	Potato <i>Solanum tuberosum</i> SOLTU	F	Mono and dicots weeds	Spray	BBCH 01-09	a) 1 b) 1	n/a	a) 0.8- 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) b) 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L)	a) 0.48- 1.2 + 0.096 kg as/ha b) 0.48- 1.2 + 0.096 kg as/ha	200- 400 300	40		

4	HU, RO, SK	Sunflower <i>Helianthus annuus</i> HELAN	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha a) 2.0 l/ha b) 2.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha a) 1.2 kg as/ha b) 1.2 kg as/ha	200-300	n/a		Not acceptable HU
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)														
5														
6														
Minor uses according to Article 51 (zonal uses)														
7	PL	Sunflower <i>Helianthus annuus</i> HELAN	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
8	PL, SK	Spring rapeseed BRNSN	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
9	DE	Spring rapeseed BRNSN	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 L/ha b) 1.95 L/ha	a) 1.17 kg as/ha b) 1.17 kg as/ha	200-300	n/a		
10	PL, HU, RO, SK	Flax LIUUT	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
11	PL, HU, RO, SK	Opium poppy <i>Papaver somniferum</i> PAPSO	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
12	DE	Opium poppy <i>Papaver somniferum</i> PAPSO	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 L/ha b) 1.95 L/ha	a) 1.17 kg as/ha b) 1.17 kg as/ha	200-300	n/a		
13	PL, RO, SK	Mustard 3MUSC	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
14	PL	Soybeans GLXMA	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
15	PL, HU, RO, SK	Pumpkin CUUPE	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
16	DE	Pumpkin CUUPE	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 L/ha b) 1.95 L/ha	a) 1.17 kg as/ha b) 1.17 kg as/ha	200-300	n/a		
17	PL, HU, RO, SK	Hemp CNISA	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
18	DE	Hemp CNISA	F	Mono and dicots weeds	Spray	BBCH 00-08	a) 1 b) 1	n/a	a) 1.95 L/ha b) 1.95 L/ha	a) 1.17 kg as/ha b) 1.17 kg as/ha	200-300	n/a		

19	PL, HU, RO, SK	Tobacco <i>Nicotiana tabacum</i> NIOTA	F	Mono and dicots weeds	Spray	Before planting	a) 1 b) 1	n/a	a) 1.8 - 2.5 L/ha b) 1.8 - 2.5 L/ha	a) 1.08 - 1.50 kg as/ha b) 1.08 - 1.50 kg as/ha	150-400	n/a		
20	PL, HU, RO, SK	Forest nurseries plants (pine tree, spruce, fir tree, larch) YPFLG	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 3.0 L/ha b) 1.95 - 3.0 L/ha	a) 1.17 - 1.8 kg as/ha b) 1.17 - 1.8 kg as/ha	200-300	n/a		
21	PL, HU, RO, SK	Ornamental shrubs NNNZG	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
22	PL, HU, RO, SK	Basket willow <i>Salix</i> sp. SAXSS	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
23	PL, HU, RO, SK	Purple willow SAXPU	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
24	PL, HU, RO, SK	Forest tree 3FORC	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
25	PL, HU, RO, SK	Christmas tree PIEAB	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
26	PL, HU, RO, SK	Energetic willow SAXSS	F	Mono and dicots weeds	Spray	Immediately after planting, when trees are dormant	a) 1 b) 1	n/a	a) 1.95 - 2.5 L/ha b) 1.95 - 2.5 L/ha	a) 1.17 - 1.50 kg as/ha b) 1.17 - 1.50 kg as/ha	200-300	n/a		
Minor uses according to Article 51 (interzonal uses)														
27														

* 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, Fpn: professional and non-professional field use, G: professional greenhouse use, Gn: non-professional greenhouse use, Gpn: professional and non-professional greenhouse use, I: indoor application

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

3.2 Efficacy data (KCP 6)

Introduction

This document summarizes the information related to the efficacy of the product AKO 600 SC containing active substance aclonifen.

AKO 600 SC applies in the Central Registration Zone for the registration of in potato at spring applied once per season preemergence BBCH 01-08:

- solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species
- in tank mix at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) which are corresponding to 0.48-1.2 kg a.s./ha of aclonifen and per application for the control of most important weed species.

Description of active substances

The descriptions of active substances will be provided in Section 1,2 4 to 8 and Part C.

Mode of action

Aclonifen 600 g/L

Chemical name (IUPAC): 2-chloro-6-nitro-3-phenoxyaniline

CAS No.: 74070-46-5

According to Aclonifen_DAR_03_Vol3_B1-B5_public.pdf

Aclonifen is a herbicidal active substance belonging to the chemical class of diphenylether for the pre-emergence control of annual grass and broad-leaved weed species in several dicotyledonous crops. Aclonifen affects germination of sensitive weeds but does not stop germination. Typical symptoms of susceptible weeds treated with aclonifen is bleaching and chlorosis of young shoot tissue. Aclonifen is a contact herbicide with only limited translocation activity within the plant. Aclonifen should therefore be applied uniformly to the ground surface, where it forms an homogenous film. Incorporation within the soil profile will significantly reduce its activity. Good soil and seed bed preparation and application are therefore important to ensure optimum levels of performance of the material. Aclonifen is intended to be used as a selective pre-emergence herbicide for the control of annual broad-leaved and grass weeds. When used according to label recommendations aclonifen is effective against a wide range of key annual weeds including *Abutilon*, *Amaranthus*, *Brassica*, *Chenopodium*, *Euphorbia*, *Lamium*, *Matricaria*, *Papaver*, *Portulaca*, *Raphanus*, *Sinapis*, *Sonchus*, *Stellaria*, *Crucifers* and *Galium aparine*. Of the *Polygonaceae* family, *Fallopia convolvulus* is the most resistant weed. The same applies to *Veronica hederifolia* in the *Scrophulariaceae* family and *Senecio vulgaris* in *Compositae*. *Umbelliferae* and *Solanaceae* families are totally tolerant to aclonifen. Of the grass weeds, *Poa annua* and *Setaria* are susceptible; *Alopecurus myosuroides*, *Apera spica-venti* and *Eleusine indica* are only moderately susceptible.

Table 3.2-1: Details of the active substances

Active substance	aclonifen
Concentration (Unit: g/kg or g/L...)	600 g/L
Chemical group	Diphenyl ether
Mode of action	Inhibition of Solanesyl Diphosphate Synthase
Biological action	Aclonifen affects germination of sensitive weeds but does not stop germination. Typical symptoms of susceptible weeds treated with aclonifen is bleaching and chlorosis of young shoot tissue. Aclonifen is a contact herbicide with only limited translocation activity within the plant. Aclonifen should therefore be applied uniformly to the ground surface, where it forms an homogenous film. Incorporation within the soil profile will significantly reduce its activity. Good soil and seed bed preparation and application are therefore important to ensure optimum levels of performance of the material.

Description of the plant protection product

AKO 600 SC containing aclonifen as the active substance is prepared for the use in agricultural practice as a herbicide in the form SC – Suspension concentrate.

Marketing name:

product submitted to registration under two different marketing names: Tanger 600 SC, Libretto 600 SC

AKO 600 SC is to be applied at spring in potato at spring applied once per season preemergence BBCH 01-08:

- solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species
- in tank mix at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) which are corresponding to 0.48-1.2 kg a.s./ha of aclonifen and per application for the control of most important weed species.

Information on the composition of product AKO 600 SC are included in the confidential part of the registration dossier: Registration Report – Part C.

Table 3.2-2: Simplified table of currently registered uses and requested uses for the product code.

Uses		Member State	Currently registered rate(s)	Requested rate(s)	Comments / Other relevant details on GAPs
Crop(s)	Target(s)				
potato	Mono and dicots weeds	PL	-	1.95-3.0 L/ha	-
potato	Mono and dicots weeds	DE	-	1.95 L/ha	-
potato	Mono and dicots weeds	PL	-	0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC	

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

Description of the target pests

Table 3.2-3: Glossary of pests mentioned in the dossier.

EPPO code	Scientific name	Common name*
CHEAL	<i>Chenopodium album</i>	fat-hen
VIOAR	<i>Viola arvensis</i>	Field violet
ECHCG	<i>Echinochloa crus-galli</i>	one-sided barnyardgrass
BRSNW	<i>Brassica napus</i> (self-sown plant)	Rapeseed
AMARE	<i>Amaranthus retroflexus</i>	redroot pigweed
POLCO	<i>Polygonum convolvulus</i>	black bindweed
STEME	<i>Stellaria media</i>	Common chickweed
MATMA	<i>Tripleurospermum maritimum</i>	false mayweed
GALAP	<i>Galium aparine</i>	Catchweed bedstraw
POLPE	<i>Polygonum persicaria</i>	lady's thumb
THLAR	<i>Thlaspi arvense</i>	Fanweed
GASPA	<i>Galinsoga parviflora</i>	gallant soldier
GAETE	<i>Galeopsis tetrahit</i>	common hemp nettle
POAAN	<i>Poa annua</i>	annual meadowgrass

* optional

Table 3.2-4: 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
potato	PL, DE	-	<i>Chenopodium album</i>	x	
			<i>Viola arvensis</i>	x	
			<i>Echinochloa crus-galli</i>	x	
			<i>Brassica napus</i> (self-sown plant)		x
			<i>Amaranthus retroflexus</i>	x	
			<i>Polygonum convolvulus</i>	x	
			<i>Stellaria media</i>		x
			<i>Tripleurospermum maritimum</i>		x
			<i>Galium aparine</i>		x
			<i>Polygonum persicaria</i>	x	
			<i>Thlaspi arvense</i>	x	
			<i>Galinsoga parviflora</i>	x	
			<i>Galeopsis tetrahit</i>		x
			<i>Poa annua</i>	x	

Compliance with the Uniform Principles

The overall assessment was performed according to the uniform principles. There were no deviations from the EPPO guidelines with the trials conducted in North-East EPPO zone.

Information on trials submitted (3.1 Efficacy data)

The 21 efficacy trials have been carried out in 2023 and 2024 in Poland within the Central registration zone to evaluate the efficacy of applied at the proposed label rate solo of 1.17-1.8 kg a.s./ha aclonifen and in tank mix with Boa Pro 480 EC (clomazone 480 g/L) at the maximum dose 1.5-1.8 kg a.s./ha of aclonifen and 0.096 kg a.s./ha of clomazone for the weed species control in potato (Table 3.2 6). Trials were conducted in the main potato in the North-East EPPO zone in Poland.

Table 3.2-5: Presentation of trials (efficacy trials, preliminary trials...)

Potato

Crop*	Target(s)*	Country	Years	Type of trial**	Number of trials(number of valid trials)	GEP, non-GEP, official***	Comments (any other relevant information)
					North-East EPPO zone		
Potato	<i>Chenopodium album</i>	Poland	2023	E	5(5)	GEP	-
		Poland	2024	E	2(2)	GEP	-
		-	2023-2024	-	7(7)	-	-
	<i>Viola arvensis</i>	Poland	2023	E	7(7)	GEP	-
		Poland	2024	E	2(2)	GEP	-
		-	2023-2024	-	9(9)	-	-
	<i>Echinochloa crus-galli</i>	Poland	2023	E	4(4)	GEP	-
		Poland	2024	E	3(3)	GEP	-
		-	2023-2024	-	7(7)	-	-
	TOTAL	-	2023-2024	-	-	-	-

	<i>Brassica napus</i> (self-sown plant)	Poland	2023	E	4(4)	GEP	-
		Poland	2024	E	1(1)	GEP	
	TOTAL	-	2023-2024	-	5(5)	-	-
	<i>Amaranthus retroflexus</i>	Poland	2023	E	4(4)	GEP	-
		Poland	2024	E	4(4)	GEP	
	TOTAL	-	2023-2024	-	8(8)	-	-
	<i>Polygonum convolvulus</i>	Poland	2023	E	5(5)	GEP	-
		Poland	2024	E	3(3)	GEP	
	TOTAL	-	2023-2024	-	8(8)	-	-
	<i>Stellaria media</i>	Poland	2023	E	5(5)	GEP	-
		Poland	2024	E	3(3)	GEP	
	TOTAL	-	2023-2024	-	8(8)	-	-
	<i>Tripleurospermum maritimum</i>	Poland	2023	E	4(4)	GEP	-
		Poland	2024	E	1(1)	GEP	
	TOTAL	-	2023-2024	-	5(5)	-	-
	<i>Galium aparine</i>	Poland	2023	E	2(2)	GEP	-
		Poland	2024	E	1(1)	GEP	
	TOTAL	-	2023-2024	-	3(3)	-	-
	<i>Polygonum persicaria</i>	Poland	2023	E	2(2)	GEP	-
		Poland	2024	E	1(1)	GEP	
	TOTAL	-	2023-2024	-	3(3)	-	-
	<i>Thlaspi arvense</i>	Poland	2023	E	1(1)	GEP	-
		Poland	2024	E	7(7)	GEP	
	TOTAL	-	2023-2024	-	8(8)	-	-
	<i>Galinsoga parviflora</i>	Poland	2023	E	3(3)	GEP	-
		Poland	2024	E	2(2)	GEP	
	TOTAL	-	2023-2024	-	5(5)	-	-
	<i>Galeopsis tetrahit</i>	Poland	2023	E	2(2)	GEP	-
		Poland	2024	E	2(2)	GEP	
	TOTAL	-	2023-2024	-	4(4)	-	-
	<i>Poa annua</i>	Poland	2023	E	2(2)	GEP	-
		Poland	2024	E	7(7)	GEP	
	TOTAL	-	2023-2024	-	9(9)	-	-
TOTAL	21		2023-2024	-	89(89)	-	-

* According to the GAP table. Timing of the application(s) can be added if relevant (e.g. Pre-mergence vs post-emergence, spring vs autumn).

** P = preliminary trial, MED = minimum effective dose, E = efficacy trial.

*** GEP: Good Experimental Practices. Official: carried out by a national official organisation.

Table 3.2-6: Presentation of reference standards used in trials (efficacy trials, preliminary trials...)

Crop(s)	Reference standard	Country(ies) where the product is registered ⁽¹⁾	Authorization number	Active substance(s)	Formulation		Registered application rate ⁽³⁾	Application rate in trials (per treatment)	Remark ⁽⁴⁾
					Type ⁽²⁾	Concentration of a.s.			
potato	Bandur 600 SC	Poland	R-25/2018wu;	aclonifen	SC - Suspension concentrate	600 g/L	2.5-3.0 L/ha	3.0 L/ha	-

(1) only on use(s) applied for (with the test product).

(2) e.g. WP (wettable powder), EC (emulsifiable concentrate), etc.

(3) dose(s) / dose range authorized on that use in the country.

(4) Other relevant information (e.g. uses, number of applications, spray volume, method of application, etc.).

3.2.1 Preliminary tests (KCP 6.1)

Preliminary studies on product AKO 600 SC were not carried out because this herbicide contains aclonifen which is a well-known active substance that has been used for many years in agricultural practice. According to EPPO PP1/225(2) lower doses have been tested in the efficacy studies, therefore no specific studies were conducted to fill this data point.

Summary and conclusions on the preliminary trials

According to EPPO PP1/225(2) lower doses have been tested in the efficacy studies, therefore no specific studies were conducted to fill this data point.

dRR point 3.2.1	Preliminary tests
ZRMS conclusion: Preliminary range finding tests are not reported. The active substance aclonifen has well been known and used in authorised products with a known range of action.	

3.2.2 Minimum effective dose tests (KCP 6.2)

No specific studies were conducted to fill this data point.
 According to EPPO PP1/225(2) lower doses have been tested in the efficacy studies, therefore the minimum effective trials were not conducted.

Potato

The 21 field trials were established in order to determine the minimum effective dose for the control of the weed species in potato. AKO 600 SC was tested at:
 solo at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha
 in tank mix at the following rates of 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.2 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.4 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) and 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L)
 once per season at BBCH 01-08 in potato for the control of weed species. The rates reflect the proposed label rate of AKO 600 SC, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose*'.
 A summary of the dose response results is provided in **Table 3.2-9**.

Table 3.2-9: Minimum effective dose. Efficacy of AKO 600 SC at proposed label rate, at 1.95-3.0 L/ha dose rates at the BBCH 37-39 against weeds in potato

Tar- get	Group- ing*	Num ber of trials	Infestation of the un- treated control (unit)			% control with AKO 600 SC																										
						AKO 600 SC 0.8 L/ha			AKO 600 SC 1.4 L/ha			AKO 600 SC 2.0 L/ha			AKO 600 SC 2.5 L/ha			AKO 600 SC 3.0 L/ha			AKO 600 SC 0.8 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 1.2 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 1.4 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 2.0 L/ha + 0.2 L/ha Boa Pro 480 EC		
			Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max	Me an	Min & Max		
Wee ds*	CHEA L	7	7.8	5.0	14.8	84.02	75.00	92.50	88.34	80.30	98.80	95.74	91.30	99.00	97.66	93.80	100	99.76	99.00	100	85.65	68.80	97.50	80.00	75.00	85.00	90.55	86.30	94.80	97.03	88.80	100
	VIOAR	9	7.8	5.0	12.3	68.63	31.30	90.00	77.91	52.50	93.80	85.81	71.30	97.50	94.13	81.30	100	98.37	91.00	100	84.40	63.80	96.30	80.55	66.30	94.80	83.05	66.30	99.80	93.75	77.50	100
	ECHC G	7	8.5	5.0	17.0	79.90	73.80	82.50	85.65	77.50	90.00	95.03	88.80	100	98.95	97.50	100	100	100	100	88.45	72.50	100	88.97	76.30	95.80	93.63	81.30	99.80	95.95	83.80	100
	BRSN W	5	6.4	5.0	10.3	69.63	42.50	82.50	85.40	77.00	96.30	91.95	82.80	97.50	95.03	86.50	99.80	97.75	91.00	100	75.05	66.30	83.80	71.30	71.30	71.30	88.80	88.80	88.80	95.00	95.00	95.00
	AMAR E	8	6.9	5.0	13.3	50.35	31.30	78.80	64.73	50.00	83.80	76.28	67.50	86.30	90.68	88.80	91.30	97.95	97.00	98.80	75.95	71.30	80.00	81.28	80.00	82.50	91.28	90.00	92.50	97.53	95.00	99.80
	POLCO	8	6.4	5.0	10.3	42.76	17.50	83.80	55.52	37.50	82.50	69.56	45.00	96.30	77.24	60.00	94.80	85.74	78.80	99.80	78.15	55.00	91.30	91.50	80.00	98.50	97.87	93.80	100	91.58	71.30	100
	STEME	8	7.6	5.0	17.3	70.78	53.80	91.30	80.10	65.00	100	85.02	71.30	100	93.26	87.50	100	99.20	96.00	100	85.95	73.80	100	86.27	75.00	93.80	93.03	83.80	99.50	95.95	83.80	100
	MATM A	5	6.1	5.3	7.8	44.70	0.00	85.00	64.70	35.00	93.80	80.65	65.00	100	90.65	81.30	100	93.33	86.30	100	90.65	81.30	100	83.80	83.80	83.80	91.30	91.30	91.30	97.50	95.00	100

GALA P	3	6.7	5.0	9.0	80.00	72.50	87.50	87.50	80.00	95.00	90.65	85.00	96.30	95.65	92.50	98.80	98.00	96.00	100	93.05	92.30	93.80	98.50	98.50	98.50	100	100	100	98.15	96.30	100
POLPE	3	7.0	5.0	9.0	59.40	38.80	80.00	76.90	71.30	82.50	92.50	90.00	95.00	93.75	90.00	97.50	97.50	95.00	100	81.90	71.30	92.50	78.80	78.80	78.80	88.80	88.80	88.80	94.40	93.80	95.00
THLA R	8	7.5	5.5	11.3	83.8	80.0	87.5	90.8	85.0	94.5	95.4	92.5	99.5	99.2	97.3	100.0	99.6	98.5	100.0	84.7	75.0	91.3	92.1	83.8	95.8	96.4	92.5	99.8	99.4	97.5	100.0
GASPA	5	8.0	5.0	15.5	66.27	60.00	76.30	81.70	76.30	88.80	89.60	83.80	100	95.83	92.50	100	100	100	100	81.25	75.00	87.50	84.40	77.50	91.30	94.15	88.80	99.50	96.90	93.80	100
GAETE	4	7.4	5.3	8.8	56.90	56.30	57.50	64.40	57.50	71.30	79.40	78.80	80.00	88.75	87.50	90.00	99.40	98.80	100	88.75	87.50	90.00	93.65	91.30	96.00	97.40	94.80	100	100	100	100
POAA N	9	7.7	5.8	10.8	63.8	30.0	83.8	75.5	51.3	91.3	84.7	71.3	96.0	94.9	85.0	100.0	98.4	93.0	100.0	81.3	68.8	87.5	87.5	77.5	91.3	96.4	88.8	99.5	98.3	93.8	100.0

Summary and conclusions on the minimum effective dose

According to the presented results, the dose of 2.0 L/ha of AKO 600 SC and 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC provided the optimum overall control and should be considered as effective against these major weed species in potato, for which activity of product is claimed.

In the solo application, to increase the efficacy of the product against certain species, i.e. AMARE, POLCO, MATMA, GAETE and POAAN, a higher dose – 3.0 L/ha – should be used.

In the tank mix application, to increase the efficacy of the product against certain species, i.e. VIOAR, BRSNW, AMARE, POLCO, POLPE, THLAR, GASPA and POAAN, a higher dose – 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC – should be used.

Due to the allowable extrapolation of the dose by 5%, the Applicant requests registration of a dose of 1.95 L/ha on the basis of the effectiveness of a dose of 2.0 L/ha (this represents a difference of <5%).

ZRMS conclusion: the requested dose 1,95 l/ha was not tested in efficacy trials, but the dose 2,0 l/ha was tested, which is 2,5% higher than the requested dose. In the opinion of ZRM, efficacy results for the dose 2,0 L/ha can be acceptable for the lower dose of 1,95%, as such a small change in the amount of active substance will not have a significant impact on efficacy. Nevertheless, reason for using the dose rate 1,95 l/ha instead 2,0 l/ha is unknown for the evaluator. Therefore, in the GAP table 2,0 l/ha has been proposed by the evaluator. Taking into account above, both doses of 1,95 l/ha and 2,0 l/ha can be considered acceptable in terms of impact on efficacy.

As a result, the proposed rate in potato at spring applied once per season preemergence BBCH 01-08:

- solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species for Poland should be considered the minimum effective dose to deliver broad spectrum control of targets under a wide range of environmental conditions
- in tank mix at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) which are corresponding to 0.48-1.2 kg a.s./ha of aclonifen and per application for the control of most important weed species for Poland should be considered the minimum effective dose to deliver broad spectrum control of targets under a wide range of environmental conditions.

dRR point 3.2.2	Minimum effective dose tests
ZRMS conclusion: The evaluation of the minimum effective dose is shown below in black font with the conclusion that 2,5 l/ha is the minimum effective dose for a product applied solo. However, due to the indicated risk in the ecotoxicology section for doses higher than 2,0 l/ha, it was necessary to modify the dose also in the efficacy section to 2,0 l/ha. Finally, the dossier was evaluated with 2,0 l/ha of AKO 600 SC (for product solo and for mixture the product with Boa Pro 480 EC). According to the risk evaluation in the ecotoxicology section, the lowest possible dose used for the efficacy assessment is 2,0 l/ha. The proposal for a minimum mixture dose of 2,0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC remained valid. The doses justification of AKO 600 SC has been supported by data from 21 efficacy trials conducted in NE climate zone (PL). 26,7%; 46,7%; 66,7%; 83,3% and 100% of the full recommended rate were tested in the trials. There are no data for the Maritime and the SE EPPO climate zone. CMSs are invited to decide whether data carried out in PL are acceptable for them.	

Weed species	L/ha	Ass. at weeds stage BBCH 12-14 [no of trials]	up to 2 weeks after first efficacy assessment [no of trials]	Ass. BBCH 37-39 [no of trials]
CHEAL	2,0	77,1 [5]	89,6 [5]	94,9 [4]
	2,5	77,1 [5]	93,1 [5]	97,3 [4]
	3,0	81,4 [5]	97,0 [5]	99,9 [4]
	Ref. 3,0	81,1 [5]	96,1 [5]	100 [4]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=5	=4 <1	=4
VIOAR	2,0	75,1 [7]	83,3 [7]	84,8 [5]
	2,5	84,5 [7]	93,0 [7]	94,2 [5]
	3,0	88,2 [7]	97,6 [7]	99,8 [5]
	Ref. 3,0	88,1 [7]	97,2 [7]	99,1 [5]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=5 <2	=4 <3	=2 <3
ECHCG	2,0	76,0 [4]	90,6 [4]	93,8 [3]
	2,5	79,4 [4]	94,4 [4]	98,6 [3]
	3,0	81,9 [4]	97,1 [4]	100 [3]
	Ref. 3,0	82,5 [4]	97,4 [4]	100 [3]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=1 <3	=3 <1	=2 <1
BRSNW	2,0	80,8 [3]	89,2 [4]	95,0 [2]
	2,5	81,0 [3]	93,5 [4]	99,3 [2]
	3,0	82,5 [3]	97,6 [4]	100 [2]
	Ref. 3,0	81,3 [3]	95,3 [4]	100 [2]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=3	=3 <1	=2
AMARE	2,0	57,2 [4]	67,5 [4]	76,3 [4]
	2,5	73,8 [4]	81,1 [4]	90,7 [4]
	3,0	77,5 [4]	90,7 [4]	98,0 [4]
	Ref. 3,0	78,5 [4]	92,7 [4]	99,2 [4]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=1 <3	=1 <3	=1 <3
GASPA	2,0	72,1 [3]	88,4 [3]	84,4 [2]
	2,5	85,4 [3]	92,9 [3]	93,8 [2]
	3,0	91,7 [3]	99,6 [3]	100 [2]
	Ref. 3,0	91,3 [3]	100 [3]	100 [2]
No of trials		=1	=1	=1

where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		≤	≤	≤
POAAN	2,0	72,8 [5]	81,2 [5]	84,7 [5]
	2,5	82,0 [5]	92,0 [5]	94,9 [5]
	3,0	88,0 [5]	97,7 [5]	98,4 [5]
	Ref. 3,0	88,8 [5]	97,7 [5]	97,8 [5]
No of trials where eff. at 2,0 l/ha is = or < eff. at 2,5 l/ha		=2 ≤	≤5	≤5
It can be concluded that 2,5 l/ha in solo application showed a higher level of efficacy than reduced rates and indicated by the Applicant the dose 2,0 l/ha. The dose 2,5 l/ha performed better at the early assessment (up to 2-3 weeks) and results were more consistent in comparison to the dose 2,0 l/ha. Therefore 2,5 l/ha can be considered the minimum effective dose. For the mixture with Boa Pro 480 EC, dose of 2,0 L/ha AKO 600 SC + 0,2 L/ha Boa Pro 480 EC can be considered the minimum effective dose. In this case efficacy comparability the mixture of two different active substances with efficacy of the reference product contained one active substance should be the criterion of minimum efficacy dose. The mixture at dose of 2,0 L/ha AKO 600 SC + 0,2 L/ha Boa Pro 480 EC performed on the same high efficacy level as the reference product Bandur 600 SC.				

3.2.3 Efficacy tests (KCP 6.2)

Materials and methods

The Applicant submitted 21 reports (in total) showing the results in research into product efficacy carried out in 2023 and 2024 in potato. List of these reports is contained in Appendix 1.

Site

Trials were conducted in different regions in Poland where potato is grown commercially. The experiment was established on a set of complete randomized blocks in 4 replications. Details on trial sites, applications and data on effectiveness are included in Appendix 4 and 5.

Testing units

Efficacy and selectivity studies on herbicide AKO 600 SC were performed in 2023 and 2024 by:

- A.T Sp. z o.o., ul. Przemysłowa 3, 88-300 Mogilno, Poland
- Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland
- Agricola2000 Sp. z o.o., ul. Akacjowa 14, 86-011 Wtelno, Poland

Experimental details

The efficacy trials were designed, conducted and reported according to the following EPPO guidelines:

- PP 1/135 (3) Phytotoxicity assessment
- PP 1/152 (3) Design and analysis of efficacy evaluation trials
- PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice
- PP 1/51(3) Weeds in potato

Assessment methods

Statistical Analysis

The test results were statistically evaluated using the ARM 2020.1 statistical program. All assessment data was analysed by analysis of variance (two-way analysis of variance). Significance of differences

between the combinations was assessed using the Student-Newman-Keuls test at a significance level of $p = 0.05$ using "ARM 9" (version 9.1.5). All data were tested for homogeneity using the Bartlett test for homogeneity. for any data columns that did not pass this test, automatic data transformations were performed in the ARM (see ARM action codes below each scoreboard) Care should be taken when interpreting these data columns Efficacy was analysed by Abbott's test (% of control).

Assessment of efficacy

The effectiveness of the control of monocotyledonous and dicotyledonous weeds was assessed visually by comparing the condition of individual weeds on the herbicide-treated plots and on the untreated objects. Results were presented as percent damage using a 0-100 scale, where 0 - no efficacy, 100 - total weed control. Both before the application of the preparation and on each evaluation day, the number of individual weeds was determined on the control plots on the area of 1 m².

An efficacy was evaluated through assessments of damage weeds on plots treated compared to untreated (check) plots. The results was presented in percentage of efficacy (%). On untreated plots estimated number of weeds on 1 square meter.

Assessment of phytotoxicity

The phytotoxicity assessment of the tested preparations was carried out by visually assessing the intensity of chlorosis, necrosis, leaf twisting, reduction of plant turgor, etc. on the surface of the entire plots and comparing each plot with the control plot. The assessment was made directly on the plantation. The results are presented on a 0-100 scale, where 0 - no phytotoxicity, 100 - complete destruction of plants.

Applications methods and rates

The applications were carried out by a T-BOOM – BACCAI, BOSPPO

Tested herbicide was applied at spring in the growth stage:

- potato: once per season at BBCH 01-08.

The product AKO 600 SC has been used in potato:

solo at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha

in tank mix at the following rates of 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.2 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.4 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) and 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L).

Bandur 600 SC was used as a reference product in potato.

The experiment was established on a set of complete randomized blocks in 4 replications.

Experiment pattern:

potato

No.	Name	Rate (L/ha)	Rate (g a.s./ha)	Appl code	Growth Stage BBCH
1	Untreated Check				
2	AKO 600 SC	0.8	480	A	BBCH 01-08
3	AKO 600 SC	1.4	840	A	BBCH 01-08
4	AKO 600 SC	2.0	1200	A	BBCH 01-08
5	AKO 600 SC	2.5	1500	A	BBCH 01-08
6	AKO 600 SC	3.0	1800	A	BBCH 01-08
7	Bandur 600 SC	3.0	1800	A	BBCH 01-08

No.	Name	Rate (L/ha)	Rate (g a.s./ha)	Appl code	Growth Stage BBCH
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1	Untreated Check				
2	AKO 600 SC	0.8	480	A	BBCH 01-08
3	AKO 600 SC + Boa Pro 480 EC*	0.8 + 0.2	480 + 96	A	BBCH 01-08
4	AKO 600 SC + Boa Pro 480 EC*	2.0 + 0.2	1200 + 96	A	BBCH 01-08
5	AKO 600 SC	1.4	840	A	BBCH 01-08
6	AKO 600 SC	2.0	1200	A	BBCH 01-08
7	AKO 600 SC	2.5	1500	A	BBCH 01-08
8	AKO 600 SC	3.0	1800	A	BBCH 01-08
9	Bandur 600 SC	3.0	1800	A	BBCH 01-08

*Boa Pro 480 EC (clomazon 480 g/L)

No.	Name	Rate (L/ha)	Rate (g a.s./ha)	Appl code	Growth Stage BBCH
1	Untreated Check				
2	AKO 600 SC + Boa Pro 480 EC*	0.8 + 0.2	480 + 96	A	BBCH 01-08
3	AKO 600 SC + Boa Pro 480 EC*	1.2 + 0.2	720 + 96	A	BBCH 01-08
4	AKO 600 SC + Boa Pro 480 EC*	1.4 + 0.2	840 + 96	A	BBCH 01-08
5	AKO 600 SC + Boa Pro 480 EC*	2.0 + 0.2	1200 + 96	A	BBCH 01-08
6	Bandur 600 SC	3.0	1800	A	BBCH 01-08

*Boa Pro 480 EC (clomazon 480 g/L)

Details of experiments

Potato

Report code	A.T/2023/021/ ZZ	A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	A.T/2023/024/ ZZ	AH/23/Z/27/Z I/01	AH/23/Z/27/ Gr/02	AH/23/Z/27/J ab/03	AH/23/Z/27/ Ry/04	AH/23/Z/27/ Ow/05	AH/23/Z/27/ Ko/06
Location	Rakojady/ Poland	Miława/ Po- land	Mirosław/ Poland	Lichnowy/ Poland	Złotniki/ Po- land	Gorzyń/ Po- land	Jabłowo Pałuckie/ Poland	Rycerzewo/ Poland	Owczary/ Poland	Kopanie/ Poland
Plant/cultivar	potato/ Partner	potato/ Skawa	potato/ Vineta	potato/ Boryna	potato/ Vineta	potato/ Jurek	potato/ Melo- dy	potato/ Jelly	potato/ Gala	potato/ Satina
Seeding date	28.04.2023	26.04.2023	28.04.2023	26.04.2023	20.04.2023	24.04.2023	06.05.2023	17.04.2023	08.04.2023	05.05.2023
Seeding rate	2000 kg/ha	2500 kg/ha	2200 kg/ha	3000 kg/ha	2200 kg/ha	2900 kg/ha	2200 kg/ha	2200 kg/ha	2500 kg/ha	2000 kg/ha
Forecrop	winter triticale	maize	spring barley	carrots	winter rye	winter barley	spring barley	winter wheat	winter wheat	winter wheat
Type of sprayer	BACCAI	BACCAI	BACCAI	BACCAI	BOSPHO	BOSPHO	BACCAI	BACCAI	BACCAI	BACCAI
Date of treat- ment	16.05.2023	10.05.2023	17.05.2023	16.05.2023	11.05.2023	12.05.2023	16.05.2023	15.05.2023	20.05.2023	22.05.2023
Plant devel- opment phase	BBCH 07-09	BBCH 03-07	BBCH 06-08	BBCH 07-08	BBCH 08	BBCH 01-08	BBCH 03-07	BBCH 07-09	BBCH 05-09	BBCH 05-09
Soil type	loamy sand	sandy loam	sandy loam	loamy sand	loamy sand	loamy sand	loamy sand	sandy loam	sandy loam	sandy loam
pH	6.28	5.7	6.5	7.08	7.0	6.4	6.7	7.1	6.4	6.9
Water (L/ha)	200 L/ha	300 L/ha	200 L/ha	200 L/ha	200 L/ha	300 L/ha	200 L/ha	300 L/ha	300 L/ha	300 L/ha
Plot size	2.5 x 6.0 = 15.0 m ²	2.5 x 6.0 = 15.0 m ²	2.5 x 6.0 = 15.0 m ²	2.5 x 6.0 = 15.0 m ²	3.0 x 10.0 = 30.0 m ²	2.8 x 10.0 = 28.0 m ²	3.0 x 6.0 = 18.0 m ²	3.0 x 6.0 = 18.0 m ²	3.0 x 5.0 = 15.0 m ²	3.0 x 5.0 = 15.0 m ²

Report code	AH/24/Z/6/ Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Dz/04	AH/24/Z/6/ Br/05	AH/24/Z/6/ Zl/06	AH/24/Z/6/ Gr/07	AH/24/Z/6/P r/08	EA24H241- PL01	EA24H241- PL02	EA24H241- PL03
Location	Złotniki / Poland	Brody / Po- land	Gorzyń / Poland	Dzierżążno / Poland	Brody / Po- land	Złotniki / Poland	Gorzyń / Poland	Przybroda / Poland	Dąbrowa/ Poland	Pilich / Po- land	Stary Dwór / Poland
Plant/cultivar	potato/ Red Lady	potato/ Lord	potato/ Jurek	potato/ Sati- na	potato/ Lord	potato/ Red Lady	potato/ Jurek	potato/ Rivi- era	potato/ Vineta	potato/ Vineta	potato/ Gala
Seeding date	15.04.2024	22.04.2024	03.04.2024	13.04.2024	22.04.2024	15.04.2024	03.04.2024	10.04.2024	29.05.2024	29.05.2024	28.05.2024
Seeding rate	2200 kg/ha	3200 kg/ha	3400 kg/ha	3100 kg/ha	3200 kg/ha	2200 kg/ha	3400 kg/ha	2000 kg/ha	2200 kg/ha	2200 kg/ha	2200 kg/ha
Forecrop	winter barley	pea	winter wheat	winter barley	pea	winter barley	winter wheat	winter wheat	winter barley	winter barley	winter barley
Type of sprayer	BOSPHO	BOSPHO	BOSPHO	BOSPHO	BOSPHO	BOSPHO	BOSPHO	BOSPHO	SPRBAC	SPRBAC	SPRBAC
Date of treatment	14.05.2024	09.05.2024	27.04.2024	06.05.2024	09.05.2024	14.05.2024	27.04.2024	09.05.2024	17.06.2024	17.06.2024	19.06.2024
Plant devel- opment phase	BBCH 00-08	BBCH 05-08	BBCH 05	BBCH 08	BBCH 05-08	BBCH 08	BBCH 05	BBCH 08	BBCH 06-08	BBCH 06-08	BBCH 06-08
Soil type	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand
pH	7.0	6.2	6.4	6.0	6.2	7.0	6.4	6.0	7.0	7.0	7.0
Water (L/ha)	200 L/ha	230 L/ha	200 L/ha	200 L/ha	230 L/ha	200 L/ha	200 L/ha	200 L/ha	300 L/ha	300 L/ha	300 L/ha
Plot size	3.0 x 10.0 = 30.0 m ²	2.5 x 10.0 = 25.0 m ²	2.8 x 10.0 = 28.0 m ²	3.0 x 10.0 = 30.0 m ²	2.5 x 10.0 = 25.0 m ²	3.0 x 10.0 = 30.0 m ²	2.8 x 10.0 = 28.0 m ²	3.0 x 10.0 = 30.0 m ²	2.5 x 7.0 =17.5 m ²	2.5 x 7.0 =17.5 m ²	2.5 x 7.0 =17.5 m ²

Details of agricultural measures, fertilization, and other plant protection products applied during the experiments are included in detailed field study reports listed above.

Summary of the data from effectiveness trials can be found at Appendix 5.

Table 3.2-10: Details on trial methodology

Guidelines	General guidelines	PP 1/152 (4) Design and analysis of efficacy evaluation trials
		PP 1/181 (4) Conduct and reporting of efficacy evaluation trials including good experimental practice
		PP 1/135 (4) Phytotoxicity assessment
		PP 1/225(2) Minimum effective dose
	Specific guidelines	PP 1/51(3) Weeds in potato
Experimental design	Plot design	Randomized Complete Block (RCB) – (21)
	Plot size	Potato: 15.0-30.0 m ²
	Number of replications	4 (21)
Crop	Trials per crop	Potato: 21
	Varieties per crop	Potato: Partner, Skawa, Vineta, Boryna, Jurek, Melody, Jelly, Gala, Red Lady, Lord, Satina, Riviera
	Sowing period	Potato: 08.04.2023-06.05.2023; 03.04.2024-29.05.2024
Application	Crop stage (BBCH)* at application	Potato: BBCH 01-09
	Timing Pest stage at application (1)	The data available in Appendix 4
	Number of applications Intervals between applications	Potato: 1 (21 trials) interval – n/a
	Spray volumes	Potato: 200-300 L/ha
Assessment	Assessment types	Assessment of efficacy Assessment of phytotoxicity
	Assessment dates	Assessment dates deatalis is available in Appendix 4
Other relevant information	e.g. Soil type, pH (in case of soil active substance ...)	Potato: pH: 5.7-7.1
	e.g. Natural / artificial inoculation...	n/a
	e.g. Field / Greenhouse...	n/a
	...	n/a

* BBCH for weeds, pre-emergence, preventive / curative application, insect stage...

3.2.3-1 Efficacy tests of AKO 600 SC

Potato

The 21 trials were carried out in potato in 2023 and 2024. The herbicide AKO 600 SC was applied once per season solo at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha in tank mix at the following rates of 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.2 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.4 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) and 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L).

The treatments were conducted once per season at the growth stage BBCH 01-09.

3.2.3-1.1 The efficacy of AKO 600 SC in control of CHEAL

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of CHEAL was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 45.00% (14 DA-A) to 90.80% (28 DA-A), at rate 1.4 L/ha from 47.50% (14 DA-A) to 97.50% (28 DA-A), at rate 2.0 L/ha from 55.00% (14 DA-A) to 98.50% (28 DA-A), at rate 2.5 L/ha from 57.50% (14 DA-A) to 98.50% (28 DA-A) and at rate 3.0 L/ha from 60.00% (14 DA-A) to 100% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of CHEAL was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (10 DA-A) to 93.30% (28 DA-A), 1.2 L/ha + 0.2 L/ha from 67.50% (10 DA-A) to 86.30% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 73.80% (10 DA-A) to 95.00% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 78.80% (10 DA-A) to 97.50% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 82.23% for Bandur 600 SC during the assessment. (Appendix 5 tab. 1).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of CHEAL was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 62.50% (28 DA-A) to 92.50% (36 DA-A), at rate 1.4 L/ha from 70.00% (28 DA-A) to 98.30% (36 DA-A), at rate 2.0 L/ha from 75.00% (28 DA-A) to 99.00% (36 DA-A), at rate 2.5 L/ha from 85.00% (28 DA-A) to 100% (36 DA-A) and at rate 3.0 L/ha from 90.00% (28 DA-A) to 100% (36 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of CHEAL was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 75.00% (31 DA-A) to 75.50% (36 DA-A), 1.2 L/ha + 0.2 L/ha from 78.80% (31 DA-A) to 83.80% (24 DA-A), 1.4 L/ha + 0.2 L/ha from 90.00% (31 DA-A) to 93.50% (24 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 93.80% (31 DA-A) to 99.00% (36 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.59% for Bandur 600 SC during the assessment. (Appendix 5 tab. 2).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of CHEAL was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 75.00% (56 DA-A) to 92.50% (48 DA-A), at rate 1.4 L/ha from 80.30% (41 DA-A) to 98.80% (48 DA-A), at rate 2.0 L/ha from 91.30% (37 DA-A) to 99.00% (41 DA-A), at rate 2.5 L/ha from 93.80% (37 DA-A) to 100% (48 DA-A) and at rate 3.0 L/ha from 99.00% (41 DA-A) to 100% (37-48 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of CHEAL was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 68.80% (45 DA-A) to 97.50% (37 DA-A), 1.2 L/ha + 0.2 L/ha from 75.00% (45 DA-A) to 85.00% (57 DA-A), 1.4 L/ha + 0.2 L/ha from 86.30% (45 DA-A) to 94.80% (57 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 88.80% (455 DA-A) to 100% (48 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 96.36% for Bandur 600 SC during the assessment. (Appendix 5 tab. 3).

3.2.3-1.2 The efficacy of AKO 600 SC in control of VIOAR

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of VIOAR was investigated in 7 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 22.50% (21 DA-A) to 82.50% (28 DA-A), at rate 1.4 L/ha from 37.50% (14 DA-A) to 83.80% (21 DA-A), at rate 2.0 L/ha from 47.50% (14 DA-A) to 97.50% (21 DA-A), at rate 2.5 L/ha from 47.50% (14 DA-A) to 100% (21 DA-A) and at rate 3.0 L/ha from 50.00% (14 DA-A) to 100% (21 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of VIOAR was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (10 DA-A) to 81.30% (28 DA-A), 1.2 L/ha + 0.2 L/ha from 67.50% (10 DA-A) to 73.80% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 73.00% (10 DA-A) to 91.30% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 78.80% (10 DA-A) to 98.80% (15 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 87.41% for Bandur 600 SC during the assessment. (Appendix 5 tab. 4).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of VIOAR was investigated in 7 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 28.80% (35 DA-A) to 88.80% (29 DA-A), at rate 1.4 L/ha from 45.00% (35 DA-A) to 91.50% (36 DA-A), at rate 2.0 L/ha from 66.30% (35 DA-A) to 96.50% (36 DA-A), at rate 2.5 L/ha from 83.80% (28 DA-A) to 100% (35 DA-A) and at rate 3.0 L/ha from 91.00% (41 DA-A) to 100% (29-36 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of VIOAR was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 66.30% (31 DA-A) to 93.80% (29 DA-A), 1.2 L/ha + 0.2 L/ha from 70.00% (31 DA-A) to 93.50% (24 DA-A), 1.4 L/ha + 0.2 L/ha from 86.30% (31 DA-A) to 99.80% (24 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 91.30% (31 DA-A) to 100% (29 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 97.10% for Bandur 600 SC during the assessment. (Appendix 5 tab. 5).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of VIOAR was investigated in 7 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 31.30% (67 DA-A) to 90.00% (37 DA-A), at rate 1.4 L/ha from 52.50% (67 DA-A) to 93.80% (48 DA-A), at rate 2.0 L/ha from 71.30% (67 DA-A) to 97.50% (48 DA-A), at rate 2.5 L/ha from 81.30% (65 DA-A) to 100% (48-67 DA-A) and at rate 3.0 L/ha from 91.00% (41 DA-A) to 100% (37-67 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of VIOAR was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 63.80% (45 DA-A) to 96.30% (37 DA-A), 1.2 L/ha + 0.2 L/ha from 66.30% (45 DA-A) to 94.80% (57 DA-A), 1.4 L/ha + 0.2 L/ha from 66.30% (45 DA-A) to 99.80% (57 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 77.50% (45 DA-A) to 100% (57 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 96.93% for Bandur 600 SC during the assessment. (Appendix 5 tab. 6).

3.2.3-1.3 The efficacy of AKO 600 SC in control of ECHCG

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of ECHCG was investigated in 4 trials. The tested

product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 40.00% (14 DA-A) to 83.80% (28 DA-A), at rate 1.4 L/ha from 50.00% (14 DA-A) to 91.30% (28 DA-A), at rate 2.0 L/ha from 55.00% (14 DA-A) to 98.80% (28 DA-A), at rate 2.5 L/ha from 55.00% (14 DA-A) to 98.80% (28 DA-A) and at rate 3.0 L/ha from 57.50% (14 DA-A) to 98.80% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of ECHCG was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 65.00% (7 DA-A) to 92.50% (15 DA-A), 1.2 L/ha + 0.2 L/ha from 67.50% (7 DA-A) to 92.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 78.80% (7 DA-A) to 96.30% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 86.30% (7 DA-A) to 97.50% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 86.09% for Bandur 600 SC during the assessment. (Appendix 5 tab. 7).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of ECHCG was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 60.00% (28 DA-A) to 81.30% (29 DA-A), at rate 1.4 L/ha from 62.50% (28 DA-A) to 88.80% (29 DA-A), at rate 2.0 L/ha from 77.50% (28 DA-A) to 100% (29 DA-A), at rate 2.5 L/ha from 82.50% (28 DA-A) to 100% (29 DA-A) and at rate 3.0 L/ha from 92.50% (28 DA-A) to 100% (29 DA-A).

The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 82.50% (31 DA-A) to 100% (29 DA-A), 1.2 L/ha + 0.2 L/ha from 82.50% (31 DA-A) to 95.80% (24 DA-A), 1.4 L/ha + 0.2 L/ha from 90.00% (31 DA-A) to 99.80% (24 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 92.50% (31 DA-A) to 100% (21-29 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 97.16% for Bandur 600 SC during the assessment. (Appendix 5 tab. 8).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of ECHCG was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 73.80% (56 DA-A) to 82.50% (37 DA-A), at rate 1.4 L/ha from 77.50% (56 DA-A) to 90.00% (37 DA-A), at rate 2.0 L/ha from 88.80% (56 DA-A) to 100% (37 DA-A), at rate 2.5 L/ha from 97.50% (56 DA-A) to 100% (37 DA-A) and at rate 3.0 L/ha from 100% (56 DA-A) to 100% (37 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of ECHCG was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 72.50% (45 DA-A) to 100% (37 DA-A), 1.2 L/ha + 0.2 L/ha from 76.30% (45 DA-A) to 95.80% (57 DA-A), 1.4 L/ha + 0.2 L/ha from 81.30% (45 DA-A) to 99.80% (54 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 83.80% (45 DA-A) to 99.80% (54 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.57% for Bandur 600 SC during the assessment. (Appendix 5 tab. 9).

3.2.3-1.4 The efficacy of AKO 600 SC in control of BRSNW

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of BRSNW was investigated in 3 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 55.00% (14 DA-A) to 81.50% (28 DA-A), at rate 1.4 L/ha from 60.00% (14 DA-A) to 96.80% (28 DA-A), at rate 2.0 L/ha from 60.00% (14 DA-A) to 97.50% (28 DA-A), at rate 2.5 L/ha from 55.00% (14 DA-A) to 99.80% (28 DA-A) and at

rate 3.0 L/ha from 57.50% (14 DA-A) to 100% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of BRSNW was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 68.80% (12 DA-A) to 81.30% (28 DA-A), 1.2 L/ha + 0.2 L/ha from 75.00% (12 DA-A) to 75.00% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 92.50% (12 DA-A) to 92.50% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.50% (28 DA-A) to 98.80% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 86.00% for Bandur 600 SC during the assessment. (Appendix 5 tab. 10).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of BRSNW was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 42.50% (31 DA-A) to 78.50% (41 DA-A), at rate 1.4 L/ha from 72.50% (28 DA-A) to 95.00% (36 DA-A), at rate 2.0 L/ha from 81.30% (28 DA-A) to 97.50% (36 DA-A), at rate 2.5 L/ha from 86.50% (41 DA-A) to 98.80% (36 DA-A) and at rate 3.0 L/ha from 91.00% (41 DA-A) to 100% (36 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of BRSNW was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 67.50% (29 DA-A) to 83.80% (36 DA-A), 1.2 L/ha + 0.2 L/ha from 73.80% (29 DA-A) to 73.80% (29 DA-A), 1.4 L/ha + 0.2 L/ha from 91.30% (29 DA-A) to 91.30% (29 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 92.50% (36 DA-A) to 97.50% (29 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.76% for Bandur 600 SC during the assessment. (Appendix 5 tab. 11).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of BRSNW was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 42.50% (31 DA-A) to 82.50% (56 DA-A), at rate 1.4 L/ha from 77.00% (31 DA-A) to 96.30% (48 DA-A), at rate 2.0 L/ha from 82.80% (41 DA-A) to 97.50% (48 DA-A), at rate 2.5 L/ha from 86.50% (41 DA-A) to 99.80% (48 DA-A) and at rate 3.0 L/ha from 91.00% (41 DA-A) to 100% (48 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of BRSNW was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 66.30% (43 DA-A) to 83.80% (48 DA-A), 1.2 L/ha + 0.2 L/ha from 71.30% (43 DA-A) to 71.30% (43 DA-A), 1.4 L/ha + 0.2 L/ha from 88.80% (43 DA-A) to 88.80% (43 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 95.00% (43 DA-A) to 95.00% (48 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.76% for Bandur 600 SC during the assessment. (Appendix 5 tab. 12).

3.2.3-1.5 The efficacy of AKO 600 SC in control of AMARE

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of AMARE was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 27.50% (14 DA-A) to 47.50% (14 DA-A), at rate 1.4 L/ha from 43.80% (14-21 DA-A) to 52.50% (14 DA-A), at rate 2.0 L/ha from 52.50% (14 DA-A) to 60.00% (21 DA-A), at rate 2.5 L/ha from 55.00% (14 DA-A) to 82.50% (21 DA-A) and at rate 3.0 L/ha from 55.00% (14 DA-A) to 85.00% (14-21 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of AMARE was investigated in 4 trials. The

tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 45.00% (9 DA-A) to 83.80% (12 DA-A), 1.2 L/ha + 0.2 L/ha from 57.50% (7-9 DA-A) to 87.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 62.50% (7 DA-A) to 97.50% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 65.00% (7 DA-A) to 100% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 77.04% for Bandur 600 SC during the assessment. (Appendix 5 tab. 13).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of AMARE was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 26.30% (28 DA-A) to 57.50% (28 DA-A), at rate 1.4 L/ha from 45.00% (35 DA-A) to 68.80% (27 DA-A), at rate 2.0 L/ha from 63.80% (28 DA-A) to 76.30% (27 DA-A), at rate 2.5 L/ha from 72.50% (28 DA-A) to 84.30% (28 DA-A) and at rate 3.0 L/ha from 80.00% (28 DA-A) to 97.50% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of AMARE was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 68.80% (30 DA-A) to 82.50% (31 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (30 DA-A) to 83.80% (31 DA-A), 1.4 L/ha + 0.2 L/ha from 88.80% (21 DA-A) to 96.30% (31 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.30% (23 DA-A) to 100% (31 DA-A).

The efficacy of the tested herbicide was comparable to than the standard product. In the trial efficacy amounted above 95.51% for Bandur 600 SC during the assessment. (Appendix 5 tab. 14).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of AMARE was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 31.30% (67 DA-A) to 78.80% (56 DA-A), at rate 1.4 L/ha from 50.00% (65 DA-A) to 83.80% (56 DA-A), at rate 2.0 L/ha from 67.50% (67 DA-A) to 86.30% (56 DA-A), at rate 2.5 L/ha from 88.80% (58 DA-A) to 91.30% (56-67 DA-A) and at rate 3.0 L/ha from 97.00% (56 DA-A) to 98.80% (67 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of AMARE was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 71.30% (70 DA-A) to 80.00% (45 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (45 DA-A) to 82.50% (70 DA-A), 1.4 L/ha + 0.2 L/ha from 90.00% (54 DA-A) to 92.50% (45 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 95.00% (45 DA-A) to 99.80% (70 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 97.99% for Bandur 600 SC during the assessment. (Appendix 5 tab. 15).

3.2.3-1.6 The efficacy of AKO 600 SC in control of POLCO

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of POLCO was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 17.50% (14 DA-A) to 55.00% (28 DA-A), at rate 1.4 L/ha from 31.30% (14 DA-A) to 72.50% (28 DA-A), at rate 2.0 L/ha from 43.80% (14 DA-A) to 76.30% (28 DA-A), at rate 2.5 L/ha from 48.80% (14 DA-A) to 76.30% (28 DA-A) and at rate 3.0 L/ha from 55.00% (14 DA-A) to 81.30% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLCO was investigated in 4 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (14 DA-A) to 80.00% (28 DA-A), 1.2 L/ha + 0.2 L/ha from 55.00% (10

DA-A) to 83.80% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 66.30% (7 DA-A) to 97.50% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 68.80% (10 DA-A) to 100% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 73.59% for Bandur 600 SC during the assessment. (Appendix 5 tab. 16).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of POLCO was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 22.50% (27 DA-A) to 67.50% (28 DA-A), at rate 1.4 L/ha from 36.30% (27 DA-A) to 72.50% (36 DA-A), at rate 2.0 L/ha from 52.50% (27-28 DA-A) to 78.00% (36 DA-A), at rate 2.5 L/ha from 61.30% (27 DA-A) to 86.30% (28 DA-A) and at rate 3.0 L/ha from 80.00% (27 DA-A) to 92.50% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLCO was investigated in 4 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 56.30% (36 DA-A) to 90.00% (24 DA-A), 1.2 L/ha + 0.2 L/ha from 82.50% (29 DA-A) to 98.50% (21 DA-A), 1.4 L/ha + 0.2 L/ha from 96.30% (29 DA-A) to 100% (21-24 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 75.00% (36 DA-A) to 100% (21-24 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 88.86% for Bandur 600 SC during the assessment. (Appendix 5 tab. 17).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of POLCO was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 17.50% (58 DA-A) to 83.80% (56 DA-A), at rate 1.4 L/ha from 37.50% (58 DA-A) to 82.50% (56 DA-A), at rate 2.0 L/ha from 45.00% (58 DA-A) to 96.30% (56 DA-A), at rate 2.5 L/ha from 60.00% (58 DA-A) to 94.80% (56 DA-A) and at rate 3.0 L/ha from 78.80% (58 DA-A) to 99.80% (56 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLCO was investigated in 4 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 55.00% (48 DA-A) to 91.30% (57 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (43 DA-A) to 98.50% (54 DA-A), 1.4 L/ha + 0.2 L/ha from 93.80% (43 DA-A) to 100% (54-57 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 71.30% (48 DA-A) to 100% (54-57 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 89.76% for Bandur 600 SC during the assessment. (Appendix 5 tab. 18).

3.2.3-1.7 The efficacy of AKO 600 SC in control of STEME

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of STEME was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 32.50% (14 DA-A) to 82.50% (28 DA-A), at rate 1.4 L/ha from 35.00% (14 DA-A) to 92.50% (28 DA-A), at rate 2.0 L/ha from 45.00% (14 DA-A) to 93.80% (28 DA-A), at rate 2.5 L/ha from 55.00% (14 DA-A) to 97.50% (28 DA-A) and at rate 3.0 L/ha from 55.00% (14 DA-A) to 98.80% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 3 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 60.00% (7 DA-A) to 90.00% (12 DA-A), 1.2 L/ha + 0.2 L/ha from 71.30% (7 DA-A) to 92.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 77.50% (10 DA-A) to 97.50% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 81.30% (7 DA-A) to 97.50% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above **85.21%** for Bandur 600 SC during the assessment. (Appendix 5 tab. 19).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of STEME was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 51.30% (27 DA-A) to 85.80% (36 DA-A), at rate 1.4 L/ha from 61.30% (27 DA-A) to 100% (36 DA-A), at rate 2.0 L/ha from 67.50% (28 DA-A) to 100% (36 DA-A), at rate 2.5 L/ha from 67.50% (28 DA-A) to 100% (36 DA-A) and at rate 3.0 L/ha from 77.50% (28 DA-A) to 100% (36 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 4 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 80.00% (31 DA-A) to 100% (36 DA-A), 1.2 L/ha + 0.2 L/ha from 82.50% (31 DA-A) to 92.50% (24 DA-A), 1.4 L/ha + 0.2 L/ha from 92.50% (31 DA-A) to 99.50% (24 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 92.50% (31 DA-A) to 100% (21-36 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above **96.98%** for Bandur 600 SC during the assessment. (Appendix 5 tab. 20).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of STEME was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 53.80% (58 DA-A) to 91.30% (48 DA-A), at rate 1.4 L/ha from 65.00% (56 DA-A) to 100% (48 DA-A), at rate 2.0 L/ha from 71.30% (56 DA-A) to 100% (48 DA-A), at rate 2.5 L/ha from 87.50% (56 DA-A) to 100% (48 DA-A) and at rate 3.0 L/ha from 96.00% (56 DA-A) to 100% (48 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 4 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 73.80% (45 DA-A) to 100% (48 DA-A), 1.2 L/ha + 0.2 L/ha from 75.00% (45 DA-A) to 93.80% (57 DA-A), 1.4 L/ha + 0.2 L/ha from 83.80% (45 DA-A) to 99.50% (57 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 83.80% (45 DA-A) to 100% (48 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above **97.89%** for Bandur 600 SC during the assessment. (Appendix 5 tab. 21).

3.2.3-1.8 The efficacy of AKO 600 SC in control of MATMA

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of MATMA was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 0.00% (14 DA-A) to 80.00% (15 DA-A), at rate 1.4 L/ha from 38.80% (14 DA-A) to 85.00% (15 DA-A), at rate 2.0 L/ha from 46.30% (14 DA-A) to 97.50% (15 DA-A), at rate 2.5 L/ha from 55.00% (14 DA-A) to 100% (15 DA-A) and at rate 3.0 L/ha from 55.00% (14 DA-A) to 100% (15 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of MATMA was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 85.00% (12 DA-A) to 100% (15 DA-A), 1.2 L/ha + 0.2 L/ha from 87.50% (12 DA-A) to 87.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 96.30% (12 DA-A) to 96.30% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 100% (12 DA-A) to 100% (15 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above **86.62%** for Bandur 600 SC during the assessment. (Appendix 5 tab. 22).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of MATMA was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 0.00% (35 DA-A) to 81.30% (29 DA-A), at rate 1.4 L/ha from 42.50% (35 DA-A) to 90.00% (29 DA-A), at rate 2.0 L/ha from 65.00% (35 DA-A) to 97.50% (29 DA-A), at rate 2.5 L/ha from 81.30% (35 DA-A) to 100% (29 DA-A) and at rate 3.0 L/ha from 88.80% (28 DA-A) to 100% (29 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of MATMA was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 82.50% (29 DA-A) to 100% (29 DA-A), 1.2 L/ha + 0.2 L/ha from 86.30% (29 DA-A) to 86.30% (29 DA-A), 1.4 L/ha + 0.2 L/ha from 93.80% (29 DA-A) to 93.80% (29 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.50% (29 DA-A) to 100% (29 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 96.22% for Bandur 600 SC during the assessment. (Appendix 5 tab. 23).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of MATMA was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 0.00% (67 DA-A) to 85.00% (37 DA-A), at rate 1.4 L/ha from 35.00% (67 DA-A) to 93.80% (37 DA-A), at rate 2.0 L/ha from 65.00% (65 DA-A) to 100% (37 DA-A), at rate 2.5 L/ha from 81.30% (65 DA-A) to 100% (37 DA-A) and at rate 3.0 L/ha from 86.30% (65 DA-A) to 100% (37 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of MATMA was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 81.30% (43 DA-A) to 100% (37 DA-A), 1.2 L/ha + 0.2 L/ha from 83.80% (43 DA-A) to 83.80% (43 DA-A), 1.4 L/ha + 0.2 L/ha from 91.30% (43 DA-A) to 91.30% (43 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 95.00% (43 DA-A) to 100% (37 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 96.72% for Bandur 600 SC during the assessment. (Appendix 5 tab. 24).

3.2.3-1.9 The efficacy of AKO 600 SC in control of GALAP

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of GALAP was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 42.50% (14 DA-A) to 90.00% (28 DA-A), at rate 1.4 L/ha from 57.50% (14 DA-A) to 96.30% (28 DA-A), at rate 2.0 L/ha from 82.50% (14 DA-A) to 93.80% (28 DA-A), at rate 2.5 L/ha from 57.50% (14 DA-A) to 98.80% (28 DA-A) and at rate 3.0 L/ha from 60.00% (14 DA-A) to 100% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of GALAP was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 71.30% (7 DA-A) to 92.50% (28 DA-A), 1.2 L/ha + 0.2 L/ha from 78.80% (7 DA-A) to 78.80% (7 DA-A), 1.4 L/ha + 0.2 L/ha from 85.00% (7 DA-A) to 85.00% (7 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 86.30% (7 DA-A) to 97.80% (28 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 84.50% for Bandur 600 SC during the assessment. (Appendix 5 tab. 25).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of GALAP was investigated in 2 trials. The tested

product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 57.50% (28 DA-A) to 86.30% (36 DA-A), at rate 1.4 L/ha from 62.50% (28 DA-A) to 93.80% (36 DA-A), at rate 2.0 L/ha from 70.00% (28 DA-A) to 95.00% (36 DA-A), at rate 2.5 L/ha from 78.80% (28 DA-A) to 99.30% (36 DA-A) and at rate 3.0 L/ha from 85.00% (28 DA-A) to 100% (36 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of GALAP was investigated in 2 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 91.00% (21 DA-A) to 93.80% (36 DA-A), 1.2 L/ha + 0.2 L/ha from 98.50% (21 DA-A) to 98.50% (21 DA-A), 1.4 L/ha + 0.2 L/ha from 100% (21 DA-A) to 100% (21 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.80% (36 DA-A) to 100% (21 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.43% for Bandur 600 SC during the assessment. (Appendix 5 tab. 26).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of GALAP was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 51.40% (56 DA-A) to 82.78% (48 DA-A), at rate 1.4 L/ha from 53.06% (56 DA-A) to 87.30% (48 DA-A), at rate 2.0 L/ha from 60.60% (56 DA-A) to 90.85% (48 DA-A), at rate 2.5 L/ha from 60.60% (56 DA-A) to 90.85% (48 DA-A) and at rate 3.0 L/ha from 60.60% (56 DA-A) to 90.85% (48 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of GALAP was investigated in 1 trial. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 92.30% (54 DA-A) to 93.80% (48 DA-A), 1.2 L/ha + 0.2 L/ha from 98.50% (54 DA-A) to 98.50% (54 DA-A), 1.4 L/ha + 0.2 L/ha from 100% (54 DA-A) to 100% (54 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 96.30% (48 DA-A) to 100% (54 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 98.77% for Bandur 600 SC during the assessment. (Appendix 5 tab. 27).

3.2.3-1.10 The efficacy of AKO 600 SC in control of POLPE

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of POLPE was investigated in 1 trial. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness amounted at rate 0.8 L/ha 70.00% (15 DA-A), at rate 1.4 L/ha 85.00% (15 DA-A), at rate 2.0 L/ha 85.00% (15 DA-A), at rate 2.5 L/ha 87.50% (15 DA-A) and at rate 3.0 L/ha 85.00% (15 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLPE was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 76.30% (12 DA-A) to 82.50% (15 DA-A), 1.2 L/ha + 0.2 L/ha from 83.80% (12 DA-A) to 83.80% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 95.00% (12 DA-A) to 95.00% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 93.80% (15 DA-A) to 98.80% (12 DA-A).

The efficacy of the tested herbicide was higher than the standard product. In the trial efficacy amounted above 90.70% for Bandur 600 SC during the assessment. (Appendix 5 tab. 28).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of POLPE was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 38.80% (31 DA-A) to 77.50% (29 DA-A), at rate 1.4 L/ha from 71.30% (31 DA-A) to 80.00% (29 DA-A), at rate 2.0 L/ha from 90.00% (29 DA-A) to 95.00% (31 DA-A), at rate 2.5 L/ha from 90.00% (29 DA-A) to 97.50% (31 DA-A) and at rate

3.0 L/ha from 95.00% (29 DA-A) to 100% (31 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLPE was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 73.80% (29 DA-A) to 92.50% (29 DA-A), 1.2 L/ha + 0.2 L/ha from 81.30% (29 DA-A) to 81.30% (29 DA-A), 1.4 L/ha + 0.2 L/ha from 92.50% (29 DA-A) to 92.50% (29 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 95.00% (29 DA-A) to 96.30% (29 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.83% for Bandur 600 SC during the assessment. (Appendix 5 tab. 29).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of POLPE was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 38.80% (31 DA-A) to 80.00% (37 DA-A), at rate 1.4 L/ha from 71.30% (31 DA-A) to 82.50% (37 DA-A), at rate 2.0 L/ha from 90.00% (37 DA-A) to 95.00% (31 DA-A), at rate 2.5 L/ha from 90.00% (37 DA-A) to 97.50% (31 DA-A) and at rate 3.0 L/ha from 95.00% (37 DA-A) to 100% (31 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POLPE was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 71.30% (43 DA-A) to 92.50% (37 DA-A), 1.2 L/ha + 0.2 L/ha from 78.80% (43 DA-A) to 78.80% (43 DA-A), 1.4 L/ha + 0.2 L/ha from 88.80% (43 DA-A) to 88.80% (43 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 93.80% (43 DA-A) to 95.00% (37 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 95.00% for Bandur 600 SC during the assessment. (Appendix 5 tab. 30).

3.2.3-1.11 The efficacy of AKO 600 SC in control of THLAR

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of THLAR was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the low level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 55.00% (14 DA-A) to 67.50 (9 DA-A), at rate 1.4 L/ha from 55.00% (14 DA-A) to 77.50 (9 DA-A), at rate 2.0 L/ha from 55.00% (14 DA-A) to 82.50 (9 DA-A), at rate 2.5 L/ha from 57.50% (14 DA-A) to 86.30 (9 DA-A), and at rate 3.0 L/ha from 62.50% (14 DA-A) to 88.80 (16 DA-A),.

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 55.00% (9 DA-A) to 97.50% (12 DA-A), 1.2 L/ha + 0.2 L/ha from 58.80% (9 DA-A) to 98.80% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 70.00% (16 DA-A) to 100% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 75.00% (9 DA-A) to 100% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 83.30% for Bandur 600 SC during the assessment. (Appendix 5 tab. 31).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of THLAR was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 72.50% (28 DA-A) to 86.30% (30 DA-A), at rate 1.4 L/ha from 80.00% (28 DA-A) to 94.80% (30 DA-A), at rate 2.0 L/ha from 82.50% (28 DA-A) to 99.50% (30 DA-A), at rate 2.5 L/ha from 85.00% (28 DA-A) to 100% (30 DA-A) and at rate 3.0 L/ha from 87.50% (28 DA-A) to 100% (21-30 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 4 trials. The

tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 68.80% (30 DA-A) to 95.00% (31 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (30 DA-A) to 97.50% (31 DA-A), 1.4 L/ha + 0.2 L/ha from 90.00% (30 DA-A) to 99.90% (23 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 98.80% (31 DA-A) to 100% (21-23 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 98.40% for Bandur 600 SC during the assessment. (Appendix 5 tab. 32).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of THLAR was investigated in 4 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 80.00% (57 DA-A) to 87.50% (72 DA-A), at rate 1.4 L/ha from 85.00% (57 DA-A) to 94.50% (72 DA-A), at rate 2.0 L/ha from 92.50% (57 DA-A) to 99.50% (72 DA-A), at rate 2.5 L/ha from 97.30% (57 DA-A) to 100% (72 DA-A) and at rate 3.0 L/ha from 98.50% (56 DA-A) to 100% (54-72 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 75.00% (54 DA-A) to 91.30% (45 DA-A), 1.2 L/ha + 0.2 L/ha from 83.80% (54 DA-A) to 95.80% (70 DA-A), 1.4 L/ha + 0.2 L/ha from 97.50% (45 DA-A) to 100% (54-70 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.50% (45 DA-A) to 100% (54-70 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 99.30% for Bandur 600 SC during the assessment. (Appendix 5 tab. 33).

3.2.3-1.12 The efficacy of AKO 600 SC in control of GASPA

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of GASPA was investigated in 3 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 50.00% (14 DA-A) to 57.50% (21 DA-A), at rate 1.4 L/ha from 60.00% (14 DA-A) to 73.80% (21 DA-A), at rate 2.0 L/ha from 63.80% (14 DA-A) to 88.80% (21 DA-A), at rate 2.5 L/ha from 82.50% (14 DA-A) to 91.30% (21 DA-A) and at rate 3.0 L/ha from 90.00% (14 DA-A) to 93.80% (21 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (7 DA-A) to 80.00% (12 DA-A), 1.2 L/ha + 0.2 L/ha from 70.00% (7 DA-A) to 82.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 77.50% (7 DA-A) to 96.30% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 81.30% (7 DA-A) to 98.80% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 92.04% for Bandur 600 SC during the assessment. (Appendix 5 tab. 34).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of GASPA was investigated in 3 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 57.50% (28 DA-A) to 76.30% (31 DA-A), at rate 1.4 L/ha from 73.80% (27 DA-A) to 88.80% (31 DA-A), at rate 2.0 L/ha from 81.30% (27 DA-A) to 100% (31 DA-A), at rate 2.5 L/ha from 87.50% (27 DA-A) to 100% (31 DA-A) and at rate 3.0 L/ha from 98.80% (27 DA-A) to 100% (28-31 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 77.50% (31 DA-A) to 86.30% (21 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (31

DA-A) to 91.30% (21 DA-A), 1.4 L/ha + 0.2 L/ha from 92.50% (31 DA-A) to 98.50% (21 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.50% (31 DA-A) to 100% (21 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 99.76% for Bandur 600 SC during the assessment. (Appendix 5 tab. 35).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of GASPA was investigated in 3 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 60.00% (56 DA-A) to 76.30% (31 DA-A), at rate 1.4 L/ha from 76.30% (58 DA-A) to 88.80% (31 DA-A), at rate 2.0 L/ha from 83.80% (56 DA-A) to 100% (31 DA-A), at rate 2.5 L/ha from 92.50% (58 DA-A) to 100% (14 DA-A) and at rate 3.0 L/ha 100% (31-58 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 75.00% (45 DA-A) to 87.50% (54 DA-A), 1.2 L/ha + 0.2 L/ha from 77.50% (45 DA-A) to 91.30% (54 DA-A), 1.4 L/ha + 0.2 L/ha from 88.80% (45 DA-A) to 99.50% (54 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 93.80% (45 DA-A) to 100% (54 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 98.50% for Bandur 600 SC during the assessment. (Appendix 5 tab. 36).

3.2.3-1.13 The efficacy of AKO 600 SC in control of GAETE

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of GAETE was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 40.00% (14 DA-A) to 43.80% (14 DA-A), at rate 1.4 L/ha from 50.00% (14 DA-A) to 51.30% (14 DA-A), at rate 2.0 L/ha from 57.50% (14 DA-A) to 60.00% (14 DA-A), at rate 2.5 L/ha from 80.00% (14 DA-A) to 81.30% (14 DA-A) and at rate 3.0 L/ha from 88.80% (14 DA-A) to 88.80% (14 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (9 DA-A) to 62.50% (16 DA-A), 1.2 L/ha + 0.2 L/ha from 67.50% (9 DA-A) to 70.00% (16 DA-A), 1.4 L/ha + 0.2 L/ha from 75.00% (9 DA-A) to 77.50% (16 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 77.50% (9 DA-A) to 80.00% (16 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 84.08% for Bandur 600 SC during the assessment. (Appendix 5 tab. 37).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of GAETE was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium to high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 52.50% (28 DA-A) to 53.80% (27 DA-A), at rate 1.4 L/ha from 62.50% (27 DA-A) to 66.30% (28 DA-A), at rate 2.0 L/ha from 77.50% (27 DA-A) to 77.50% (27 DA-A), at rate 2.5 L/ha from 86.30% (27 DA-A) to 87.50% (28 DA-A) and at rate 3.0 L/ha from 97.50% (27 DA-A) to 98.80% (28 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 85.00% (30 DA-A) to 90.00% (23 DA-A), 1.2 L/ha + 0.2 L/ha from 91.30% (23 DA-A) to 96.00% (30 DA-A), 1.4 L/ha + 0.2 L/ha from 94.80% (23 DA-A) to 100% (30 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 100% (23 DA-A) to 100% (30 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 99.08% for Bandur 600 SC during the assessment. (Appendix 5 tab. 38).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of GAETE was investigated in 2 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the medium level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 56.90% (58 DA-A) to 57.50% (56 DA-A), at rate 1.4 L/ha from 57.50% (58 DA-A) to 71.30% (56 DA-A), at rate 2.0 L/ha from 78.80% (58 DA-A) to 80.00% (56 DA-A), at rate 2.5 L/ha from 87.50% (58 DA-A) to 90.00% (56 DA-A) and at rate 3.0 L/ha from 98.80% (58 DA-A) to 100% (56 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of STEME was investigated in 2 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 87.50% (70 DA-A) to 90.00% (57 DA-A), 1.2 L/ha + 0.2 L/ha from 91.30% (57 DA-A) to 96.00% (70 DA-A), 1.4 L/ha + 0.2 L/ha from 94.80% (57 DA-A) to 100% (70 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 100% (57 DA-A) to 100% (70 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 100% for Bandur 600 SC during the assessment. (Appendix 5 tab. 39).

3.2.3-1.14 The efficacy of AKO 600 SC in control of POAAN

Efficacy assessment at weeds stage BBCH 12-14

The efficiency of AKO 600 SC used solo in control of POAAN was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the low level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 25.00% (21 DA-A) to 66.30% (7 DA-A), at rate 1.4 L/ha from 43.80% (21 DA-A) to 73.80% (7 DA-A), at rate 2.0 L/ha from 61.30% (21 DA-A) to 85.00% (16 DA-A), at rate 2.5 L/ha from 76.30% (21 DA-A) to 87.50% (16 DA-A) and at rate 3.0 L/ha from 83.80% (9 DA-A) to 91.30% (7 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POAAN was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 57.50% (9 DA-A) to 73.80% (12 DA-A), 1.2 L/ha + 0.2 L/ha from 65.00% (9 DA-A) to 82.50% (12 DA-A), 1.4 L/ha + 0.2 L/ha from 65.00% (9 DA-A) to 93.80% (12 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 65.00% (9 DA-A) to 98.80% (12 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 84.50% for Bandur 600 SC during the assessment. (Appendix 5 tab. 40).

Efficacy assessment up 2 weeks after first efficacy assessment

The efficiency of AKO 600 SC used solo in control of POAAN was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 26.30% (35 DA-A) to 85.00% (21 DA-A), at rate 1.4 L/ha from 46.30% (35 DA-A) to 88.80% (30 DA-A), at rate 2.0 L/ha from 65.00% (35 DA-A) to 93.50% (21 DA-A), at rate 2.5 L/ha from 81.30% (35 DA-A) to 100% (30 DA-A) and at rate 3.0 L/ha from 94.30% (35 DA-A) to 100% (21-30 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POAAN was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 71.30% (31 DA-A) to 87.50% (21 DA-A), 1.2 L/ha + 0.2 L/ha from 80.00% (31 DA-A) to 91.30% (23 DA-A), 1.4 L/ha + 0.2 L/ha from 91.30% (31 DA-A) to 99.00% (23 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 97.50% (31 DA-A) to 100% (21-30 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 98.30% for Bandur 600 SC during the assessment. (Appendix 5 tab. 41).

Efficacy assessment at BBCH 37-39

The efficiency of AKO 600 SC used solo in control of POAAN was investigated in 5 trials. The tested product at the following rates of 0.8, 1.4, 2.0, 2.5 and 3.0 L/ha controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha from 30.00% (67 DA-A) to 83.80% (72 DA-A), at rate 1.4 L/ha from 51.30% (67 DA-A) to 91.30% (54 DA-A), at rate 2.0 L/ha from 71.30% (67 DA-A) to 96.00% (72 DA-A), at rate 2.5 L/ha from 85.00% (65 DA-A) to 100% (72 DA-A) and at rate 3.0 L/ha from 93.00% (67 DA-A) to 100% (54-72 DA-A).

The efficiency of AKO 600 SC used in tank mix in control of POAAN was investigated in 4 trials. The tested product at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) controlled this species of weed at the high level of efficacy. The effectiveness fluctuated at rate 0.8 L/ha + 0.2 L/ha from 68.80% (45 DA-A) to 87.50% (54 DA-A), 1.2 L/ha + 0.2 L/ha from 77.50% (45 DA-A) to 91.30% (57 DA-A), 1.4 L/ha + 0.2 L/ha from 88.80% (45 DA-A) to 99.50% (54 DA-A), and at rate 2.0 L/ha + 0.2 L/ha from 93.80% (45 DA-A) to 100% (54-70 DA-A).

The efficacy of the tested herbicide was comparable to the standard product. In the trial efficacy amounted above 97.90% for Bandur 600 SC during the assessment. (Appendix 5 tab. 42).

Table 3.2-11: Efficacy of product at BBCH 37-39

Target	Grouping*	Number of trials	Infestation of the untreated control (unit)			% control with AKO 600 SC																								% control with Standard products			No of trials where product is >, <, = compared to stand-ard(s)**			
						AKO 600 SC 0.8 L/ha			AKO 600 SC 1.4 L/ha			AKO 600 SC 2.0 L/ha			AKO 600 SC 2.5 L/ha			AKO 600 SC 3.0 L/ha			AKO 600 SC 0.8 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 1.2 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 1.4 L/ha + 0.2 L/ha Boa Pro 480 EC			AKO 600 SC 2.0 L/ha + 0.2 L/ha Boa Pro 480 EC				Bandur 600 SC 3.0 L/ha		
			Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max		Mean	Min & Max			Mean	Min & Max	
Weeds*	CHEAL	7	7.8	5.0	14.8	84.02	75.00	92.50	88.34	80.30	98.80	95.74	91.30	99.00	97.66	93.80	100	99.76	99.00	100	85.65	68.80	97.50	80.00	75.00	85.00	90.55	86.30	94.80	97.03	88.80	100	96.36	87.50	100	
	VIOAR	9	7.8	5.0	12.3	68.63	31.30	90.00	77.91	52.50	93.80	85.81	71.30	97.50	94.13	81.30	100	98.37	91.00	100	84.40	63.80	96.30	80.55	66.30	94.80	83.05	66.30	99.80	93.75	77.50	100	96.93	87.50	100	
	ECHCG	7	8.5	5.0	17.0	79.90	73.80	82.50	85.65	77.50	90.00	95.03	88.80	100	98.95	97.50	100	100	100	100	88.45	72.50	100	88.97	76.30	95.80	93.63	81.30	99.80	95.95	83.80	100	97.57	85.00	100	
	BRSNW	5	6.4	5.0	10.3	69.63	42.50	82.50	85.40	77.00	96.30	91.95	82.80	97.50	95.03	86.50	99.80	97.75	91.00	100	75.05	66.30	83.80	71.30	71.30	71.30	88.80	88.80	88.80	95.00	95.00	95.00	95.76	83.80	100	
	AMARE	8	6.9	5.0	13.3	50.35	31.30	78.80	64.73	50.00	83.80	76.28	67.50	86.30	90.68	88.80	91.30	97.95	97.00	98.80	75.95	71.30	80.00	81.28	80.00	82.50	91.28	90.00	92.50	97.53	95.00	99.80	97.99	93.80	100	
	POLCO	8	6.4	5.0	10.3	42.76	17.50	83.80	55.52	37.50	82.50	69.56	45.00	96.30	77.24	60.00	94.80	85.74	78.80	99.80	78.15	55.00	91.30	91.50	80.00	98.50	97.87	93.80	100	91.58	71.30	100	89.76	81.30	100	
	STEME	8	7.6	5.0	17.3	70.78	53.80	91.30	80.10	65.00	100	85.02	71.30	100	93.26	87.50	100	99.20	96.00	100	85.95	73.80	100	86.27	75.00	93.80	93.03	83.80	99.50	95.95	83.80	100	97.89	86.30	100	
	MATMA	5	6.1	5.3	7.8	44.70	0.00	85.00	64.70	35.00	93.80	80.65	65.00	100	90.65	81.30	100	93.33	86.30	100	90.65	81.30	100	83.80	83.80	83.80	91.30	91.30	91.30	97.50	95.00	100	96.72	92.50	100	
	GALAP	3	6.7	5.0	9.0	80.00	72.50	87.50	87.50	80.00	95.00	90.65	85.00	96.30	95.65	92.50	98.80	98.00	96.00	100	93.05	92.30	93.80	98.50	98.50	98.50	100	100	100	98.15	96.30	100	98.77	96.30	100	
	POLPE	3	7.0	5.0	9.0	59.40	38.80	80.00	76.90	71.30	82.50	92.50	90.00	95.00	93.75	90.00	97.50	97.50	95.00	100	81.90	71.30	92.50	78.80	78.80	78.80	88.80	88.80	88.80	94.40	93.80	95.00	95.00	90.00	100	
	THLAR	8	7.5	5.5	11.3	83.8	80.0	87.5	90.8	85.0	94.5	95.4	92.5	99.5	99.2	97.3	100.0	99.6	98.5	100.0	84.7	75.0	91.3	92.1	83.8	95.8	96.4	92.5	99.8	99.4	97.5	100.0	99.3	96.3	100.0	
	GASPA	5	8.0	5.0	15.5	66.27	60.00	76.30	81.70	76.30	88.80	89.60	83.80	100	95.83	92.50	100	100	100	100	81.25	75.00	87.50	84.40	77.50	91.30	94.15	88.80	99.50	96.90	93.80	100	98.50	92.50	100	
	GAETE	4	7.4	5.3	8.8	56.90	56.30	57.50	64.40	57.50	71.30	79.40	78.80	80.00	88.75	87.50	90.00	99.40	98.80	100	88.75	87.50	90.00	93.65	91.30	96.00	97.40	94.80	100	100	100	100	100	100	100	
	POAAN	9	7.7	5.8	10.8	63.8	30.0	83.8	75.5	51.3	91.3	84.7	71.3	96.0	94.9	85.0	100.0	98.4	93.0	100.0	81.3	68.8	87.5	87.5	77.5	91.3	96.4	88.8	99.5	98.3	93.8	100.0	97.9	91.3	100.0	

* A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:
- to add lines or columns, - to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”). ** Optional

Minor use

Not applicable

Yield (and relevant quality indicators), from efficacy trials (in the presence of challenging pest populations)

Not applicable

Summary and conclusion

The formulation of AKO 600 SC is suspension concentrate (SC) and it comprises active substance aclon-ifen 600 g/L. The Applicant submitted 21 reports in total showing the results in research into product efficacy carried out in 2023 and 2024 in potato.

The obtained data in performed trials show that AKO 600SC provides benefits against the most important weed species in potato as shown in the table below.

The following tables describes the effectiveness of weeds control:

Polish efficacy scale

S (Susceptible)	> 85%
MS (Moderately Susceptible)	70 – 85%
MT (Moderately Tolerant)	60 – 70%
T (Tolerant)	< 60%

SANCO scale

Highly Susceptible (HS)	95–100%
S (Susceptible)	85–94.9%
MS (Moderately Susceptible)	70–84.9%
MT (Moderately Tolerant)	50–69.9%
T (Tolerant)	< 50%

Product code (L, kg/ha)	EPPO code	Scientific name	Average	Efficacy	
				PL	SANCO
AKO 600 SC 0.8 L/ha	CHEAL	<i>Chenopodium album</i>	84.02	MS	MS
	VIOAR	<i>Viola arvensis</i>	68.63	MT	MT
	ECHCG	<i>Echinochloa crus-galli</i>	79.90	MS	MS
	BRSNW	<i>Brassica napus</i> (self-sown plant)	69.63	MT	MT
	AMARE	<i>Amaranthus retroflexus</i>	50.35	T	MT
	POLCO	<i>Polygonum convolvulus</i>	42.76	T	T
	STEME	<i>Stellaria media</i>	70.78	MS	MS
	MATMA	<i>Tripleurospermum maritimum</i>	44.70	T	T
	GALAP	<i>Galium aparine</i>	80.00	MS	MS
	POLPE	<i>Polygonum persicaria</i>	59.40	T	MT
	THLAR	<i>Thlaspi arvense</i>	83.75	MS	MS
	GASPA	<i>Galinsoga parviflora</i>	66.27	MT	MT

	GAETE	<i>Galeopsis tetrahit</i>	56.90	T	MT
	POAAN	<i>Poa annua</i>	63.78	MT	MT
AKO 600 SC 1.4 L/ha	CHEAL	<i>Chenopodium album</i>	88.34	S	S
	VIOAR	<i>Viola arvensis</i>	77.91	MS	MS
	ECHCG	<i>Echinochloa crus-galli</i>	85.65	S	S
	BRSNW	<i>Brassica napus</i> (self-sown plant)	85.40	S	S
	AMARE	<i>Amaranthus retroflexus</i>	64.73	MT	MT
	POLCO	<i>Polygonum convolvulus</i>	55.52	T	MT
	STEME	<i>Stellaria media</i>	80.10	MS	MS
	MATMA	<i>Tripleurospermum maritimum</i>	64.70	MT	MT
	GALAP	<i>Galium aparine</i>	87.50	S	S
	POLPE	<i>Polygonum persicaria</i>	76.90	MS	MS
	THLAR	<i>Thlaspi arvense</i>	90.83	S	S
	GASPA	<i>Galinsoga parviflora</i>	81.70	MS	MS
	GAETE	<i>Galeopsis tetrahit</i>	64.40	MT	MT
	POAAN	<i>Poa annua</i>	75.52	MS	MS
AKO 600 SC 2.0 L/ha	CHEAL	<i>Chenopodium album</i>	95.74	S	HS
	VIOAR	<i>Viola arvensis</i>	85.81	S	S
	ECHCG	<i>Echinochloa crus-galli</i>	95.03	S	HS
	BRSNW	<i>Brassica napus</i> (self-sown plant)	91.95	S	S
	AMARE	<i>Amaranthus retroflexus</i>	76.28	MS	MS
	POLCO	<i>Polygonum convolvulus</i>	69.56	MT	MT
	STEME	<i>Stellaria media</i>	85.02	S	S
	MATMA	<i>Tripleurospermum maritimum</i>	80.65	MS	MS
	GALAP	<i>Galium aparine</i>	90.65	S	S
	POLPE	<i>Polygonum persicaria</i>	92.50	S	S
	THLAR	<i>Thlaspi arvense</i>	95.40	S	HS
	GASPA	<i>Galinsoga parviflora</i>	89.60	S	S
	GAETE	<i>Galeopsis tetrahit</i>	79.40	MS	MS
	POAAN	<i>Poa annua</i>	84.72	MS	MS
AKO 600 SC 2.5 L/ha	CHEAL	<i>Chenopodium album</i>	97.66	S	HS
	VIOAR	<i>Viola arvensis</i>	94.13	S	S
	ECHCG	<i>Echinochloa crus-galli</i>	98.95	S	HS
	BRSNW	<i>Brassica napus</i> (self-sown plant)	95.03	S	HS
	AMARE	<i>Amaranthus retroflexus</i>	90.68	S	S
	POLCO	<i>Polygonum convolvulus</i>	77.24	MS	MS
	STEME	<i>Stellaria media</i>	93.26	S	S
	MATMA	<i>Tripleurospermum maritimum</i>	90.65	S	S
	GALAP	<i>Galium aparine</i>	95.65	S	HS
	POLPE	<i>Polygonum persicaria</i>	93.75	S	S
	THLAR	<i>Thlaspi arvense</i>	99.15	S	HS
	GASPA	<i>Galinsoga parviflora</i>	95.83	S	HS

	GAETE	<i>Galeopsis tetrahit</i>	88.75	S	S
	POAAN	<i>Poa annua</i>	94.88	S	S
AKO 600 SC 3.0 L/ha	CHEAL	<i>Chenopodium album</i>	99.76	S	HS
	VIOAR	<i>Viola arvensis</i>	98.37	S	HS
	ECHCG	<i>Echinochloa crus-galli</i>	100.00	S	HS
	BRSNW	<i>Brassica napus</i> (self-sown plant)	97.75	S	HS
	AMARE	<i>Amaranthus retroflexus</i>	97.95	S	HS
	POLCO	<i>Polygonum convolvulus</i>	85.74	S	S
	STEME	<i>Stellaria media</i>	99.20	S	HS
	MATMA	<i>Tripleurospermum maritimum</i>	93.33	S	S
	GALAP	<i>Galium aparine</i>	98.00	S	HS
	POLPE	<i>Polygonum persicaria</i>	97.50	S	HS
	THLAR	<i>Thlaspi arvense</i>	99.63	S	HS
	GASPA	<i>Galinsoga parviflora</i>	100.00	S	HS
	GAETE	<i>Galeopsis tetrahit</i>	99.40	S	HS
	POAAN	<i>Poa annua</i>	98.36	S	HS
AKO 600 SC 0.8 L/ha + Boa Pro 480 EC 0.2 L/ha	CHEAL	<i>Chenopodium album</i>	85.65	S	S
	VIOAR	<i>Viola arvensis</i>	84.40	MS	MS
	ECHCG	<i>Echinochloa crus-galli</i>	88.45	S	S
	BRSNW	<i>Brassica napus</i> (self-sown plant)	75.05	MS	MS
	AMARE	<i>Amaranthus retroflexus</i>	75.95	MS	MS
	POLCO	<i>Polygonum convolvulus</i>	78.15	MS	MS
	STEME	<i>Stellaria media</i>	85.95	S	S
	MATMA	<i>Tripleurospermum maritimum</i>	90.65	S	S
	GALAP	<i>Galium aparine</i>	93.05	S	S
	POLPE	<i>Polygonum persicaria</i>	81.90	MS	MS
	THLAR	<i>Thlaspi arvense</i>	84.73	MS	MS
	GASPA	<i>Galinsoga parviflora</i>	81.25	MS	MS
	GAETE	<i>Galeopsis tetrahit</i>	88.75	S	S
	POAAN	<i>Poa annua</i>	81.28	MS	MS
AKO 600 SC 1.2 L/ha + Boa Pro 480 EC 0.2 L/ha	CHEAL	<i>Chenopodium album</i>	80.00	MS	MS
	VIOAR	<i>Viola arvensis</i>	80.55	MS	MS
	ECHCG	<i>Echinochloa crus-galli</i>	88.97	S	S
	BRSNW	<i>Brassica napus</i> (self-sown plant)	71.30	MS	MS
	AMARE	<i>Amaranthus retroflexus</i>	81.28	MS	MS
	POLCO	<i>Polygonum convolvulus</i>	91.50	S	S
	STEME	<i>Stellaria media</i>	86.27	S	S
	MATMA	<i>Tripleurospermum maritimum</i>	83.80	MS	MS
	GALAP	<i>Galium aparine</i>	98.50	S	HS
	POLPE	<i>Polygonum persicaria</i>	78.80	MS	MS
	THLAR	<i>Thlaspi arvense</i>	92.05	S	S
	GASPA	<i>Galinsoga parviflora</i>	84.40	MS	MS
	GAETE	<i>Galeopsis tetrahit</i>	93.65	S	S

	POAAN	Poa annua	87.53	S	S
AKO 600 SC 1.4 L/ha + Boa Pro 480 EC 0.2 L/ha	CHEAL	Chenopodium album	90.55	S	S
	VIOAR	Viola arvensis	83.05	MS	MS
	ECHCG	Echinochloa crus-galli	93.63	S	S
	BRSNW	Brassica napus (self-sown plant)	88.80	S	S
	AMARE	Amaranthus retroflexus	91.28	S	S
	POLCO	Polygonum convolvulus	97.87	S	HS
	STEME	Stellaria media	93.03	S	S
	MATMA	Tripleurospermum maritimum	91.30	S	S
	GALAP	Galium aparine	100.00	S	HS
	POLPE	Polygonum persicaria	88.80	S	S
	THLAR	Thlaspi arvense	96.40	S	HS
	GASPA	Galinsoga parviflora	94.15	S	S
	GAETE	Galeopsis tetrahit	97.40	S	HS
	POAAN	Poa annua	96.40	S	HS
AKO 600 SC 2.0 L/ha + Boa Pro 480 EC 0.2 L/ha	CHEAL	Chenopodium album	97.03	S	HS
	VIOAR	Viola arvensis	93.75	S	S
	ECHCG	Echinochloa crus-galli	95.95	S	HS
	BRSNW	Brassica napus (self-sown plant)	95.00	S	HS
	AMARE	Amaranthus retroflexus	97.53	S	HS
	POLCO	Polygonum convolvulus	91.58	S	S
	STEME	Stellaria media	95.95	S	HS
	MATMA	Tripleurospermum maritimum	97.50	S	HS
	GALAP	Galium aparine	98.15	S	HS
	POLPE	Polygonum persicaria	94.40	S	S
	THLAR	Thlaspi arvense	99.38	S	HS
	GASPA	Galinsoga parviflora	96.90	S	HS
	GAETE	Galeopsis tetrahit	100.00	S	HS
	POAAN	Poa annua	98.33	S	HS
Bandur 600 SC 3.0 L/ha	CHEAL	Chenopodium album	96.36	S	HS
	VIOAR	Viola arvensis	96.93	S	HS
	ECHCG	Echinochloa crus-galli	97.57	S	HS
	BRSNW	Brassica napus (self-sown plant)	95.76	S	HS
	AMARE	Amaranthus retroflexus	97.99	S	HS
	POLCO	Polygonum convolvulus	89.76	S	S
	STEME	Stellaria media	97.89	S	HS
	MATMA	Tripleurospermum maritimum	96.72	S	HS
	GALAP	Galium aparine	98.77	S	HS
	POLPE	Polygonum persicaria	95.00	S	HS
	THLAR	Thlaspi arvense	99.33	S	HS
	GASPA	Galinsoga parviflora	98.50	S	HS
	GAETE	Galeopsis tetrahit	100.00	S	HS
	POAAN	Poa annua	97.93	S	HS

According to the above, the plant protection product AKO 600 SC can be approved to the market and use in Poland according to proposed range of use – GAP

Based on submitted data the following regulation on the label is proposed: the dose of 2.0 L/ha of AKO 600 SC and 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC provided the optimum overall control and should be considered as effective against these major weed species in potato, for which activity of product is claimed.

In the solo application, to increase the efficacy of the product against certain species, i.e. AMARE, POLCO, MATMA, GAETE and POAAN, a higher dose – 3.0 L/ha – should be used.

In the tank mix application, to increase the efficacy of the product against certain species, i.e. VIOAR, BRSNW, AMARE, POLCO, POLPE, THLAR, GASPA and POAAN, a higher dose – 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC – should be used.

Due to the allowable extrapolation of the dose by 5%, the Applicant requests registration of a dose of 1.95 L/ha on the basis of the effectiveness of a dose of 2.0 L/ha (this represents a difference of <5%).

Recommended dose at:

- in potato at spring applied once per season preemergence BBCH 01-08:
 - solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species
 - in tank mix at the following rates of 0.8-2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) which are corresponding to 0.48-1.2 kg a.s./ha of aclonifen and per application for the control of most important weed species

Recommended volume of water 200-300 L/ha

Recommended medium droplet spraying

dRR point 3.2.3.1	Efficacy tests						
ZRMS conclusion: <u>Control of weeds in the NE EPPO climate zone (Poland)</u> Due to the indicated risk in the ecotoxicology section for doses higher than 2,0 l/ha, it was necessary to modify the dose also in the efficacy section to 2,0 l/ha. Finally, the dossier was evaluated with 2,0 l/ha of AKO 600 SC (for product solo and for mixture the product with Boa Pro 480 EC). Efficacy trials were carried out by organizations that are officially recognized as competent to carry out efficacy testing in accordance with Regulation (EC) 284/2013 by the authorities in the relevant countries. All trials have been conducted according to GEP. The efficacy trials were designed, conducted and reported according to the following EPPO guidelines: 1. PP 1/226 Number of efficacy trials, 2. PP 1/181 Conduct and reporting of efficacy evaluation trials including good experimental practice, 3. PP 1/135 Phytotoxicity assessment, 4. PP 1/51 Weeds in potato, 6. PP 1/152 Design and analysis of efficacy evaluation trials • <u>Weed species are classified as:</u> <table> <tr> <td>very susceptible (VS) -</td><td>95 - 100%</td></tr> <tr> <td>susceptible (S) –</td><td>85 - 94,9%</td></tr> <tr> <td>moderately susceptible (MS) -</td><td>70 - 84,9%</td></tr> </table>		very susceptible (VS) -	95 - 100%	susceptible (S) –	85 - 94,9%	moderately susceptible (MS) -	70 - 84,9%
very susceptible (VS) -	95 - 100%						
susceptible (S) –	85 - 94,9%						
moderately susceptible (MS) -	70 - 84,9%						

moderately tolerant (MT) - 50 – 69,9%
tolerant (T) < 49,9%

- For PL the criteria are presented below:

Weed species are classified as:

susceptible (S) – 85%
moderately susceptible (MS) - 70-85%
moderately tolerant (MT) 60 -70%
tolerant (T) < 60%

AKO 600 SC applied solo on potato

The applicant submitted 13 trials carried out in 2023, 2024 on different varieties of potato (Partner, Skawa, Vineta, Boryna, Jurek, Melody, Jelly, Gala, Satina, Red Lady, Lord) in PL.

The tested herbicide was applied in potato at the rates: 0,8 l/ha; 1,4 l/ha; 2,0 l/ha; 2,5 l/ha; 3,0 l/ha (spray volume 200 – 300 l/ha, BBCH 00-09) as pre-emergence application against weeds.

Weed species	L/ha	Ass. at weeds stage BBCH 12-14 [no of trials]	up to 2 weeks after first efficacy as- sessment [no of trials]	Ass. BBCH 37-39 [no of trials]
CHEAL	2,0	77,1 (55,0-98,5) [5]	89,6 (75,0-99,0) [5]	94,9 (91,3-98,8) [4]
	2,5	77,1 (57,5-98,8) [5]	93,1 (85,0-100,0) [5]	97,3 (93,8-100) [4]
	3,0	81,4 (60,0-100) [5]	97,0 (90,0-100) [5]	99,9 (99,8-100) [4]
	Ref. 3,0	81,1 (57,5-100) [5]	96,1 (91,3-100)[5]	100 [4]
VIOAR	2,0	75,1 (47,5-97,5) [7]	83,3 (66,3-96,5) [7]	84,8 (71,3-97,50) [5]
	2,5	84,5 (47,5-100) [7]	93,0 (83,8-100) [7]	94,2 (81,3-100) [5]
	3,0	88,2 (50,00-00) [7]	97,6 (91,0-100) [7]	99,8 (98,8-100) [5]
	Ref. 3,0	88,1 (52,5-100) [7]	97,2 (91,0-100) [7]	99,1 (96,8-100) [5]
ECHCG	2,0	76,0 (55,0-98,8) [4]	90,6 (77,5-100) [4]	93,8 (88,8-100) [3]
	2,5	79,4 (55,0-98,8) [4]	94,4 (85,0-100) [4]	98,6 (97,5-100) [3]
	3,0	81,9 (57,5-100) [4]	97,1 (92,5-100) [4]	100 [3]
	Ref. 3,0	82,5 (57,5-100) [4]	97,4 (91,3-100) [4]	100 [3]
BRSNW	2,0	80,8 (60,0-97,5) [3]	89,2 (81,3-97,5) [4]	95,0 (92,5-100) [2]
	2,5	81,0 (60,0-97,5) [3]	93,5 (86,5-98,8) [4]	99,3 (92,5-97,5) [2]
	3,0	82,5 (57,5-100) [3]	97,6 (91,0-100) [4]	100 [2]
	Ref. 3,0	81,3 (57,5-100) [3]	95,3 (83,8-100) [4]	100 [2]
AMARE	2,0	57,2 (52,5-60,0) [4]	67,5 (63,8-76,3) [4]	76,3 (57,5-86,3) [4]
	2,5	73,8 (55,0-82,5) [4]	81,1 (72,5-84,3) [4]	90,7 (88,8-91,3) [4]
	3,0	77,5 (55,0-85,0) [4]	90,7 (80,0-97,5) [4]	98,0 (97,0-98,8) [4]
	Ref. 3,0	78,5 (57,5-87,5) [4]	92,7 (81,3-98,0) [4]	99,2 (98,0-100) [4]
POLCO	2,0	54,4 (43,8-76,3) [4]	66,4 (52,5-78,0) [5]	68,5 (45,0-96,3)[4]
	2,5	57,9 (48,8-76,3) [4]	75,0 (61,3-86,3) [5]	75,6 (60,0-94,8) [4]
	3,0	63,8 (55,0-81,3) [4]	84,2 (80,0-92,5) [5]	85,9 (78,8-99,8) [4]
	Ref. 3,0	64,4 (52,5-82,5) [4]	83,0 (80,0-90,0) [5]	86,5 (82,5-98,5) [4]
STEME	2,0	63,8 (45,0-93,8) [4]	82,8 (67,5-100) [5]	82,2 (71,3-100) [4]
	2,5	77,4 (55,0-97,5) [4]	88,3 (67,5 -100) [5]	91,6 (87,5-100) [4]
	3,0	82,1 (55,0-98,8) [4]	95,3 (77,5-100) [5]	99,0 (96,0-100) [4]
	Ref. 3,0	83,2 (57,5-100) [4]	96,3 (83,8-100) [5]	99,3 (97,3-100) [4]
MATMA	2,0	66,6 (46,3-97,5) [4]	76,9 (65,0-97,5) [4]	80,7 (65,0-100) [4]
	2,5	78,8 (55,0-100) [4]	88,2 (81,3-100) [4]	90,7 (81,3-100) [4]
	3,0	83,8 (55,0-100) [4]	95,0 (88,8-100) [4]	93,3 (86,3-100) [4]
	Ref. 3,0	83,3 (55,0-100) [4]	96,2 (88,8-100) [4]	97,4 (92,5-100) [4]
GALAP	2,0	73,2 (52,5-93,8) [2]	82,5 (70,0-95,0) [2]	90,7 (85,0-96,3) [2]
	2,5	78,2 (57,5-98,8) [2]	89,1 (78,8-99,3) [2]	95,7 (92,5-98,8) [2]
	3,0	80,0 (60,0-100) [2]	92,5 (85,0-100) [2]	98,0 (96,0-100) [2]

	Ref. 3,0	81,8 (65,0-98,5) [2]	93,2 (86,3-100) [2]	98,2 (96,2-100) [2]
POLPE	2,0	85,0 [1]	92,5 (90,0-95,0) [2]	90,0 [1]
	2,5	87,5 [1]	93,8 (90,0-97,5) [2]	90,0 [1]
	3,0	85,0 [1]	97,5 (95,0-100) [2]	95,0 [1]
	Ref. 3,0	82,5 [1]	97,5 (95,0-100) [2]	95,0 [1]
THLAR	2,0	74,1 (55,0-82,5) [4]	92,0 (82,5-99,5) [4]	95,4 (92,5-99,5) [4]
	2,5	78,2 (57,5-86,3) [4]	96,0 (85,0-100) [4]	99,2 (97,3-100) [4]
	3,0	82,2 (62,5-88,8) [4]	96,9 (87,5-100) [4]	99,6 (98,5-100) [4]
	Ref. 3,0	83,2 (67,5-88,8) [4]	97,2 (88,8-100) [4]	99,6 (98,5-100) [4]
GASPA	2,0	72,1 (63,8-88,8) [3]	88,4 (81,3-100) [3]	84,4 (83,8-85,0) [2]
	2,5	85,4 (82,5-91,3) [3]	92,9 (87,5-100) [3]	93,8 (92,5-95,0) [2]
	3,0	91,7 (90,0-93,8) [3]	99,6 (98,8-100) [3]	100 [2]
	Ref. 3,0	91,3 (88,8-93,8) [3]	100 [3]	100 [2]
GAETE	2,0	58,8 (57,5-60,00) [2]	77,5 (77,5-77,5) [2]	79,4 (78,8-80,0) [2]
	2,5	80,7 (80,0-81,3) [2]	86,9 (86,3-87,5) [2]	88,8 (87,5-90,0) [2]
	3,0	88,8 (88,8-88,8) [2]	98,2 (97,5-98,8) [2]	99,4 (98,8-100) [2]
	Ref. 3,0	88,8 (87,5-90,0) [2]	98,2 (97,5-98,8) [2]	100 [2]
POAAN	2,0	72,8 (61,3-85,0) [5]	81,2 (65,0-93,5) [5]	84,7 (71,3-96,0) [5]
	2,5	82,0 (76,3-87,5) [5]	92,0 (81,3-100) [5]	94,9 (85,0-100) [5]
	3,0	88,0 (83,8-91,3) [5]	97,7 (94,3-100) [5]	98,4 (93,0-100) [5]
	Ref. 3,0	88,8 (83,8-92,5) [5]	97,7 (93,0-100) [5]	97,8 (91,3-100) [5]

- Weeds susceptibility classification approximately 30 days after application (up to 2 weeks after first efficacy assessment)

At the dose rate 2,0 l/ha, the target weed species were categorized as:

- very susceptible (VS) -
- susceptible (S): CHEAL, ECHCG, BRSNW, POLPE, GASPA, THLAR;
- moderately susceptible (MS): VIOAR, STEME, MATMA, GALAP, GAETE, POAAN
- moderately tolerant (MT): AMARE, POLCO;

At the dose rate 2,5 l/ha, the target weed species were categorized as:

- ~~-very susceptible (VS):THLAR;~~
- ~~-susceptible (S): CHEAL, VIOAR, ECHCG, BRSN, STEME, MATMA, GALAP, POLPE GASPA, GAETE, POAAN;~~
- ~~-moderately susceptible (MS): AMARE, POLCO;~~

At the dose rate 3,0 l/ha, the target weed species were categorized as:

- ~~-very susceptible (VS): CHEAL, VIOAR, ECHCG, BRSNW, STEME, MATMA, POLPE, THLAR, GASPA, GAETE, POAAN;~~
- ~~-susceptible (S): AMARE, POLCO, GALAP;~~

Weeds susceptibility classification approximately 60 days after application (ass. at BBCH 37-39)

At the dose rate 2,0 l/ha, the target weed species were categorized as:

- very susceptible (VS): BRSNW, THLAR;
- susceptible (S): CHEAL, ECHCG, GALAP, POLPE, GASPA,
- moderately susceptible (MS): VIOAR, STEME, AMARE, MATMA, GAETE, POAAN;
- moderately tolerant (MT): POLCO

At the dose rate 2,5 l/ha, the target weed species were categorized as:

- ~~-very susceptible (VS): CHEAL, ECHCG, BRSNW, GALAP, THLAR, POAAN;~~
- ~~-susceptible (S): VIOAR, AMARE, STEME, MATMA, POLPE, GASPA, GAETE;~~
- ~~-moderately susceptible (MS): POLCO;~~

At the dose rate 3,0 l/ha, the target weed species were categorized as:

- ~~-very susceptible (VS): CHEAL, VIOAR, ECHCG, BRSNW, STEME, POLPE, THLAR, GASPA, GAETE, POAAN, AMARE, GALAP;~~

~~–susceptible (S): POLCO, MATMA;~~

- Weeds susceptibility classification for PL

At the dose rate 2, l/ha, approximately 30 days after application, the target weed species were categorized as:

- susceptible (S): CHEAL, ECHCG, BRSNW, POLPE, THLAR, GASPA;
- moderately susceptible (MS): VIOAR; STEME, MATMA, GALAP, GAETE, POAAN;
- moderately tolerant (MT): AMARE, POLCO;

At the dose rate 2,0 l/ha, approximately 60 days after application, the target weed species were categorized as:

- susceptible (S): CHEAL, ECHCG, BRSNW, POLPE, THLAR, GASPA, GALAP;
- moderately susceptible (MS): VIOAR, STEME, MATMA, GAETE, POAAN, AMARE;
- moderately tolerant (MT): POLCO;

~~At the dose rate 2,5 l/ha, approximately 30 days after application, the target weed species were categorized as:~~

- ~~–susceptible (S): CHEAL, VIOAR, ECHCG, BRSNW, STEME, MATMA, GALAP, POLPE, THLAR, GASPA, GAETE, POAAN;~~
- ~~–moderately susceptible (MS): AMARE, POLCO;~~

~~At the dose rate 3,0 l/ha, approximately 30 days after application the target weed species were categorized as:~~

- ~~–susceptible (S): CHEAL, VIOAR, ECHCG, BRSNW, STEME, MATMA, GALAP, POLPE, THLAR, GASPA, GAETE, POAAN, AMARE;~~
- ~~–moderately susceptible (MS): POLCO.~~

AKO 600 SC at 2,0 l/ha controlled weeds at a lower level compared to the reference product. However, the reduced dose of 2,0 l/ha still provided good control of some weed species for about two months after application.

There is no sufficient number of trials for GASPA. The Applicant presented results of three (two trials for later assessment) trials instead of 4. As the product was still effective against GASPA at the reduced dose, it is proposed to accept the reduced number of trials, subject to the submission of an additional 2-3 trials post-authorization.

To sum up, it might be concluded that the pre-emergence application of AKO 600 SC at dose rate 2,0 l/ha (spray volume 200 - 300 l/ha) provided benefit against some weeds species in potato.

AKO 600 SC applied in a mixture with Boa Pro 480 SC, in potato

The applicant submitted 10 trials carried out in 2023, 2024 on different varieties of potato (Vineta, Boryna, Satina, Lord, Red Lady, Jurek, Riviera, Gala) in PL.

The tested mixture was applied in potato at the rates:

- 0,8 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC;
- 1,2 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC
- 1,4 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC
- 2,0 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC

(spray volume 200 – 300 l/ha, BBCH 05-08) as pre-emergence application against weeds.

For the mixture with Boa Pro 480 EC, dose of 2,0 L/ha AKO 600 SC + 0,2 L/ha Boa Pro 480 EC can be considered the minimum effective dose. In this case efficacy comparability the mixture of two different active substances with efficacy of the reference product contained one active substance should be the criterion of minimum efficacy dose. The mixture performed on the same

high efficacy level as the reference product Bandur 600 SC, at dose of 2,0 L/ha AKO 600 SC + 0,2 L/ha Boa Pro 480 EC.

Weed species	L/ha	Ass. at weeds stage BBCH 12-14 [no of trials]	up to 2 weeks after first efficacy as- sessment [no of trials]	Ass. BBCH 37-39 [no of trials]
CHEAL	2,0+0,2	90,5 (78,8-97,5) [4]	96,9 (93,8-99,0) [4]	97,0 (88,8-100) [4]
	Ref. 3,0	88,8 (71,3-100) [4]	97,2 (93,8-100)	95,6 (87,5-100) [4]
VIOAR	2,0+0,2	92,2 (78,8-98,8) [4]	97,0 (91,3-100) [4]	93,8 (77,5-100) [4]
	Ref. 3,0	89,0 (71,3-98,8) [4]	98,1 (95,0-99,8)	96,3 (87,5-100) [4]
ECHCG	2,0+0,2	92,5 (86,3-97,5) [4]	98,1 (92,5-100) [4]	96,0 (83,8-100) [4]
	Ref. 3,0	93,2 (87,5-100) [4]	97,6 (92,5-100)	95,8 (85,0 -100) [4]
BRSNW	2,0+0,2	98,2 (97,5-98,8) [2]	95,0 (92,5-97,5) [2]	95,0 (95,0-95,0) [2]
	Ref. 3,0	100 [2]	98,8 (97,5-100) [2]	97,5 (95,0-100) [2]
AMARE	2,0+0,2	75,6 (65,0-100) [4]	98,7 (97,3-100) [4]	97,5 (95,0-99,8) [4]
	Ref. 3,0	75,6 (62,5-100) [4]	98,4 (96,0-100) [4]	96,8 (93,8-99,5) [4]
POLCO	2,0+0,2	82,3 (68,8-100) [4]	92,8 (75,0-100) [4]	91,6 (71,3-100) [4]
	Ref. 3,0	85,0 (68,8-100) [4]	94,6 (82,5-100) [4]	93,3 (82,5-100) [4]
STEME	2,0+0,2	87,1 (81,3-97,5) [3]	98,1 (92,5-100) [3]	96,0 (83,8-100) [3]
	Ref. 3,0	88,0 (81,3-98,8) [3]	98,6 (95,0-100) [3]	96,5 (86,3-100) [3]
MATMA	2,0+0,2	100 [2]	98,8 (97,5-100) [2]	97,5 (95,0-100) [2]
	Ref. 3,0	100 [2]	98,2 (96,3-100)	96,9 (93,8-100) [2]
GALAP	2,0+0,2	92,1 (86,3-97,8) [2]	98,9 (97,8-100) [2]	98,2 (96,3-100) [2]
	Ref. 3,0	94,3 (90,0-98,5) [2]	100 [2]	100 [2]
POLPE	2,0+0,2	96,3 (93,8-98,8) [3]	95,7 (95,0-96,3) [2]	94,4 (93,8-95,0) [2]
	Ref. 3,0	90,7 (82,5-98,8) [3]	93,8 (92,5-95,0) [2]	92,5 (90,0-95,0) [2]
THLAR	2,0+0,2	83,8 (75,0-100) [4]	99,6 (98,8-100) [4]	99,4 (97,5-100) [4]
	Ref. 3,0	83,5 (73,8-100) [4]	99,6 (98,8-100) [4]	99,1 (96,3-100) [4]
GASPA	2,0+0,2	90,1 (81,3-98,8) [2]	98,8 (97,5-100) [2]	96,9 (93,8-100) [2]
	Ref. 3,0	93,2 (86,3-100) [2]	99,4 (98,8-100) [2]	96,3 (92,5-100) [2]
GAETE	2,0+0,2	78,8 (77,5-80,0) [2]	100 [2]	100 [2]
	Ref. 3,0	79,4 (78,8-80,0) [2]	100 [2]	100 [2]
POAAN	2,0+0,2	76,6 (65,0-98,8) [4]	99,3 (97,5-100) [4]	98,3 (93,8-100) [4]
	Ref. 3,0	79,1 (70,0-100) [4]	99,1 (97,5-100) [4]	98,2 (93,8-100) [4]

- Weeds susceptibility classification for PL, approximately 30 days after application:

At the dose 2,0 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC, the target weed species were categorized as:

- susceptible (S): CHEAL, VIOAR, ECHCG, BRSNW, STEME, MATMA, GALAP, POLPE, THLAR, GASPA, GAETE, POAAN, AMARE, POLCO;

Furthermore, all target weed species were effectively controlled for approximately two months after application.

To sum up, it might be concluded that the pre-emergence application of 2,0 l/ha AKO 600 SC + 0,2 l/ha Boa Pro 480 SC (spray volume 200 - 300 l/ha) provided benefit against weeds in potato.

The Maritime EPPO climate zone (DE)

AKO 600 SC applied solo in potato

Efficacy after application of AKO 600 SC were no tested in the Maritime EPPO climate zone. CMS is invited to decide whether data carried out in PL are acceptable for DE.

Efficacy data are not acceptable for DE CMS as no data from the Maritime climate zone has been provided in the dossier.

The SE EPPO climate zone

AKO 600 SC applied solo in sunflower

Efficacy after application of AKO 600 SC were no tested in the SE climate zone. In the opinion of ZRMS, efficacy data for potato with pre-emergence application might be extrapolated to other crops included sunflower. CMSs is invited to decide whether data carried out in PL are acceptable for them.

Efficacy data are not acceptable for DE CMS as no data from the SE climate zone has been provided in the dossier.

3.3 Information on the occurrence or possible occurrence of the development of resistance (KCP 6.3)

Resistance Risk Assessment (*according to EPPO PP 1/213 (4) Resistance risk analysis*)

3.3.1. Mode of action

AKO 600 SC is herbicide containing active substance: aclonifen 600 g/L, which belong to 32 (legacy S) HRAC group - Inhibition of Solanesyl Diphosphate Synthase.

Aclonifen is a herbicidal active substance belonging to the chemical class of diphenyl ether for the pre-emergence control of annual grass and broad-leaved weed species in several dicotyledonous. Aclonifen affects germination of sensitive weeds but does not stop germination. Typical symptoms of susceptible weeds treated with aclonifen is bleaching and chlorosis of young shoot tissue. Aclonifen is a contact herbicide with only limited translocation activity within the plant. Aclonifen should therefore be applied uniformly to the ground surface, where it forms an homogenous film. Incorporation within the soil profile will significantly reduce its activity. Good soil and seed bed preparation and application are therefore important to ensure optimum levels of performance of the material. Aclonifen is a contact herbicide with only limited translocation activity within the plant. Aclonifen should therefore be applied uniformly to the ground surface, where it forms an homogenous film. Incorporation within the soil profile will significantly reduce its activity. Good soil and seed bed preparation and application are therefore important to ensure optimum levels of performance of the material. Aclonifen is a member of the diphenyl ether class of herbicides. In spite of a structural similarity with other diphenyl ether herbicides, aclonifen does not inhibit protoporphyrinogen oxidase nor chlorophyll biosynthesis. Aclonifen is a bleaching compound of unknown mode of action. It causes an accumulation of phytoene but is not an inhibitor of phytoene desaturase. The accumulation of phytoene is likely to be due to an indirect effect of PDS, similar to inhibitors of HPPD, but aclonifen is not an HPPD inhibitor. Therefore, there must be another unknown target that causes the same symptoms. The lack of activity of aclonifen on HPPD has been documented. The reduction in carotenoids, accumulation of phytoene, and the lack of inhibition of PDS at 100 µM *in vitro* is also documented. Aclonifen is taken up by hypocotyl, cotyledons and coleoptile (but not by roots) and the translocated to the meristems. Following aclonifen uptake by plants, large amounts of phytoene accumulate and carotenoids are not formed. The chloroplasts fail to develop and chlorophyll and other photosynthetic components are not formed. The meristematic cell division continues but without production of chlorophyll leading to the development of bleached plant tissues. Aclonifen does not stop germination, but controls germinated weeds at a speed depending on available reserves in the seed, speed of weed growth and amount of absorbed aclonifen. The typical symptoms of susceptible weeds treated with aclonifen in pre-emergence is bleaching

and chlorosis of young shoot tissue as it develops. Exposure to light does not affect the activity of aclonifen, but a rise in temperature can improve its efficacy. Efficacy is good in both autumn and spring, but results are often better in spring, when a shorter span of residual action is required and climatic conditions are more favourable to plant growth. Aclonifen presents no metabolite with biological activity.

3.3.2. Mechanism of resistance

AKO 600 SC is herbicide containing active substance: aclonifen 600 g/L, which belong to 32 (legacy S) HRAC group - Inhibition of Solanesyl Diphosphate Synthase.

According to EPPO PP 1/213 (4) Resistance risk analysis weeds usually only produce one generation per year and development of resistance is usually a relatively slow process. It is difficult to class any weed species as inherently more or less likely to develop resistance to a particular herbicide.

3.3.3. Evidence of resistance

AKO 600 SC is herbicide containing active substance: aclonifen 600 g/L, which belong to 32 (legacy S) HRAC group - Inhibition of Solanesyl Diphosphate Synthase. This group of herbicides is quite well known and has been applied commercially for decades.

According to Ian Heap's website (<http://www.weedscience.org>) there are any weed species which have been reported as resistant to aclonifen.

According to *Aclonifen_DAR_03_Vol3_B1-B5_public.pdf*

The risk of resistance is directly linked to the frequency of use of plant protection products with the same mode of action. In spite of a structural similarity with other diphenyl ether herbicides, aclonifen does not inhibit protoporphyrinogen oxidase or chlorophyll biosynthesis. So aclonifen is a bleacher compound having a mode of action different to those of other existing bleachers and diphenyl ether products. Additionally, these products are applied either in pre- or in post-emergence of the weeds and once per season on crops that are planted in a rotation. To date, no information indicative of resistance in target weeds to aclonifen has been reported. Therefore the risk of resistance development to aclonifen is very limited. However, it is recommended to alternate the use of herbicides having different modes of action.

3.3.4. Cross-resistance

According to <https://hracglobal.com/files/Herbicide-Cross-Resistance-and-Multiple-Resistance-in-Plants.pdf>

Cross resistance is defined as the expression of a genetically-endowed mechanism conferring the ability to withstand herbicides from different chemical classes. There are two broad cross resistance categories; target site cross resistance and non-target site cross resistance. Cross resistance occurs mainly in the group of ALS inhibitors.

No cases of weed resistance to aclonifen have been reported, so the risk of cross-resistance is very low.

3.3.5. Sensitivity data

The Applicant didn't conduct separately trials for sensitivity data, this data was evaluated in efficacy trials. The 21 field trials preemergence use were established in order to determine the sensitivity of weeds in the potato. The AKO 600 SC was tested solo at doses: 0.8 to 3.0 L/ha (0.48-1.8 kg of active substance) and in tank mix at doses 0.8 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.2 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L), 1.4 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) and 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) in potato for the control of mono and dicot weeds. Detailed studies on the weeds sensitivity are submitted and summarised in 3.2 Efficacy data (KCP 6.2).

3.3.6. Use pattern

Herbicide AKO 600 SC has demonstrated good crop tolerance to potato. Therefore concluded that AKO 600 SC is safe usage at proposed rate and this support the label claim for the use in potato.

Undesirable effects are not expected on succeeding crops, adjacent crop, part of plants used for propagating purposes and beneficial organisms.

Based on submitted data the following regulation on the label is proposed:

in potato at spring applied once per season preemergence BBCH 01-08:

- solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species.
- in tank mix with Boa Pro 480 EC (clomazon 480 g/L) at the maximum dose 0.8-2.0 L/ha AKO 600 SC +0.2 L/ha Boa Pro 480 EC which are corresponding to 1.5-1.8 kg a.s./ha of aclonifen and 0.096 kg a.s./ha of clomazon per application for the control of most important weed species.

The product AKO 600 SC should be use once per season at spring pre – emergence. To avoid resistance, products contain active substance with the same group shouldn't be used year after year on the same field.

Recommended volume of water 200-300 L/ha

Recommended medium droplet spraying

3.3.7. Resistance risk assessment of unrestricted use pattern

According to EPPO PP 1/213 (4) Resistance risk analysis weeds usually only produce one generation per year and development of resistance is usually a relatively slow process. In case of aclonifen the cross resistance is not evident and no cases of resistance have been recorded, it is considered reasonable that no specific resistance management strategy will be required. However, to avoid the development of resistance, the user must follow the general principles of integrated pest management and the label of the plant protection product.

3.3.8. Test methods

Not applicable

3.3.9. Acceptability of the resistance risk

AKO 600 SC is herbicide containing active substance: aclonifen 600 g/L, which belong to 32 (legacy S) HRAC group - Inhibition of Solanesyl Diphosphate Synthase. This group of herbicides is quite well known and has been applied commercially for decades.

According to Ian Heap's website (<http://www.weedscience.org>) there are any weed species which have been reported as resistant to aclonifen.

According to EPPO PP 1/213 (4) Resistance risk analysis weeds usually only produce one generation per year and development of resistance is usually a relatively slow process.

In conclusion, in the Applicant's opinion, this level of weeds resistance risk should be considered to be acceptable, provided always that the provisions on the label are followed.

3.3.10. Management strategy

According to *Herbicide Resistance Action Committee (HRAC)* (<https://hracglobal.com/prevention-management/best-management-practices>)

Integrated Weed Management (IWM) refers to using chemical, cultural, mechanical and biological methods, in an integrated fashion, to control weeds. It does not rely excessively on any one method. When used in a integrated approach, the following tools help reduce selection pressure and survival of resistant weeds.

- Chemical - Applying herbicides to a crop.

- **Mechanical** - Includes measures such as hand-weeding using cultivation or ploughing to control emerged plants and bury non-germinated seed. It also includes harvest weed seed destruction such as stubble burning and cutting for hay or silage to prevent the weeds from setting seed.
- **Cultural** - Includes altering the crop planting date, row spacing and harvest timing to disrupt the weed cycle. It also includes planting crops that can out-compete weeds, buying certified seed that's free of weeds and using a diverse crop rotation. Growers should also sanitize farm equipment when moving between fields.
- **Biological** - Includes introducing insects and pathogens that control target weed species and introducing post-harvest grazing of growing weeds.

Using a diversified crop rotation allows farmers to use these different weed techniques. Avoid successive crops that use herbicides with the same mechanism of action to control the same weed species in the same field.

Guidelines for the sustainable use of herbicide site of action groups:

- Use mixtures or sequential treatments of herbicides having different sites of action. Each herbicide in the mixture should target the same weed species.
- Consider all chemical control options before planting, in-crop and after harvest.
- Avoid continued use of the same herbicides, or herbicides with the same site of action in the same field, unless integrated with other weed control practices.
- Limit the number of applications of a single herbicide or herbicides with the same site of action in a single growing season.
- Herbicide mixtures and herbicide rotations alone are not enough to prevent resistance. They must be used in a diversified plan than also incorporates mechanical, cultural and biological practices.

Growers should also do the following:

- Follow label use instructions, such as application rates, timing and equipment recommendations.
- Know the weeds in their fields and nearby non-crop areas and tailor their weed control program to weed densities and economic thresholds.
- Monitor herbicide results and be aware of any trends or changes in weed populations.
- Maintain detailed field records to confirm cropping and herbicide history.

3.3.11. Implementation of the management strategy

The herbicide label provides all the necessary information for preventing weed resistance to herbicides.

3.3.12. Monitoring, reporting and reaction to changes in performance

According to <https://hracglobal.com/files/Monitoring-and-Mitigation-of-Herbicide-Resistance.pdf>

Managing the risk of herbicide resistance (HR) is an area of strategic importance for leading herbicide technology providers and is the focus of the Global Herbicide Resistance Action Committee (HRAC), an organization comprised of 8 major companies working as a part of Crop Life International. Early detection of HR, understanding the scope of HR in a defined area, and potential mitigation of resistance through efforts to limit its spread are important aspects of managing the risk of HR. Monitoring for HR populations has been employed by public and private weed scientists for both early detection and defining the scope of resistance. The primary methods used to monitor for resistance include:

- 1) field surveys where seed from putative resistant plants are collected and tested in a controlled environment using bioassay procedures,
- 2) market research surveys of farmers and weed management experts, and
- 3) tracking farmer performance inquiries with appropriate follow up field evaluation and testing.

The most common monitoring method is the use of field surveys designed to either qualitatively (i.e., determine whether the level of resistance is high, medium, or low) or quantitatively (i.e., determine the area infested with HR populations) define existing HR. The primary method to detect resistance in new

species and in new geographies is to track farmer performance inquiries. Once resistance is detected, steps may be taken to mitigate its impact. A critical aspect to mitigation is the implementation of best management practices (BMPs) which is facilitated by effective education and training programs. Education efforts can be enhanced with information obtained from monitoring studies and early detection of resistant populations using appropriate monitoring methods can improve the outcome of mitigation efforts.

dRR point 3.3.	Information on the occurrence or possible occurrence of the development of resistance
ZRMS conclusion: Aclonifen is classified by HRAC to the group 32 (Inhibition of Solanesyl Diphosphate Synthase, chemical class of diphenyl ether). Solanesyl diphosphate synthase was identified as the target of aclonifen, representing a novel mode of action for herbicides. Currently, it is the only known herbicide with this mechanism of action. Aclonifen is a contact herbicide with only limited translocation activity within the plant. Herbicidal action takes place inside the aerial parts of plants and is most efficient in young seedlings. After spraying, chlorosis and blanching appear on the seedlings, followed by desiccation. The international herbicide-resistant weed database http://www.weedscience.org/Pages/Herbicide.aspx does not report Aclonifen resistant weed species. What is more the weeds usually only produce one generation per year, so development of resistance is a slow process. <u>Risk inherent to the active substance Aclonifen:</u> Aclonifen currently does not show any resistance to weed species in Europe. Therefore, the risk of resistance arising from the use of Aclonifen is considered to be low. <u>Risk inherent to the target weeds:</u> in the dossier the following target weeds were tested in protection of potatoes: CHEAL, VIOAR, ECHCG, BRSNW, AMARE, POLCO, STEME, MATMA, GALAP, POLPE, THLAR, GASPA, GAETE, POAAN. According to the database - The International Survey of herbicide Resistant Weeds, that can be found on www.weedscience.org and taking into account sites of actions to which resistance has been observed per target weed species: - a high inherent risk was identified for: CHEAL, POAAN, STEME, ECHCG, AMARE - a medium inherent risk was identified for: POLCO, GALAP, POLPE, THLAR, GASPA, GAETE <u>The agronomic risk</u> Potato can grow in the crop rotation inter alia with winter and spring crops, where Aclonifen is not can be used. The product is intended to use once in season. What is more other non-chemical methods to control weeds are used: ploughing, harrow, cultivation of catch crop and crop change. Agronomic practices like superficial soil ploughing increases the population density of mainly monocotyledonous weeds. Those techniques contribute to a non-chemical weed control and to a reduced risk of developing resistances. Additionally, there are many active substances available with alternative MoA controlling key target weeds. However, considering the fact that many target weeds eradicated by AKO 600 SC show a high risk of resistance, the agronomic risk is classified as medium to high. Taking into account above three criteria, overall risk of resistance arising from unmodified use of AKO 600 SC is medium. In order to prevent from the development of resistance, the proposed by the Applicant resistance risk strategies should be implemented, including placing on the label information that this product should be used alternately with others having a different mode of action. DE rates the overall resistance risk low to moderate focusing on the fact that there are no reports on resistance cases to aclonifen yet. The zRMS agrees with the applicant's proposal of resistant management strategy. However, management strategy should be implemented in CMSs based on the latest HRAC recommendations and taking into consideration CMSs conditions.	

3.4. Adverse effects on treated crops (KCP 6.4)

Information on trials submitted (3.4: Adverse effects on treated crops)

Table 3.4-1: Presentation of trials (selectivity trials, transformation trials...)

Crop*	Country	Type of trial**	Number of trials	Years	GEP, non-GEP, official***	Comments (any other relevant information)
			North-East Zone			
potato	Poland	S + Y + Q	5	2023	GEP	-
potato	Poland	S + Y + Q	5	2024	GEP	-
TOTAL	-	-	10	-	-	-

* According to the GAP table

** S = selectivity trial, Y = trial with yield assessment, Q = trial with quality assessment, T = trial on the basis of the study of impact on transformation process (TP: Physical transformation, TF: transformation involving microbial fermentation), P = trial with assessment of impact on propagation

*** Official: carried out by a national official organisation

Table 3.4-2: Presentation of reference standards used in trials (selectivity trials, transformation trials...)

Crop	Reference standard	Country(ies) where the product is registered (1)	Authorization number	Active substance	Formulation		Registered application rate(3)	Application rate in trials (per treatment)	Remark(4)
					Type(2)	Concentration of a.s.			
potato	Bandur 600 SC	Poland	R-25/2018wu;	acolonifen	SC - Suspension concentrate	600 g/L	2.5-3.0 L/ha	3.0 L/ha and 6.0 L/ha (2N)	-

(1) only on use(s) applied for (with the test product).

(2) e.g. WP (wetttable powder), EC (emulsifiable concentrate), etc.

(3) dose(s) / dose range authorized on that use in the country.

(4) Other relevant information (e.g. uses, number of applications, spray volume, method of application, etc.).

3.4.1. Phytotoxicity to host crop (KCP 6.4.1)

Materials and methods

The applicant submitted 10 reports (in total) showing the results in research into product selectivity carried out in 2023 and 2024 in potato. List of these reports is contained in Appendix 1.

Site

Trials were conducted in different regions in Poland where potato is grown commercially. The experiment was established on a set of complete randomized blocks in 4 replications. Details on trial sites, applications and data on selectivity are included in Appendix 4 and 5.

Testing units

Selectivity studies on herbicide AKO 600 SC were performed in 2023 and 2024 by:

- A.T Sp. z o.o., ul. Przemysłowa 3, 88-300 Mogilno, Poland
- Poznań University of Life Sciences, Research and Education Center Gorzyń, ul. Wojska Polskiego 28, 60-637 Poznań; Poland

Experimental details

The efficacy trials were designed, conducted and reported according to the following EPPO guidelines:

- PP 1/135 (3) Phytotoxicity assessment
- PP 1/152 (3) Design and analysis of efficacy evaluation trials
- PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice

They were carried out on the field in the conditions of natural agrofag infestation. The efficacy trials were concluded according to the EPPO standards:

- PP 1/51(3) Weeds in potato

Assessment methods

Statistical Analysis

The treatment means of the assessment dates were calculated and compared using Student-Newman-Keuls test ($P=0.05$). The statistical procedures were applied using ARM 2020.1 software.

Assessment of phytotoxicity

Phytotoxicity of whole symptoms of injuries observed on the crop plants. Recording all the symptoms of possible phytotoxic effect of tested product, mainly: changes in the growth (plant height, tillering, dates of succeeding growth stages), thinning out of plants, discolorations (without destruction of plant tissue), necroses, deformations, yield quantity and quality. The occurrence and intensity of outside symptoms of crop damages were determined using 0-100 % scale (0 % = no damage; 100 % = total plant destruction).

Harvest

The crop was harvested with a combine harvester from the central part of each plot.

Sample for each plots was analysed on the grain analyser: Aquamatic 5200 Perten; Inframatic 8800.

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content.

Applications methods and rates

The applications were carried out by a T-BOOM – BACCAI, BOSPPO in potato.

The product AKO 600 SC has been used:

in potato at BBCH 01-08 at the following rates of

solo at the following rates of 3.0 and 6.0 L/ha

in tank mix at the following rates of 2.0 L/ha AKO 600 SC + 0.2 L/ha Boa Pro 480 EC (clomazon 480 g/L) and 4.0 L/ha AKO 600 SC + 0.4 L/ha Boa Pro 480 EC (clomazon 480 g/L).

Bandur 600 SC was used as a reference product in potato.

The experiment was established on a set of complete randomized blocks in 4 replications.

Experiment pattern:

Potato

No.	Name	Rate (L/ha)	Appl code	Growth Stage BBCH
1	Untreated Check			
2	AKO 600 SC	3.0	A	BBCH 01-08
3	AKO 600 SC	6.0	A	BBCH 01-08
4	Bandur 600 SC	3.0	A	BBCH 01-08
5	Bandur 600 SC	6.0	A	BBCH 01-08

No.	Name	Rate (L/ha)	Appl code	Growth Stage BBCH
1	Untreated Check			
2	AKO 600 SC	3.0	A	BBCH 01-08
3	AKO 600 SC	6.0	A	BBCH 01-08
4	AKO 600 SC + Boa Pro 480 EC*	2.0 + 0.2	A	BBCH 01-08
5	AKO 600 SC+ Boa Pro 480 EC*	4.0 + 0.4	A	BBCH 01-08
6	Bandur 600 SC	3.0	A	BBCH 01-08
7	Bandur 600 SC	6.0	A	BBCH 01-08

*Boa Pro 480 EC (clomazon 480 g/L)

No.	Name	Rate (L/ha)	Appl code	Growth Stage BBCH
1	Untreated Check			
2	AKO 600 SC + Boa Pro 480 EC*	2.0 + 0.2	A	BBCH 01-08
3	AKO 600 SC+ Boa Pro 480 EC*	4.0 + 0.4	A	BBCH 01-08
4	Bandur 600 SC	3.0	A	BBCH 01-08
5	Bandur 600 SC	6.0	A	BBCH 01-08

*Boa Pro 480 EC (clomazon 480 g/L)

Details of experiments

Potato

Report code	A.T/2023/025/ZZ	A.T/2023/026/ZZ	AH/23/Z/27/Gr/01	AH/23/Z/27/Jab/02	AH/23/Z/27/Ko/03
Location	Miława/ Poland	Lichnowy/ Poland	Gorzyń/ Poland	Jabłowo Pałuckie/ Poland	Kopanie/ Poland
Plant/cultivar	potato/ Skawa	potato/ Boryna	potato/ Jurek	potato/ Melody	potato/Satina
Seeding date	26.04.2023	26.04.2023	24.04.2023	20.04.2023	05.05.2023
Seeding rate	2500 kg/ha	3000 kg/ha	2900 kg/ha	2200 kg/ha	2600 kg/ha
Forecrop	maize	carrots	spring barley	spring barley	winter wheat
Type of sprayer	BACCAI	BACCAI	BOSPHO	BACCAI	BACCAI
Date of treatment	10.05.2023	16.05.2023	12.05.2023	16.05.2023	22.05.2023
Plant development phase	BBCH 03-07	BBCH 07-08	BBCH 01-08	BBCH 03-07	BBCH 05-09
Soil type	loamy sand	loamy sand	loamy sand	loamy sand	sandy loam
pH	5.7	7.08	6.4	6.7	6.9
Water (L/ha)	200 L/ha	300 L/ha	300 L/ha	200 L/ha	300 L/ha
Plot size	3.0 x 8.0 = 24.0 m ²	3.0 x 8.0 = 24.0 m ²	2.8 x 10.0 = 28.0 m ²	3.0 x 8.0 = 24.0 m ²	3.0 x 7.0 = 21.0 m ²

Report code	AH/24/Z/6/Pr/01	AH/24/Z/6/Br/02	AH/24/Z/6/Gr/03	AH/24/Z/6/Dz/04	AH/24/Z/6/ZI/05
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Location	Przybroda/ Poland	Brody/ Poland	Gorzyń/ Poland	Dzierżąno/ Poland	Złotniki / Poland
Plant/cultivar	potato/Riviera	potato/ Lord	potato/ Jurek	potato/Satina	potato/ Red Lady
Seeding date	10.04.2024	22.04.2024	03.04.2024	13.04.2024	15.04.2024
Seeding rate	2000 kg/ha	3200 kg/ha	3400 kg/ha	3100 kg/ha	2200 kg/ha
Forecrop	winter wheat	pea	winter wheat	winter barley	winter barley
Type of sprayer	BOSPHO	BOSPHO	BOSPHO	BOSPHO	BOSPHO
Date of treatment	09.05.2024	09.05.2024	27.04.2024	06.05.2024	14.05.2024
Plant development phase	BBCH 08	BBCH 05-08	BBCH 05	BBCH 08	BBCH 08
Soil type	loamy sand	loamy sand	loamy sand	loamy sand	loamy sand
pH	6.0	6.2	6.4	6.0	7.0
Water (L/ha)	200 L/ha	230 L/ha	200 L/ha	200 L/ha	200 L/ha
Plot size	3.0 x 10.0 = 30.0 m ²	2.5 x 10.0 = 25.0 m ²	2.8 x 10.0 = 28.0 m ²	3.0 x 10.0 = 30.0 m ²	3.0 x 10.0 = 30.0 m ²

Details of agricultural measures, fertilization, and other plant protection products applied during the experiments are included in detailed field study reports listed above.

Summary of the data from selectivity assessment can be found at Appendix 6.

Table 3.4-3: Phytotoxicity of product

The 31 trials were carried out on potato in Poland in 2023 and 2024 on a wide range of commercially grown varieties (21 efficacy trials with phytotoxicity assessment and 10 selectivity trials). In one selectivity report (no. A.T/2023/025/ZZ) and one efficacy report (no. A.T/2023/022/ZZ) there were observed phytotoxicity symptoms on tested product and standard. The level of phytotoxicity in these trials did not exceed 3.3%.

Number of trials with		Selectivity trials (10)						Efficacy trials (21)		
		AKO 600 SC		AKO 600 SC + Boa Pro 480 EC		Bandur 600 SC		AKO 600 SC	AKO 600 SC + Boa Pro 480 EC	Bandur 600 SC
		N	2N (or other)	N	2N (or other)	N	2N (or other)	N	N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	1	1	1	1	1	1	1	0	1
	>5% to 10%	0	0	0	0	0	0	0	0	0
	>10% to 15%	0	0	0	0	0	0	0	0	0
	>15 %	0	0	0	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5%	0	0	0	0	0	0	0	0	0
	>5% to 10%	0	0	0	0	0	0	0	0	0
	>10% to 15%	0	0	0	0	0	0	0	0	0
	>15 %	0	0	0	0	0	0	0	0	0

dRR point 3.4.1	Phytotoxicity to host crop
ZRMS conclusion: <u>The NE EPPO climate zone (PL)</u> <u>AKO 600 SC applied solo on potato</u> Phytotoxicity symptoms were checked in all efficacy trials and 5 selectivity trials carried out in 2023, in PL. In selectivity trials the following varieties were tested: Skawa, Boryna, Jurek, Melody, Satina. AKO 600 SC was applied at the dose rate 1N (3,0 l/ha) and 2N (6,0 l/ha) at BBCH 03-09 and compared to the reference product Bandur 600 SC. In one selectivity trial (var. Skawa), application of AKO 600 SC gave transient delay in reaching various growth stages (0,5%, 16 DAA, 1N) and transient stunting (2,0%, 16 DAA, 2N). No signs of phytotoxicity were found on the following assessment day. The reference product gave similar results. No negative effect on potato yield was observed in that trial. In one efficacy trial (var. Skawa) application of AKO 600 SC at 2,5 l/ha gave transient delay in reaching	

various growth stages (2,5%, 16 DAA). Application of 3,0 l/ha gave transient stunting (0,3% 16 DAA) and transient chlorosis (0,3%, 16 DAA). No signs of phytotoxicity were found on the following assessment day. The reference product gave similar results- transient delay in reaching various growth stages and transient stunting.

The label should contain the information that solo application of the product may cause transient, minor symptoms of phytotoxicity (delay in reaching various growth stages, stunting, chlorosis) - especially on the variety Skawa- without negative effect on yield.

AKO 600 SC applied in mixture with Boa Pro 480 SC on potato

Phytotoxicity symptoms were checked in all efficacy trials and 7 selectivity trials carried out in 2023 and 2024, in PL.

In selectivity trials the following varieties were tested: Skawa, Boryna, Riviera, Lord, Jurek, Red Lady, Satina.

applied in mixture with Boa Pro 480 SC was applied at the dose rate 1N and 2N at BBCH 03-08 and compared to the reference product Bandur 600 SC.

In one selectivity trial (var. Skawa), the application of AKO 600 SC with Boa Pro 480 SC gave transient chlorosis (1N-0,5%, 16 DAA and 2N-2,0%, 16 DAA) and transient stunting (1N-1,0%, 16 DAA and 2N-2,0%, 16 DAA). No signs of phytotoxicity were found on the following assessment day. The reference product gave similar results - stunting. No negative effect on potato yield was observed in that trial.

The label should contain the information that the application of the of AKO 600 SC with Boa Pro 480 SC may cause transient, minor symptoms of phytotoxicity (stunting, chlorosis) - especially on the variety Skawa- without negative effect on yield.

The Maritime EPPO climate zone (DE)

AKO 600 SC applied solo on potato

Phytotoxicity symptoms after application of AKO 600 SC were no checked in the Maritime EPPO climate zone. CMS is invited to decide whether data carried out in PL are acceptable for DE.

Phytotoxicity data are not acceptable for DE CMS as no data from the Maritime climate zone has been provided in the dossier.

The SE EPPO climate zone

AKO 600 SC applied solo on sunflower

Phytotoxicity symptoms after application of AKO 600 SC were no checked.

3.4.2. Effect on the yield of treated plants or plant product (KCP 6.4.2)

Potato

Influence of AKO 600 SC on the yield of potato was evaluated in selectivity research. The yield was evaluated on the basis of harvested potato quantity from one hectare (t/ha). The influence of the tested product on quantity of yield was evaluated in 10 field experiments in potato in Poland in 2023 and 2024. There weren't difference between the treatment objects and standard.

table 3.4.2.1-1 The influence of the AKO 600 SC on yield quantity [t/ha]

Crop code			potato yield t/ha												
Report code			A.T/2023/0 25/ZZ	A.T/2023/0 26/ZZ	AH/23/Z/27 /Gr/01	AH/23/Z/27 /Jab/02	AH/23/Z/27 /Ko/03	AH/24/Z/6/ Pr/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Dz/04				AH/24/Z/6/ Zl/05
Assessment date			02.10.2023	04.09.2023	29.09.2023	07.11.2023	20.09.2023	25.09.2024	27.09.2024	20.09.2024	20.09.2024				30.09.2024
Days after application DA-A			145 DA-A	111 DA-A	140 DA-A	175 DA-A	121 DA-A	139 DA-A	141 DA-A	146 DA-A	137 DA-A				139 DA-A
N o.	Name	Rate (L, kg/ha)						↓	↓	↓	↓	↓	Ave- rage	Mi n.	Ma x.
1	Untreated Check	-	63.00	42.63	48.12	34.30	51.07	28.45	31.33	31.75	31.43	31.23	39.33	28.45	63.00
2	AKO 600 SC	3.0	64.04	46.01	51.20	35.00	50.28	↓	↓	↓	↓	↓	49.31	35.00	64.04
3	AKO 600 SC	6.0	63.44	45.18	51.19	34.70	51.77	↓	↓	↓	↓	↓	49.26	34.70	63.44
4	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	64.22	45.46	-	-	-	28.38	31.03	39.22	31.91	32.65	38.98	28.38	64.22
5	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2 0.4	62.24	45.21	-	-	-	28.59	31.87	42.23	31.32	31.78	39.03	28.59	62.24
6	Bandur 600 SC	3.0	63.10	43.79	50.42	31.50	52.43	28.42	31.20	37.63	31.97	30.20	40.07	28.42	63.10
7	Bandur 600 SC	6.0	62.59	43.00	51.33	35.90	50.59	28.80	31.70	42.71	30.78	31.54	40.89	28.80	62.59
LSD(P=.05)			6.284	5.343	5.415	7.920	3.452	1.098	0.763	6.523	2.928	2.611			

Table 3.4-4: Relationship between phytotoxicity and yield.

In one trial there were phytotoxicity effects reports no. A.T/2023/025/ZZ. This effects didn't have any negative impact on the yield of potato.
No significant differences in **the yield** were noted.

Potato

Test report	Variety	Maximum phyto. at 1N rate (%) (DAA)		Maximum phyto. at 2N (or other) rate (%) (DAA)		Yield in the untreated control Absolute figures (%)	Yield at 1N as % of untreated		Yield at 2N (or other) rate as % of untreated	
		AKO 600 SC	Bandur 600 SC	AKO 600 SC	Bandur 600 SC		AKO 600 SC	Bandur 600 SC	AKO 600 SC	Bandur 600 SC
A.T/2023/025/ZZ	Skawa	0.6% (16 DA-A)	1.3% (16 DA-A)	2.0% (16 DA-A)	1.5% (16 DA-A)	63.00 (100%)	64.04 (101.7%)	63.10 (100.2%)	63.44 (100.7%)	62.59 (99.3%)

dRR point 3.4.2	Effect on the yield of treated plants or plant product
ZRMS conclusion: <u>The NE EPPO climate zone (PL)</u> <u>AKO 600 SC applied solo on potato</u> Effects on the yield of plants or plant products after application of AKO 600 SC were checked in 5 selectivity trials carried out in 2023, in PL. AKO 600 SC at the rates 1N (3 l/ha) and 2N (6 l/ha) had no negative effect on the yield of potato. <u>AKO 600 SC applied in mixture with Boa Pro 480 SC on potato</u> Effects on the yield of plants or plant products after application of AKO 600 SC plus Boa Pro 480 SC were tested in 7 selectivity trials carried out in 2023 and 2024, in PL. AKO 600 SC plus Boa Pro 480 SC at the rates 1N (2,0 l/ha plus 0,2 l/ha) and 2N (4 l/ha plus 0,4 l/ha) had no negative effect on the yield of potato. <u>The Maritime EPPO climate zone (DE)</u> <u>AKO 600 SC applied solo on potato</u> Effects on the yield of plants or plant products after application of AKO 600 SC were no tested in the Maritime EPPO climate zone. CMS is invited to decide whether data carried out in PL are acceptable for DE. Data are not acceptable for DE CMS as no data from the Maritime climate zone has been provided in the dossier. <u>The SE EPPO climate zone</u> <u>AKO 600 SC applied solo on sunflower</u> Effects on the yield of plants or plant products after application of AKO 600 SC were no tested.	

3.4.3. Effects on the quality of plants or plant products (KCP 6.4.3)

Potato

10 studies conducted in 2023 and 2024 in Poland on potato had no negative impact of AKO 600 SC on quality of potato yield. Influence of AKO 600 SC on the quality was evaluated in selectivity research. The influence of the tested product on quantity was evaluated in 10 field experiments. There weren't difference between the treatment objects and standard. Details of the data shows tables below.

table 3.4.3.1-1 The influence of the AKO 600 SC on quality of yield – weight of small tuber <35 mm [%/plot]

Crop code			potato - weight of small tuber <35 mm [%/plot]									
Report code			A.T/20 23/025/ ZZ	A.T/20 23/026/ ZZ	AH/23/ Z/27/Gr /01	AH/23/ Z/27/Ja b/02	AH/23/ Z/27/Ko /03	AH/24/ Z/6/Pr/ 01	AH/24/ Z/6/Br/ 02	AH/24/ Z/6/Gr/ 03	AH/24/ Z/6/Dz/ 04	AH/24/ Z/6/ZM/ 05
Assessment date			02.10.2 023	05.09.2 023	29.09.20 23	07.11.20 23	20.09.20 23	25.09.2 024	27.09.2 024	20.09.2 024	20.09.2 024	30.09.2 024
Days after application DA-A			145 DA-A	112 DA-A	140 DA-A	175 DA- A	121 DA- A	139 DA-A	141 DA-A	146 DA-A	137 DA-A	139 DA-A
No	Name	Rate (L, kg/ha)	%	%	%	%	%	%	%	%	%	%
1	Untreated Check	-	0.34	7.66	3.00	2.61	3.77	10.33	11.4	4.13	10.28	9.71
2	AKO 600 SC	3.0	0.05	5.59	4.00	2.32	2.86	1	1	1	1	1
3	AKO 600 SC	6.0	0.46	5.66	3.00	2.95	3.64	1	1	1	1	1
4	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.48	6.58	-	-	-	10.26	11.42	2.2	10.08	9.3
5	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2 0.4	0.57	6.14	-	-	-	10.27	11.06	2.75	9.79	9.56
6	Bandur 600 SC	3.0	0.11	5.65	4.00	2.44	2.64	10.4	11.42	1.54	9.81	10.5
7	Bandur 600 SC	6.0	0.34	5.01	3.00	2.88	2.28	10.2	10.98	2.63	10.29	9.7
LSD(P=.05)			0.593	2.011	2.500	0.920	1.891	0.666	0.605	1.875	1.253	1.156

table 3.4.3.1-2 The influence of the AKO 600 SC on quality of yield – weight of medium tuber 36-60 mm [%/plot]

Crop code			potato - weight of medium tuber 36-60 mm [%/plot]									
Report code			A.T/20 23/025/ ZZ	A.T/20 23/026/ ZZ	AH/23/ Z/27/Gr /01	AH/23/ Z/27/Ja b/02	AH/23/ Z/27/Ko /03	AH/24/ Z/6/Pr/ 01	AH/24/ Z/6/Br/ 02	AH/24/ Z/6/Gr/ 03	AH/24/ Z/6/Dz/ 04	AH/24/ Z/6/ZM/ 05
Assessment date			02.10.2 023	05.09.2 023	29.09.20 23	07.11.20 23	20.09.20 23	25.09.2 024	27.09.2 024	20.09.2 024	20.09.2 024	30.09.2 024
Days after application DA-A			145 DA-A	112 DA-A	140 DA-A	175 DA- A	121 DA- A	139 DA-A	141 DA-A	146 DA-A	137 DA-A	139 DA-A
No	Name	Rate (L, kg/ha)	%	%	%	%	%	%	%	%	%	%
1	Untreated Check	-	26.32	30.47	50.00	7.21	11.07	79.71	76.9	80.88	76.49	77.27
2	AKO 600 SC	3.0	26.3	32.58	57.00	7.93	9.33	1	1	1	1	1
3	AKO 600 SC	6.0	29.49	34.27	57.00	7.65	10.72	1	1	1	1	1
4	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	18.14	32.06	-	-	-	79.41	75.9	63.41	77.15	78.59
5	AKO 600 SC	4.0 +	24.92	32.26	-	-	-	79.62	77.07	71.88	77.32	78.15

	+ Boa Pro 480 EC	0.2 0.4										
6	Bandur 600 SC	3.0	31.22	30.43	46.00	7.71	10.60	79.46	76.79	68.38	77.63	75.85
7	Bandur 600 SC	6.0	27.23	32.19	45.00	7.33	10.70	80.12	76.71	68.88	76.32	77.89
LSD(P=.05)			13.073	3.698	20.400	1.760	1.245	1.386	0.994	19.207	2.317	2.459

table 3.4.3.1-3 The influence of the AKO 600 SC on quality of yield – weight of medium tuber >60 mm [%/plot]

Crop code			potato - weight of large tuber >60 mm [%/plot]									
Report code			A.T/2023/025/ZZ	A.T/2023/026/ZZ	AH/23/Z/27/Gr/01	AH/23/Z/27/Jab/02	AH/23/Z/27/Ko/03	AH/24/Z/6/Pr/01	AH/24/Z/6/Br/02	AH/24/Z/6/Gr/03	AH/24/Z/6/Dz/04	AH/24/Z/6/Zl/05
Assessment date			02.10.2023	05.09.2023	29.09.2023	07.11.2023	20.09.2023	25.09.2024	27.09.2024	20.09.2024	20.09.2024	30.09.2024
Days after application DA-A			145 DA-A	112 DA-A	140 DA-A	175 DA-A	121 DA-A	139 DA-A	141 DA-A	146 DA-A	137 DA-A	139 DA-A
No.	Name	Rate (L, kg/ha)	%	%	%	%	%	%	%	%	%	%
1	Untreated Check	-	73.34	61.87	48.00	30.65	37.74	9.96	11.7	15.5	13.23	13.03
2	AKO 600 SC	3.0	73.65	61.83	40.00	31.08	39.79					
3	AKO 600 SC	6.0	70.05	60.07	40.00	30.43	39.16					
4	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	81.39	61.36	-	-	-	10.34	12.68	34.39	12.76	12.12
5	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.24	74.51	61.60	-	-	-	10.11	11.87	25.38	12.89	12.3
6	Bandur 600 SC	3.0	68.67	63.93	51.00	26.84	410.05	10.14	11.79	30.08	12.56	13.65
7	Bandur 600 SC	6.0	72.43	62.80	52.00	32.25	39.36	9.68	12.31	28.5	13.4	12.41
LSD(P=.05)			13.256	3.945	21.800	8.963	1.717	1.023	0.69	19.908	1.429	1.580

table 3.4.3.1-4 The influence of the AKO 600 SC on quality of yield – starch content %

Crop code			potato - starch content %		Average	Min.	Max.
Report code			A.T/2023/025/ZZ	A.T/2023/026/ZZ			
Assessment date			12.10.2023	11.09.2023			
Days after application DA-A			155 DA-A	118 DA-A			
No.	Name	Rate (L, kg/ha)					
1	Untreated Check	-	20.60	17.53	19.07	17.53	20.60
2	AKO 600 SC	3.0	20.68	18.38	19.53	18.38	20.68
3	AKO 600 SC	6.0	20.99	17.99	19.49	17.99	20.99
4	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	20.4	17.93	19.17	17.93	20.40
5	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.24	20.65	18.74	19.70	18.74	20.65
6	Bandur 600 SC	3.0	20.40	18.71	19.56	18.71	20.40
7	Bandur 600 SC	6.0	21.14	17.88	19.51	17.88	21.14
LSD(P=.05)			1.159	1.129			

dRR point 3.4.3	Effect on the quality of plants or plant products
ZRMS conclusion: <u>The NE EPPO climate zone (PL)</u> <u>AKO 600 SC applied solo on potato</u> The quality of plants or plant products after application of AKO 600 SC were tested in 5 selectivity trials carried out in 2023, in PL. The following quality parameters of the potato were tested: content of starch [%]- 2 trials, weight of small tuber < 35 (30) mm – 5 trials, weight of medium tuber 36-60 (30-50) mm – 5 trials and weight of large tuber < 60 (50)mm – 5 trials. AKO 600 SC at the rates 1N (3 l/ha) and 2N (6 l/ha) had no negative effect on the quality parameters of tested crop. <u>AKO 600 SC applied in mixture with Boa Pro 480 SC on potato</u> The quality of plants or plant products after application of AKO 600 SC plus Boa Pro 480 SC were tested in 7 selectivity trials carried out in 2023 and 2024, in PL. The following quality parameters of the potato were tested: content of starch [%]- 2 trials, weight of small tuber < 35 (30) mm – 7 trials, weight of medium tuber 36-60 (30-50) mm – 7 trials and weight of large tuber < 60 (50)mm – 7 trials. AKO 600 SC plus Boa Pro 480 SC at the rates 1N (2,0 l/ha plus 0,2 l/ha) and 2N (4 l/ha plus 0,4 l/ha) had no negative effect on the quality parameters of tested crop. <u>The Maritime EPPO climate zone (DE)</u> <u>AKO 600 SC applied solo on potato</u> The quality of plants or plant products after application of AKO 600 SC were no tested in the Maritime EPPO climate zone. CMS is invited to decide whether data carried out in PL are acceptable for DE. Data are not acceptable for DE CMS as no data from the Maritime climate zone has been provided in the dossier. <u>The SE EPPO climate zone (HU, SK, RO)</u> <u>AKO 600 SC applied solo on sunflower</u> The quality of plants or plant products after application of AKO 600 SC were no tested.	

3.4.4. Effects on transformation processes (KCP 6.4.4)

Lack of additional tests in this range. Active substances comprising in this product have been applied for many years, not only in Poland but also in the other countries of Europe.

According *EPPO 1/243 (2) Effects of plant protection products on transformation processes* and Section B7 additional study is not required.

dRR point 3.4.4	Effects on transformation processes
ZRMS conclusion: The Applicant presented no data on effects on transformation processes. The active substance has no fungicidal activity so there is no likelihood that AKO 600 SC could have any effect on the transformation processes (fermentation of potatoes for spirit production).	

3.4.5. Impact on treated plants or plant products to be used for propagation (KCP 6.4.5)

Lack of additional tests in this range. According to EPPO standard PP 1/135 'Phytotoxicity assessment' in case of pre-emergence herbicide there no data on plant parts for propagation are required. In the course of studies carried out in Poland in the season of 2023 and 2024 on product AKO 600 SC the herbicide has not been observed to have any significant influence on yield and yield quality of potato. What is more, there have been no phytotoxicity symptoms accounted for in various cultivars of potato. In that case no further testing is needed.

Summary and conclusion

Herbicide AKO 600 SC has demonstrated good crop tolerance to potato. Therefore concluded that AKO 600 SC is safe usage at proposed rate and this support the label claim for the use in potato.

Undesirable effects are not expected on part of plants used for propagating purposes.

Based on submitted data the following regulation on the label is proposed:

Recommended dose at:

in potato at spring applied once per season preemergence BBCH 01-08:

solo at the maximum dose 1.95-3.0 L/ha which are corresponding to 1.17-1.8 kg a.s./ha of aclonifen per application for the control of most important weed species.

in tank mix with Boa Pro 480 EC (clomazon 480 g/L) at the maximum dose 0.8-2.0 L/ha AKO 600 SC +0.2 L/ha Boa Pro 480 EC which are corresponding to 1.5-1.8 kg a.s./ha of aclonifen and 0.096 kg a.s./ha of clomazon per application for the control of most important weed species.

3.5. Observations on other undesirable or unintended side-effects (KCP 6.5)

3.5.1. Impact on succeeding crops (KCP 6.5.1)

According to EPPO guidance PP 1/207 worst case ER₁₀ from Seedling Emergence study (P. Pieczka, Study code: G-40-23 and G-09-24):

Table 3.5-1: Recalculated ER₁₀-value for AKO 600 SC

Crop	Worst case ER ₁₀ from seedling emergence study [mL/ha]	Recalculated ER ₁₀ to g/ha using product's density = 1.218 g/mL	Recalculated EC ₁₀ from g/ha to mg/kg soil using factor 750 (5 cm depth and 1.5 g/cm soil's density)
<i>Helianthus annuus</i>	3000	3654.00	4.8720
<i>Brassica oleracea var. capitata</i>	2.41	2.94	0.0039
<i>Pisum sativum</i>	3000	3654.00	4.8720
<i>Daucus carota</i>	127.21	154.94	0.2066
<i>Allium cepa</i>	420.87	512.62	0.6835
<i>Avena sativa</i>	329.52	401.36	0.5351
<i>Beta vulgaris</i>	27.22	33.15	0.0442
<i>Brassica napus</i>	1.77	2.16	0.0029
<i>Zea mays</i>	3000	3654.00	4.8720

Predicted Environmental Concentrations (PEC) for the individual actives are performed with equations (1) and (2) (cfr. EPPO guidance PP 1/207(2)):

$$(1) \text{PEC}_{\text{ini}} = \frac{A \cdot (1 - \text{fint})}{100 \cdot d \cdot b}$$

$$(2) \text{PEC}_{\text{act}}(t) = \text{PEC}_{\text{ini}} \cdot e^{-k \cdot t} = \text{PEC}_{\text{ini}} \cdot e^{-t \cdot \ln 2 / \text{DT50}}$$

Whereby A = application rate (g active/ha), fint = fraction intercepted by crop cover (0% for potato at BBCH 01-08), d = depth of soil layer (cm) and bd = bulk density of soil.

DT50 = 195 days –worst case scenario for product's DT50

Table 3.5-2: PEC-values and TER-calculation of **acelonifen** based on **EC₁₀**-values – potato

Succeeding crop(1)	Days after application(2)	EC ₁₀ mg/kg soil (3)	PEC(4)				TER(5)			
			mg/kg soil e.g. 5 cm	mg/kg soil e.g. 10 cm	mg/kg soil e.g. 20 cm	mg/kg soil e.g. 30 cm	EC ₁₀ /PE C e.g. 5 cm	EC ₁₀ /PE C e.g. 10 cm	EC ₁₀ /PE C e.g. 20 cm	EC ₁₀ /PE C e.g. 30 cm
<i>Helianthus annuus</i>	1	4.8720	2.4000	1.2000	0.6000	0.4000	2.03000	4.06000	8.12000	12.18000
<i>Brassica oleracea</i> var. <i>capitata</i>	1	0.0039	2.4000	1.2000	0.6000	0.4000	0.00163	0.00326	0.00652	0.00978
	1300		0.0236	0.0118	0.0059	0.0039	0.16568	0.33135	0.66270	0.99405
	1310		0.0228	0.0114	0.0057	0.0038	0.17167	0.34334	0.68668	1.03002
	1410		0.0160	0.0080	0.0040	0.0027	0.24495	0.48989	0.97978	
	1420		0.0154	0.0077	0.0039	0.0026	0.25381	0.50762	1.01524	
	1610		0.0078	0.0039	0.0020	0.0013	0.49868	0.99735		
	1620		0.0076	0.0038	0.0019	0.0013	0.51672	1.03344		
	1800		0.0040	0.0020	0.0010	0.0007	0.97978			
	1810		0.0039	0.0019	0.0010	0.0006	1.01524			
<i>Pisum sativum</i>	1	4.8720	2.4000	1.2000	0.6000	0.4000	2.03000	4.06000	8.12000	12.18000
<i>Daucus carota</i>	1	0.2066	2.4000	1.2000	0.6000	0.4000	0.08608	0.17216	0.34432	0.51647
	180		1.2657	0.6329	0.3164	0.2110	0.16322	0.32644	0.65287	0.97931
	190		1.2215	0.6108	0.3054	0.2036	0.16912	0.33825	0.67570	1.01475
	290		0.8561	0.4281	0.2140	0.1427	0.24131	0.48263	0.96525	
	300		0.8262	0.4131	0.2066	0.1377	0.25005	0.50009	1.00018	
	490		0.4205	0.2103	0.1051	0.0701	0.49128	0.98256		
	500		0.4058	0.2029	0.1015	0.0676	0.50906	1.01812		
	680		0.2140	0.1070	0.0535	0.0357	0.96525			
	690		0.2066	0.1033	0.0516	0.0344	1.00018			
<i>Allium cepa</i>	1	0.6835	2.4000	1.2000	0.6000	0.4000	0.28479	0.56958	1.13915	1.70873
	150		1.4082	0.7041	0.3520	0.2347	0.48538	0.97077		
	160		1.3590	0.6795	0.3397	0.2265	0.50295	1.00589		
	350		0.6917	0.3458	0.1729	0.1153	0.98817			
	360		0.6675	0.3338	0.1669	0.1113	1.02393			
<i>Avena sativa</i>	1	0.5351	2.4000	1.2000	0.6000	0.4000	0.22298	0.44595	0.89190	1.33785
	30		2.1572	1.0786	0.5393	0.3595	0.24807	0.49613	0.99227	
	40		2.0819	1.0410	0.5205	0.3470	0.25704	0.51409	1.02817	

Succeeding crop(1)	Days after applica-tion(2)	EC ₁₀ mg/kg soil (3)	PEC(4)				TER(5)			
			mg/kg soil e.g. 5 cm	mg/kg soil e.g. 10 cm	mg/kg soil e.g. 20 cm	mg/kg soil e.g. 30 cm	EC ₁₀ /PE C e.g. 5 cm	EC ₁₀ /PE C e.g. 10 cm	EC ₁₀ /PE C e.g. 20 cm	EC ₁₀ /PE C e.g. 30 cm
	220		1.0980	0.5490	0.2745	0.1830	0.48739	0.97479		
	230		1.0596	0.5298	0.2649	0.1766	0.50503	1.01006		
	420		0.5393	0.2697	0.1348	0.0899	0.99227			
	430		0.5205	0.2602	0.1301	0.0867	1.02817			
<i>Beta vul-garis</i>	1	0.0442	2.4000	1.2000	0.6000	0.4000	0.01842	0.03684	0.07368	0.11051
	610		0.2745	0.1372	0.0686	0.0457	0.16104	0.32209	0.64418	0.96627
	620		0.2649	0.1325	0.0662	0.0442	0.16687	0.33374	0.66749	1.00123
	730		0.1792	0.0896	0.0448	0.0299	0.24672	0.49343	0.98686	
	740		0.1729	0.0865	0.0432	0.0288	0.25564	0.51129	1.02257	
	920		0.0912	0.0456	0.0228	0.0152	0.48474	0.96948		
	930		0.0880	0.0440	0.0220	0.0147	0.50228	1.00456		
	1120		0.0448	0.0224	0.0112	0.0075	0.98686			
	1130		0.0432	0.0216	0.0108	0.0072	1.02257			
<i>Brassica napus</i>	1	0.0029	2.4000	1.2000	0.6000	0.4000	0.00120	0.00240	0.00479	0.00719
	1380		0.0178	0.0089	0.0044	0.0030	0.16170	0.32340	0.64681	0.97021
	1390		0.0172	0.0086	0.0043	0.0029	0.16755	0.33511	0.67021	1.00532
	1500		0.0116	0.0058	0.0029	0.0019	0.24772	0.49544	0.99089	
	1510		0.0112	0.0056	0.0028	0.0019	0.25669	0.51337	1.02674	
	1690		0.0059	0.0030	0.0015	0.0010	0.48671	0.97343		
	1700		0.0057	0.0028	0.0014	0.0009	0.50433	1.00865		
	1890		0.0029	0.0015	0.0007	0.0005	0.99089			
	1900		0.0028	0.0014	0.0007	0.0005	1.02674			
<i>Zea mays</i>	1	4.8720	2.4000	1.2000	0.6000	0.4000	2.03000	4.06000	8.12000	12.18000

- (1) possible following crops in a regular crop rotation
(2) adequate value for following crop in a regular crop rotation
(3) NOER-values of succeeding crops
(4) PEC (soil depth e.g. 5/20 cm)
(5) TER (soil depth e.g. 5/20 cm)

The TER values of AKO 600 SC do exceed a trigger value 1 , then no further trials are required when:

Crop	Date of sowing	Crop rotation
		DT50= 195
<i>Helianthus annuus</i>	April	Normal crop rotation without ploughing before sowing
<i>Brassica oleracea var. capitata</i>	April	Normal crop rotation every fourth season after ploughing on 30 cm depth before sowing
<i>Pisum sativum</i>	March/April	Normal crop rotation without ploughing before sowing
<i>Daucus carota</i>	April	Normal crop rotation after ploughing on 20 cm depth before sowing
<i>Allium cepa</i>	April	Normal crop rotation without ploughing before sowing
<i>Avena sativa</i>	March	Normal crop rotation after ploughing on 20-10 cm depth before sowing
<i>Beta vulgaris</i>	April	Normal crop rotation every second season after ploughing on 30 cm

		depth before sowing
<i>Brassica napus</i>	August	Normal crop rotation every third fourth season after ploughing on 30 cm depth before sowing
<i>Zea mays</i>	April/May	Normal crop rotation without ploughing before sowing

Labelling in Succeeding crop sections:

In normal crop rotation as a succeeding crop you can sow:

- *Fabaceae* crops, sunflower, maize and bulbs-onion-vegetables – without ploughing before sowing,

- root vegetables carrot after ploughing on 20 cm depth before sowing and spring cereals oat – after ploughing on 20 10 cm depth before sowing.

In normal crop rotation every second season after ploughing on 30 cm depth before sowing you can sow root crops: beet.

In normal crop rotation every third season after ploughing on 30 cm depth before sowing you can sow winter oilseed rape.

In normal crop rotation every fourth season after ploughing on 30 cm depth before sowing you can sow brassica vegetables-winter oilseed rape and cabbage.

In case of crop failure and without ploughing before sowing you can sow *Fabaceae* crops, sunflower and maize and potato.

dRR point 3.5.1	Impact on succeeding crops
ZRMS conclusion: The corrected by the ZRMS conclusions concerning impact of AKO 600 SC on succeeding crops can be acceptable and should be placed on the label. CMS are invited to take the national measures concerning impact of AKO 600 SC on succeeding crops.	

3.5.2. Impact on other plants including adjacent crops (KCP 6.5.2)

No specific studies were conducted to fill this data point.

According to EPPO 1/256 - Decision-support scheme for the risk assessment for adjacent crops - Toxicity values are compared with predicted environmental concentrations to develop a Toxicity:Exposure-Ratio (TER is calculated as the ED50-value divided by the estimated drift value Appendix 2. Progression to the next tier is warranted if the safety margin is not met, while testing is stopped if the safety margin is met or exceeded.

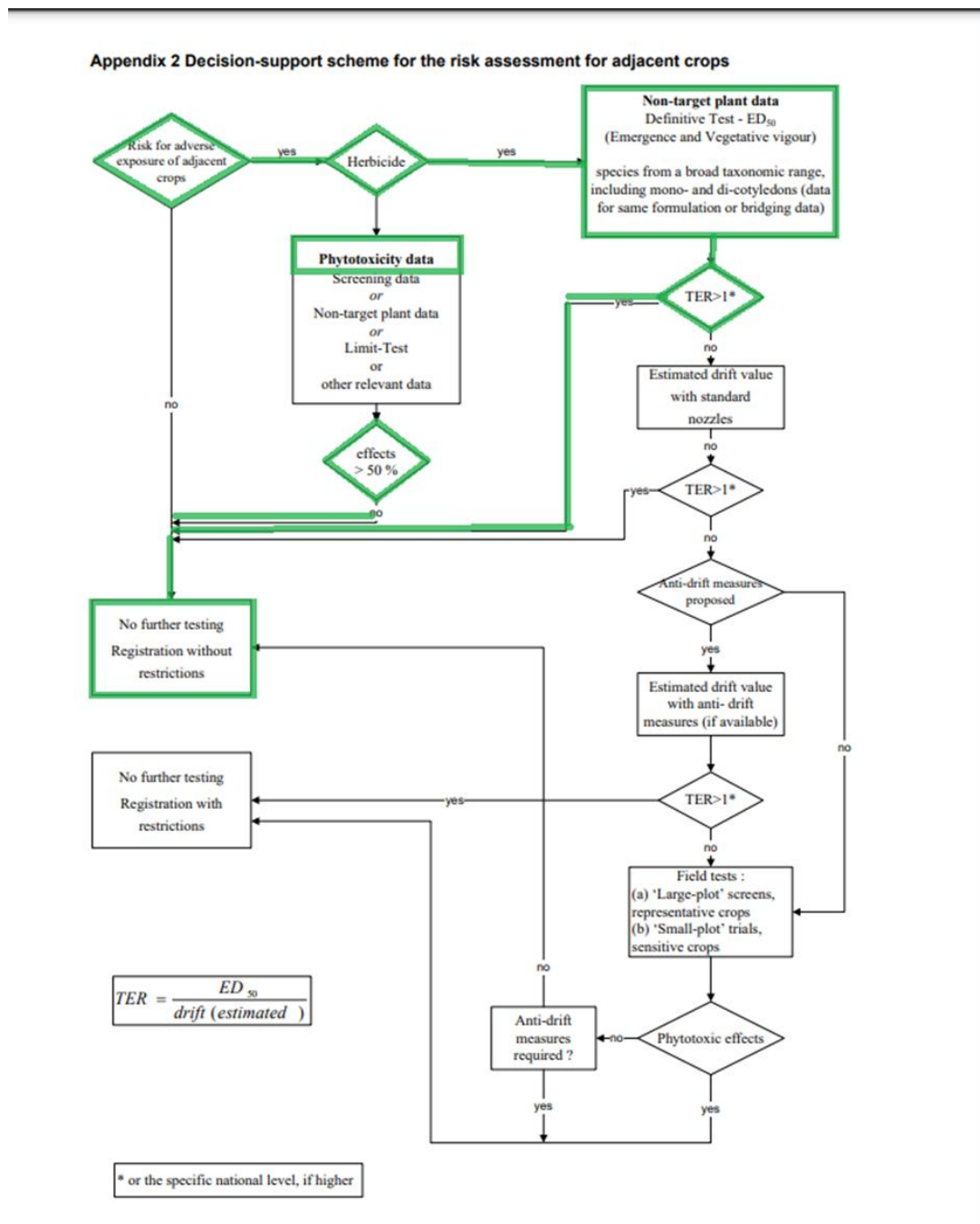
Tier 0: If no adverse exposure of adjacent crops will occur under field conditions (e.g. seed treatment, use of granules, application by watering can) no further testing is necessary.

Tier 1: If a relevant exposure is likely. If the plant protection product causes no phytotoxic symptoms on the plant species tested, no further testing is necessary.

Tier 2: If phytotoxicity is observed, dose-response relationships for species representing plant families for which significant negative activity has been found should be generated to quantify the level of effect using both soil and foliar exposure scenarios.

AKO 600 SC analyse for decision if further testing is necessary.

According EPPO 1/256, Appendix 2 Decision-support scheme for the risk assessment for adjacent crops on green applicant marked path of analyse.



AKO 600 SC is herbicide so there is risk for adverse exposure of adjacent crops. When analysing phytotoxicity AKO 600 SC in potato there was only one report with the phytotoxicity symptoms in potato in all phytotoxicity trials conducted in Poland.

In all efficacy trails no effect on non-target organisms was observed.

When phytotoxicity effects are below 50% no further testing is needed. Registration without restrictions.

When Non target plant data TER >1 no further testing is needed. Registration without restrictions.

According to P. Pieczka, Study code: G-40-23 and G-09-24 please find results for seedling emergence and vegetative vigour below.

Assessment of the risk for non-target plants due to the use of AKO 600 SC in potato

Intended use	Group no. 1	
Active substance/product	AKO 600 SC	
Application rate (g/ha)	1 x 3654 g/ha	

MAF		1			
Test species	ER ₅₀ (g of the product /ha)	Drift rate	PER _{off-field} (g/ha)	TER criterion: TER ≥ 5	
<i>Helianthus annuus</i>	3654	0.0277	101.22	36.1	21 days Seedling Emergence and Seedling Growth
<i>Brassica oleracea</i> <i>var. capitata</i>	115.6856	0.0277	101.22	1.14	21 days Seedling Emergence and Seedling Growth
<i>Pisum sativum</i>	3654	0.0277	101.22	36.1	21 days Seedling Emergence and Seedling Growth
<i>Daucus carota</i>	3654	0.0277	101.22	36.1	21 days Seedling Emergence and Seedling Growth
<i>Allium cepa</i>	3654	0.0277	101.22	36.1	21 days Seedling Emergence and Seedling Growth
<i>Avena sativa</i>	590.1454	0.0277	101.22	5.83	21 days Seedling Emergence and Seedling Growth
<i>Beta vulgaris</i>	138.9738	0.0277	101.22	1.37	21 days Seedling Emergence and Seedling Growth
<i>Brassica napus</i>	62.88534	0.0277	101.22	0.62	21 days Seedling Emergence and Seedling Growth
<i>Zea mays</i>	3654	0.0277	101.22	36.1	21 days Vegetative Vigour
<i>Helianthus annuus</i>	3654	0.0277	101.22	36.1	21 days Vegetative Vigour
<i>Brassica oleracea</i> <i>var. capitata</i>	122.9206	0.0277	101.22	1.21	21 days Vegetative Vigour
<i>Pisum sativum</i>	3654	0.0277	101.22	36.1	21 days Vegetative Vigour
<i>Daucus carota</i>	3654	0.0277	101.22	36.1	21 days Vegetative Vigour
<i>Allium cepa</i>	2217.661	0.0277	101.22	21.91	21 days Vegetative Vigour
<i>Avena sativa</i>	491.597	0.0277	101.22	4.86	21 days Vegetative Vigour
<i>Beta vulgaris</i>	17.52702	0.0277	101.22	0.17	21 days Vegetative Vigour
<i>Brassica napus</i>	33.70206	0.0277	101.22	0.33	21 days Vegetative Vigour
<i>Zea mays</i>	3602.722	0.0277	101.22	35.59	21 days Vegetative Vigour

MAF: Multiple application factor; PER: Predicted environmental rate; TER: toxicity to exposure ratio. TER values shown in bold fall below the relevant trigger

In order to reduce the off-field exposure, risk mitigation measures can be implemented. These correspond to unsprayed in-field buffer strips of a given width and/or the usage of drift reducing nozzles. The results of the risk assessment using typical mitigation measures (no-spray buffer zones of 5 or 10 m; drift-reducing nozzles with reduction by 50 %, 75 %, or 90 %) are summarised in the following table.

Risk assessment for non-target terrestrial plants due to the use of AKO 600 SC in group no. 1 considering risk mitigation (in-field no-spray buffer zones, and drift-reducing nozzles)

Intended use		Group no. 1			
Active substance/product		AKO 600 SC			
Application rate (g/ha)		1 x 3654			
MAF		1			
Buffer strip (m)	Drift rate (%)	PER_{off-field} (g/ha)	PER_{off-field} 50 % drift red. (g/ha)	PER_{off-field} 75 % drift red. (g/ha)	PER_{off-field} 90 % drift red. (g/ha)
1	0.0277	101.22	50.61	25.305	10.122
5	0.0057	20.83	10.415	5.2075	2.083
10	0.0029	10.6	5.3	2.65	1.06
15	0.002	7.308	7.31	3.655	1.8275
20	0.0015	5.481	5.48	2.74	1.37
30	0.001	3.654	3.65	1.825	0.9125
40	0.0007	2.5578	2.56	1.28	0.64
50	0.0006	2.1924	2.19	1.095	0.5475
Toxicity value		TER = 0.17			
ER₅₀ = 17.53 g/ha		criterion: TER ≥ 5			
1	0.0277	0.17	0.35	0.69	1.73
5	0.0057	0.84	1.68	3.37	8.42
10	0.0029	1.65	3.31	6.62	16.54
15	0.002	2.4	4.8	9.59	23.98
20	0.0015	3.2	6.4	12.8	31.99
30	0.001	4.8	9.61	19.21	48.03
40	0.0007	6.85	13.7	27.39	68.48
50	0.0006	8	16.01	32.02	80.05

MAF: Multiple application factor; PER: Predicted environmental rates; TER: toxicity to exposure ratio. Criteria values shown in bold breach the relevant trigger.

In order to achieve an acceptable the off-field exposure (TER ≥ 5) and minimize of a risk for non-target plants, one of the following risk mitigation measures has to be implemented

- 5 m buffer zone with 90% nozzle reduction
- 10 m buffer zone with 75% nozzle reduction
- 20 m buffer zone with 50% nozzle reduction
- 40 m buffer zone with 0% nozzle reduction

For all data and details with assessment of the risk for non-target plants due to the use of AKO 600 SC please refer to section 9 Ecotoxicology point 9.10.

dRR point: 3.5.2	Studies are acceptable
The Applicant presented data obtained from 2 greenhouse trials carried out in line with OECD Guideline 227 (Vegetative vigour test and Seedling emergence test) and EPPO guideline PP 1/256(1) Effects on adjacent crops, on a representative range of monocotyledonous and dicotyledonous crop types. The lower amount of ER₅₀, being the worst case, was presented for <i>Beta vulgaris</i> - 17,53 g of the product/ha. Assessment of adverse impact of AKO 600 SC on other plants including adjacent crops were obtained by calculation of TER (Toxicity Exposure Ratio) values. The risk of adverse impact resulting from the pre - emergence application of AKO 600 SC SC was acceptable low (TER > 5) when: 5 m buffer zone with 90% nozzle reduction 10 m buffer zone with 75% nozzle reduction 20 m buffer zone with 50% nozzle reduction 40 m buffer zone with 0% nozzle reduction will be kept.	

Tank cleaning

According to Report I. Górka, Study code: ICB/107/2023 the effectiveness of cleaning was done regards to Efficacy Guideline 305:

Single rinse procedure.

- The bottle was inverted twice, then the bottle was shaken once and the suspension was poured out,
- 10 mL of tap water was added, the bottle was inverted twice, and the rinsing was poured out,
- 10 mL of acetonitrile was added and the bottle was shaken to coat all surfaces. The acetonitrile was analysed for the active substances content.

Double rinse procedure.

- The bottle was inverted twice, then the bottle was shaken once and the suspension was poured out,
- 10 mL of tap water was added, the bottle was inverted twice, and the rinsing was poured out,
- point b) was repeated,
- 10 mL of acetonitrile was added and the bottle was shaken to coat all surfaces. The acetonitrile was analysed for the active substances content.

Triple rinse procedure.

- The bottle was inverted twice, then the bottle was shaken once and the suspension poured out
- 10 mL of tap water was added, the bottle was inverted twice, and the rinsing was poured out
- point b) was repeated twice,
- 10 mL of acetonitrile was added and the bottle was shaken to coat all surfaces. The acetonitrile was analysed for the active substances content.

Single rinse procedure:

99.96 [%] acelonifen removed from the bottle

Double rinse procedure:

99.98 [%] acelonifen removed from the bottle

Triple rinse procedure:

99.99 [%] acelonifen removed from the bottle

Cleaning of equipment should be conducted according to the flowing procedure:

- Immediately after spraying drain tank completely. Any contamination on the outside of the spraying equipment should be removed by washing with clean water.
- Rinse inside of tank with clean water and flush through boom and hoses using at least one tenth of the spray tank volume. Drain completely.
- Fill the tank with clean water and add one of the cleaning agents recommended for clean-up of spraying equipment. Agitate for a minimum of 10 min. and then flush the boom and hoses with the

cleaning solution. Nozzles and filters should be removed and cleaned up separately with a recommended cleaning agent.

- Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume. Drain tank completely.
- AKO 600 SC is non-corrosive to equipment, non-flammable and non-volatile.

	Other/special studies Cleaning application equipment
ZRMS conclusion:	
On the label should be placed information about use of the cleaning agents recommended for clean-up of spraying equipment.	

3.5.3. Effects on beneficial and other non-target organisms (KCP 6.5.3)

Detailed studies on the possible adverse effects to beneficial organisms are submitted and summarised in Part B, Section 9 (Ecotoxicology).

Compatibility with current management practices including IPM

Not applicable

Summary and conclusion

Herbicide AKO 600 SC has demonstrated good crop tolerance to potato. Therefore concluded that AKO 600 SC is safe usage at proposed rate and this support the label claim for the use in potato.

Undesirable effects are not expected on succeeding crops, adjacent crop and beneficial organisms.

Use of AKO 600 SC according to the proposed GAP does not represent a hazard to rotational crops and does not justify a specific labelling. AKO 600 SC is not persistent in soil nor is it taken up by succeeding crops.

3.6. Other/special studies

Not applicable

3.7. List of test facilities including the corresponding certificates

Table 3.5-5: List of test facilities

Test facility	Address	Certificate (Yes or No)
A.T Sp. z o.o.	ul. Przemysłowa 3, 88-300 Mogilno, Poland	Yes
Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department	ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Yes

Test facility	Address	Certificate (Yes or No)
Agricola2000 Sp. z o.o.	ul. Akacjowa 14, 86-011 Wtelno, Poland	Yes

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 Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.2	Kamil Wołowicz	2023	Efficacy evaluation of herbicide AKO 600 SC when applied into potato to control of weeds, Poland, 2023 A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/021/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Kamil Wołowicz	2023	Efficacy evaluation of herbicide AKO 600 SC when applied into potato to control of weeds, Poland, 2023 A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/022/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Kamil Wołowicz	2023	Efficacy evaluation of herbicide AKO 600 SC when applied into potato to control of weeds, Poland, 2023 A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/023/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Kamil Wołowicz	2023	Efficacy evaluation of herbicide AKO 600 SC when applied into potato to control of weeds, Poland, 2023 A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/024/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Zł/01 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Gr/02 GEP - yes Unpublished		Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Jab/03 GEP - yes Unpublished	N	Chemiról Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Ry/04 GEP - yes Unpublished	N	Chemiról Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Ow/05 GEP - yes Unpublished	N	Chemiról Sp. z o.o.
KCP 6.2	Artur Strzeliński	2023	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Ko/06 GEP - yes Unpublished	N	Chemiról Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Z/01 GEP - yes Unpublished		Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Br/02 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Gr/03 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Dz/04 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Br/05 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeliński	2024	The evaluation efficacy of herbicide AKO 600	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Z/06 GEP - yes Unpublished		Sp. z o.o.
KCP 6.2	Artur Strzeński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Gr/07 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Artur Strzeński	2024	The evaluation efficacy of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Pr/08 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Dariusz Pańka	2024	Efficacy evaluation of AKO 600 SC + Boa Pro 480 EC against weeds in potato. Poland, 2024. Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland Report no.: EA24H241-PL01 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Dariusz Pańka	2024	Efficacy evaluation of AKO 600 SC + Boa Pro 480 EC against weeds in potato. Poland, 2024. Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland Report no.: EA24H241-PL02 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.2	Dariusz Pańka	2024	Efficacy evaluation of AKO 600 SC + Boa Pro 480 EC against weeds in potato. Poland, 2024. Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland Report no.: EA24H241-PL03 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4	Kamil Wołowicz	2023	Selectivity evaluation of herbicide AKO 600 SC when applied in to potato, Poland 2023. A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/025/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Kamil Wołowicz	2023	Selectivity evaluation of herbicide AKO 600 SC when applied in to potato, Poland 2023. A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland Report no.: A.T/2023/026/ZZ GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2023	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Gr/01 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2023	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Jab/02 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2023	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/23/Z/27/Ko/03 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2024	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes.	N	Chemiroł Sp. z o.o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Pr/01 GEP - yes Unpublished		
KCP 6.4	Artur Strzeliński	2024	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Br/02 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2024	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Gr/03 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2024	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Dz/04 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.4	Artur Strzeliński	2024	The evaluation selectivity of herbicide AKO 600 SC in the control on weeds in the cultivation on potatoes. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland Report no.: AH/24/Z/6/Zł/05 GEP - yes Unpublished	N	Chemiroł Sp. z o.o.
KCP 6.5	Pieczka P.	2024	Terrestrial Plant Test: Seedling Emergence and Seedling Growth Test Lukasiewicz Research Network – Institute of	N	PUH Chemiroł Sp. z o.o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Industrial Organic Chemistry, Branch Pszczyna Report no.: G-09-24 GLP - Yes Unpublished		
KCP 6.5	Pieczka P.	2024	Terrestrial Plant Test: Seedling Emergence and Seedling Growth Test Lukasiewicz Research Network – Institute of Industrial Organic Chemistry, Branch Pszczyna Report no.: G-40-23 GLP - Yes Unpublished	N	PUH Chemirol Sp. z o.o.
KCP 6.5	Górka I.	2023	Determination of physicochemical properties of CHR/H/AKO 600 SC ICB Pharma 10 Lema Street 43-600, Jaworzno POLAND Report no.: ICB/107/2023 GLP - Yes Unpublished	N	PUH Chemirol Sp. z o.o.

Appendix 2 Additional information provided by the applicant

Not applicable

Appendix 3 Summary of data on trials site and application details per use

Potato

Test report/ research number (1)	Trial location (2); Crop cultivar; F/G (3); N/A (4)	Testing Unit (5)	Test method (6); Plot size; Sample size (7)	Treatment			
				Growth stage (8)	Interval	Total number	Spray volume (L/ha)
A.T/2023/021/ZZ	Rakojady/ Poland potato/ Partner F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 2.5 x 6.0 = 15.0 m ²	BBCH 07-09	n/a	1	200 L/ha
A.T/2023/022/ZZ	Miława/ Poland potato/ Skawa F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 2.5 x 6.0 = 15.0 m ²	BBCH 03-07	n/a	1	300 L/ha
A.T/2023/023/ZZ	Mirosław/ Poland potato/ Vineta F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 2.5 x 6.0 = 15.0 m ²	BBCH 06-08	n/a	1	200 L/ha
A.T/2023/024/ZZ	Lichnowy/ Poland potato/ Boryna F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 2.5 x 6.0 = 15.0 m ²	BBCH 07-08	n/a	1	200 L/ha
AH/23/Z/27/ZI/01	Złotniki/ Poland potato/ Vineta F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
AH/23/Z/27/Gr/02	Gorzyń/ Poland potato/ Jurek F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.8 x 10.0 = 28.0 m ²	BBCH 01-08	n/a	1	300 L/ha
AH/23/Z/27/Jab/03	Jabłowo Pałuckie/ Poland potato/ Melody F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 6.0 = 18.0 m ²	BBCH 03-07	n/a	1	200 L/ha
AH/23/Z/27/Ry/04	Rycerzewo/ Poland potato/ Jelly F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 6.0 = 18.0 m ²	BBCH 07-09	n/a	1	300 L/ha
AH/23/Z/27/Ow/05	Owczary/ Poland potato/ Gala F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 5.0 = 15.0 m ²	BBCH 05-09	n/a	1	300 L/ha
AH/23/Z/27/Ko/06	Kopanie/ Poland potato/ Satina F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 5.0 = 15.0 m ²	BBCH 05-09	n/a	1	300 L/ha
AH/24/Z/6/ZI/01	Złotniki / Poland potato/ Red Lady F N	Poznań University of Life Sciences, Research and Education Center Gorzyń,	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 00-08	n/a	1	200 L/ha

		Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland					
AH/24/Z/6/Br/02	Brody / Poland potato/ Lord F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.5 x 10.0 = 25.0 m ²	BBCH 05-08	n/a	1	230 L/ha
AH/24/Z/6/Gr/03	Gorzyń / Poland potato/ Jurek F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.8 x 10.0 = 28.0 m ²	BBCH 05	n/a	1	200 L/ha
AH/24/Z/6/Dz/04	Dzierżąno / Poland potato/ Satina F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
AH/24/Z/6/Br/05	Brody / Poland potato/ Lord F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.5 x 10.0 = 25.0 m ²	BBCH 05-08	n/a	1	230 L/ha
AH/24/Z/6/ZI/06	Złotniki / Poland potato/ Red Lady F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
AH/24/Z/6/Gr/07	Gorzyń / Poland potato/ Jurek F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.8 x 10.0 = 28.0 m ²	BBCH 05	n/a	1	200 L/ha
AH/24/Z/6/Pr/08	Przybroda / Poland potato/ Riviera F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
EA24H241-PL01	Dąbrowa/ Poland potato/ Vineta F N	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	PP 1/51(3) 2.5 x 7.0 =17.5 m ²	BBCH 06-08	n/a	1	300 L/ha
EA24H241-PL02	Pilich / Poland potato/ Vineta F N	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	PP 1/51(3) 2.5 x 7.0 =17.5 m ²	BBCH 06-08	n/a	1	300 L/ha
EA24H241-PL03	Stary Dwór / Poland potato/ Gala F N	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	PP 1/51(3) 2.5 x 7.0 =17.5 m ²	BBCH 06-08	n/a	1	300 L/ha
A.T/2023/025/ZZ	Mława/ Poland potato/ Skawa F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 3.0 x 8.0 = 24.0 m ²	BBCH 03-07	n/a	1	200 L/ha
A.T/2023/026/ZZ	Lichnowy/ Poland potato/ Boryna F N	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	PP 1/51(3) 3.0 x 8.0 = 24.0 m ²	BBCH 07-08	n/a	1	300 L/ha

AH/23/Z/27/Gr/01	Gorzyń/ Poland potato/ Jurek F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.8 x 10.0 = 28.0 m ²	BBCH 01-08	n/a	1	300 L/ha
AH/23/Z/27/Jab/02	Jabłowo Pałuckie/ Poland potato/ Melody F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 8.0 = 24.0 m ²	BBCH 03-07	n/a	1	200 L/ha
AH/23/Z/27/Ko/03	Kopanie/ Poland potato/Satina F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 7.0 = 21.0 m ²	BBCH 05-09	n/a	1	300 L/ha
AH/24/Z/6/Pr/01	Przybroda/ Poland potato/Riviera F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
AH/24/Z/6/Br/02	Brody/ Poland potato/ Lord F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.5 x 10.0 = 25.0 m ²	BBCH 05-08	n/a	1	230 L/ha
AH/24/Z/6/Gr/03	Gorzyń/ Poland potato/ Jurek F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 2.8 x 10.0 = 28.0 m ²	BBCH 05	n/a	1	200 L/ha
AH/24/Z/6/Dz/04	Dzierżąno/ Poland potato/Satina F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha
AH/24/Z/6/ZI/05	Złotniki / Poland potato/ Red Lady F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	PP 1/51(3) 3.0 x 10.0 = 30.0 m ²	BBCH 08	n/a	1	200 L/ha

Notes:

- (1): test report number including the year of establishing the trial
- (2): precise place of the trial followed by the country
- (3): F= field trial, G=protected crop, specify
- (4): N=Natural infestation, A= Artificial inoculation
- (5): Trial responsible entity/ officially recognized organization
- (6): Test guideline used
- (7): Sample size per plot
- (8): Crop growth stage at application timing

A.T/2023/024/ZZ	potato/ Boryna CHEAL GALAP VIOAR POLCO FUMOF VERHE BRSNW STEME	CHEAL 10.0 GALAP 5.0 VIOAR 10.0 POLCO 5.0 FUMOF 5.0 VERHE 5.0 BRSNW 5.0 STEME 5.0	CHEAL BBCH 00 GALAP BBCH 00 VIOAR BBCH 00 POLCO BBCH 00 FUMOF BBCH 00 VERHE BBCH 00 BRSNW BBCH 00 STEME BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 1.4 2.0 2.5 3.0 0.8 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 16.05.2023 Assessment date: 16.05.2023 02.06.2023 13.06.2023 21.06.2023 03.07.2023
AH/23/Z/27/ZI/01	potato/ Vineta ECHCG VIOAR STEME CHEAL MATMA BRSNW	ECHCG 6.3 VIOAR 7.0 STEME 5.5 CHEAL 5.8 MATMA 5.0 BRSNW 6.5	ECHCG BBCH 00 VIOAR BBCH 00 STEME BBCH 00 CHEAL BBCH 00 MATMA BBCH 00 BRSNW BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 11.05.2023 Assessment date: 18.05.2023 25.06.2023 08.06.2023 06.07.2023
AH/23/Z/27/Gr/02	potato/ Jurek ECHCG CHEAL GALAP AMARE THLAR POLCO	ECHCG 7.5 CHEAL 8.5 GALAP 6.0 AMARE 5.5 THLAR 5.5 POLCO 5.3	ECHCG BBCH 00 CHEAL BBCH 00 GALAP BBCH 00 AMARE BBCH 00 THLAR BBCH 00 POLCO BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 12.05.2023 Assessment date: 19.05.2023 26.05.2023 09.06.2023 07.07.2023
AH/23/Z/27/Jab/03	potato/ Melody VIOAR MATMA AMARE POAAN	VIOAR 5.8 MATMA 5.0 AMARE 5.3 POAAN 6.0	VIOAR BBCH 00 MATMA BBCH 00 AMARE BBCH 00 POAAN BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 16.05.2023 Assessment date: 06.06.2023 20.06.2023 22.07.2023
AH/23/Z/27/Ry/04	potato/ Jelly MATMA VIOAR AMARE POAAN	MATMA 6.0 VIOAR 5.5 AMARE 5.0 POAAN 7.0	MATMA BBCH 00 VIOAR BBCH 00 AMARE BBCH 00 POAAN BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 15.05.2023 Assessment date: 29.05.2023 12.06.2023 19.07.2023

AH/23/Z/27/Ow/05	potato/ Gala STEME GAETE AMARE GASPA POLCO	STEME 5.5 GAETE 6.0 AMARE 5.3 GASPA 7.5 POLCO 5.0	STEME BBCH 01-09 GAETE BBCH 01-09 AMARE BBCH 01-09 GASPA BBCH 01-09 POLCO BBCH 01-09	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 20.05.2023 Assessment date: 20.05.2023 03.06.2023 16.06.2023 17.07.2023
AH/23/Z/27/Ko/06	potato/ Satina STEME GAETE GASPA POLCO	STEME 5.0 GAETE 7.0 GASPA 6.0 POLCO 6.3	STEME BBCH 01-09 GAETE BBCH 01-09 GASPA BBCH 01-09 POLCO BBCH 01-09	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 22.05.2023 Assessment date: 22.05.2023 05.06.2023 19.06.2023 17.07.2023
AH/24/Z/6/ZI/01	potato/ Red Lady THLAR POAAN	THLAR 6.5 POAAN 5.8	THLAR BBCH 00 POAAN BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 14.05.2024 Assessment date: 23.05.2024 06.06.2024 10.07.2024 02.09.2024
AH/24/Z/6/Br/02	potato/ Lord THLAR POAAN	THLAR 6.8 POAAN 9.5	THLAR BBCH 00 POAAN BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 09.05.2024 Assessment date: 16.05.2024 30.05.2024 02.07.2024 29.08.2024
AH/24/Z/6/Gr/03	potato/ Jurek THLAR POAAN	THLAR 7.8 POAAN 8.8	THLAR BBCH 00 POAAN BBCH 00	AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC AKO 600 SC	0.8 1.4 2.0 2.5 3.0	Bandur 600 SC	3.0	Application date: 27.04.2024 Assessment date: 13.05.2024 27.05.2024 08.07.2024 26.08.2024
AH/24/Z/6/Dz/04	potato/ Satina CHEAL VIOAR	CHEAL 5.0 VIOAR 5.8 STEME 5.8 ECHCG 5.8	CHEAL BBCH 00 VIOAR BBCH 00 STEME BBCH 00 ECHCG BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 06.05.2024 Assessment date: 16.05.2024

	STEME ECHCG POLCO	POLCO 6.0	POLCO BBCH 00					30.05.2024 02.07.2024 29.08.2024
AH/24/Z/6/Br/05	potato/ Lord AMARE THLAR POAAN GASPA	AMARE 6.0 THLAR 8.0 POAAN 6.0 GASPA 5.3	AMARE BBCH 00 THLAR BBCH 00 POAAN BBCH 00 GASPA BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 09.05.2024 Assessment date: 16.05.2024 30.05.2024 02.07.2024 29.08.2024
AH/24/Z/6/Zl/06	potato/ Red Lady AMARE THLAR POAAN GAETE	AMARE 6.3 THLAR 7.3 POAAN 8.3 GAETE 8.8	AMARE BBCH 00 THLAR BBCH 00 POAAN BBCH 00 GAETE BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 14.05.2024 Assessment date: 23.05.2024 06.06.2024 10.07.2024 02.09.2024
AH/24/Z/6/Gr/07	potato/ Jurek AMARE THLAR POAAN GAETE	AMARE 6.8 THLAR 6.8 POAAN 6.8 GAETE 5.3	AMARE BBCH 00 THLAR BBCH 00 POAAN BBCH 00 GAETE BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 27.04.2024 Assessment date: 13.05.2024 27.05.2024 08.07.2024 26.08.2024
AH/24/Z/6/Pr/08	potato/ Riviera STEME ECHCG POLCO GALAP	STEME 7.0 ECHCG 5.0 POLCO 7.3 GALAP 9.0	STEME BBCH 00 ECHCG BBCH 00 POLCO BBCH 00 GALAP BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 09.05.2024 Assessment date: 16.05.2024 30.05.2024 02.07.2024 29.08.2024
EA24H241-PL01	potato/ Vineta CHEAL VIOAR ECHCG STEME	CHEAL 7.0 VIOAR 6.5 ECHCG 7.0 STEME 6.5	CHEAL BBCH 00 VIOAR BBCH 00 ECHCG BBCH 00 STEME BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 17.06.2024 Assessment date: 29.06.2024 18.07.2024 01.08.2024
EA24H241-PL02	potato/ Vineta	AMARE 8.3 THLAR 8.3	AMARE BBCH 00 THLAR BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2	Bandur 600 SC	3.0	Application date: 17.06.2024

	AMARE THLAR GASPA POAAN	GASPA 8.3 POAAN 8.5	GASPA BBCH 00 POAAN BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	1.4 + 0.2 2.0 + 0.2			Assessment date: 29.06.02024 18.07.2024 01.08.2024
EA24H241-PL03	potato/ Gala POLCO BRSNW MATMA POLPE	POLCO 7.0 BRSNW 7.3 MATMA 4.3 POLPE 5.0	POLCO BBCH 00 BRSNW BBCH 00 MATMA BBCH 00 POLPE BBCH 00	AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC + Boa Pro 480 EC AKO 600 SC+ Boa Pro 480 EC	0.8 + 0.2 1.2 + 0.2 1.4 + 0.2 2.0 + 0.2	Bandur 600 SC	3.0	Application date: 19.06.2024 Assessment date: 29.06.02024 18.07.2024 01.08.2024

Notes:

- 1): Test report number including the year of establishing the trial
- (2): Plant part assessed and criteria for assessment
- (3): efficacy or intended effect
- (4): Relevant conclusions on effectiveness

Appendix 5 Summary of detailed data on herbicide effectiveness trials

Table 1. The efficacy of AKO 600 SC in control of CHEAL in potato – assessment at weeds stage BBCH 12-14

Pest code			CHEAL									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	A.T/2023/024/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	EA24H241- PL01			
Assessment date			07.06.2023	01.06.2023	13.06.2023	25.05.2023	26.05.2023	16.05.2024	29.06.2024			
Days after application DA-A			28 DA-A	15 DA-A	28 DA-A	14 DA-A	14 DA-A	10 DA-A	12 DA-A	Average	Min	Max.
weeds density pcs/m²			5.0	5.0	10.0	5.8	7.8	5.0	9.5	6.9	5.0	10.0
No	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	86.00	50.00	90.80	45.00	62.50			66.86	45.00	90.80
3	AKO 600 SC	1.4	91.50	55.00	97.50	47.50	62.50			70.80	47.50	97.50
4	AKO 600 SC	2.0	98.00	76.30	98.50	55.00	57.50			77.06	55.00	98.50
5	AKO 600 SC	2.5	98.00	73.80	98.50	57.50	57.50			77.06	57.50	98.50
6	AKO 600 SC	3.0	98.00	86.30	100.00	60.00	62.50			81.36	60.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	82.50	93.30	-	-	57.50	80.00	78.33	57.50	93.30
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						67.50	86.30	76.90	67.50	86.30
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						73.80	95.00	84.40	73.80	95.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	88.80	96.80	-	-	78.80	97.50	90.48	78.80	97.50
11	Bandur 600 SC	3.0	98.00	85.00	100.00	57.50	65.00	71.30	98.80	82.23	57.50	100.00
LSD (P=0.05)			6.51	12.18	2.77	7.13	7.54	4.26	7.27			

Table 2. The efficacy of AKO 600 SC in control of CHEAL in potato – assessment up 2 weeks after first efficacy assessment

Pest code			CHEAL									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	A.T/2023/024/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	EA24H241- PL01			
Assessment date			20.06.2023	15.06.2023	21.06.2023	08.06.2023	09.06.2023	30.05.2024	18.07.2024			
Days after application DA-A			41 DA-A	29 DA-A	36 DA-A	28 DA-A	28 DA-A	24 DA-A	31 DA-A	Avera- ge	Min !	Max.
weeds density pcs/m²			5.0	5.0	10.0	6.0	8.5	5.0	12.0	7.4	5.0	12.0
No .	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	78.80	88.80	92.50	62.50	75.00			79.52	62.5 0	92.50
3	AKO 600 SC	1.4	80.30	86.30	98.30	70.00	81.30			83.24	70.0 0	98.30
4	AKO 600 SC	2.0	99.00	88.80	99.00	75.00	86.30			89.62	75.0 0	99.00
5	AKO 600 SC	2.5	99.00	93.80	100.00	85.00	87.50			93.06	85.0 0	100.0 0
6	AKO 600 SC	3.0	99.00	100.00	99.80	96.00	90.00			96.96	90.0 0	100.0 0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	95.00	95.50	-	-	78.80	75.00	86.08	75.0 0	95.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						83.80	78.80	81.30	78.8 0	83.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						93.50	90.00	91.75	90.0 0	93.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	97.50	99.00	-	-	97.30	93.80	96.90	93.8 0	99.00
11	Bandur 600 SC	3.0	92.00	100.00	100.00	97.00	91.30	93.80	95.00	95.59	91.3 0	100.0 0
LSD (P=0.05)			12.06	4.17	2.19	6.66	4.68	4.32	8.70			

Table 3. The efficacy of AKO 600 SC in control of CHEAL in potato – assessment at BBCH 37-39

Pest code			CHEAL									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	A.T/2023/024/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	EA24H241- PL01			
Assessment date			20.06.2023	23.06.2023	03.07.2023	06.07.2023	07.07.2023	02.07.2024	01.08.2024			
Days after application DA-A			41 DA-A	37 DA-A	48 DA-A	56 DA-A	56 DA-A	57 DA-A	45 DA-A	Avera- ge	Min !	Max.
weeds density pcs/m²			5.0	5.0	10.0	6.0	8.5	5.0	14.8	7.8	5.0	14.8
No .	Name	Rate (L, kg/ha)						!	!	!	!	!
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	78.80	90.00	92.50	75.00	83.80	!	!	84.02	75.0 0	92.50
3	AKO 600 SC	1.4	80.30	87.50	98.80	83.80	91.30	!	!	88.34	80.3 0	98.80
4	AKO 600 SC	2.0	99.00	91.30	98.80	94.80	94.80	!	!	95.74	91.3 0	99.00
5	AKO 600 SC	2.5	99.00	93.80	100.00	98.50	97.00	!	!	97.66	93.8 0	100.0 0
6	AKO 600 SC	3.0	99.00	100.00	100.00	100.00	99.80	!	!	99.76	99.0 0	100.0 0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	97.50	93.80	-	-	82.50	68.80	85.65	68.8 0	97.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						85.00	75.00	80.00	75.0 0	85.00
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						94.80	86.30	90.55	86.3 0	94.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	100.00	100.00	-	-	99.30	88.80	97.03	88.8 0	100.0 0
11	Bandur 600 SC	3.0	92.00	100.00	100.00	100.00	100.00	95.00	87.50	0.20	87.5 0	100.0 0
LSD (P=0.05)			12.06	3.83	2.14	4.86	3.89	3.27	6.41			

Table 4. The efficacy of AKO 600 SC in control of VIOAR in potato – assessment at weeds stage BBCH 12-14

Pest code			VIOAR											
Report code			A.T/2023/02 1/ZZ	A.T/2023/02 2/ZZ	A.T/2023/02 3/ZZ	A.T/2023/02 4/ZZ	AH/23/Z/27/ Z1/01	AH/23/Z/27/J ab/03	AH/23/Z/27/ Ry/04	AH/24/Z/6/ Dz/04	EA24H241- PL01			
Assessment date			06.06.2023	07.06.2023	01.06.2023	13.06.2023	25.05.2023	06.06.2023	29.05.2023	16.05.2024	29.06.2024			
Days after application DA-A			21 DA-A	28 DA-A	15 DA-A	28 DA-A	14 DA-A	21 DA-A	14 DA-A	10 DA-A	12 DA-A	Ave- rage	Mi- n.	Max
weeds density pcs/m²			11.0	6.0	5.0	10.0	7.0	5.8	5.5	5.8	6.5	7.0	5.0	11.0
N o.	Name	Rate (L, kg/ha)												
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	68.80	80.80	47.50	82.50	37.50	22.50	40.00			54.23	22.50	82.50
3	AKO 600 SC	1.4	83.80	83.30	60.00	82.50	37.50	52.50	53.80			64.77	37.50	83.80
4	AKO 600 SC	2.0	97.50	85.80	67.50	88.80	47.50	67.50	71.30			75.13	47.50	97.50
5	AKO 600 SC	2.5	100.00	89.30	80.00	92.50	47.50	100.00	82.50			84.54	47.50	100.00
6	AKO 600 SC	3.0	97.50	90.00	93.80	96.00	50.00	100.00	90.00			88.19	50.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	80.00	81.30	-	-	-	57.50	68.80	71.90	57.50	81.30
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2								67.50	73.80	70.65	67.50	73.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2								73.00	91.30	82.15	73.00	91.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	98.80	95.00	-	-	-	78.80	96.30	92.23	78.80	98.80
11	Bandur 600 SC	3.0	100.00	89.80	90.00	96.00	52.50	100.00	88.30	71.30	98.80	87.41	52.50	100.00
LSD (P=0.05)			14.30	4.36	13.15	3.80	6.68	5.69	8.93	4.26	7.31			

Table 5. The efficacy of AKO 600 SC in control of VIOAR in potato – assessment up 2 weeks after first efficacy assessment

Pest code			VIOAR											
Report code			A.T/2023/02 1/ZZ	A.T/2023/02 2/ZZ	A.T/2023/02 3/ZZ	A.T/2023/02 4/ZZ	AH/23/Z/27/ Z1/01	AH/23/Z/27/J ab/03	AH/23/Z/27/ Ry/04	AH/24/Z/6/ Dz/04	EA24H241- PL01			
Assessment date			16.06.2023	20.06.2023	15.06.2023	21.06.2023	08.06.2023	20.06.2023	12.06.2023	30.05.2024	18.07.2024			
Days after application DA-A			31 DA-A	41 DA-A	29 DA-A	36 DA-A	28 DA-A	35 DA-A	28 DA-A	24 DA-A	31 DA-A	Ave- rage	Mi n.	Max
weeds density pcs/m²			12.0	7.0	5.0	10.0	7.3	5.3	5.3	5.8	9.0	7.4	5.0	12.0
N o.	Name	Rate (L, kg/ha)												
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	74.00	78.80	88.80	88.50	65.00	28.80	45.00			66.99	28.80	88.80
3	AKO 600 SC	1.4	87.00	79.50	90.00	91.50	67.50	45.00	53.80			73.47	45.00	91.50
4	AKO 600 SC	2.0	91.30	85.50	91.30	96.50	77.50	66.30	75.00			83.34	66.30	96.50
5	AKO 600 SC	2.5	98.80	89.30	92.50	99.00	87.50	100.00	83.80			92.99	83.80	100.00
5	AKO 600 SC	3.0	98.80	91.00	100.00	100.00	97.30	100.00	96.30			97.63	91.00	100.00
5	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	93.80	90.00	-	-	-	86.30	66.30	84.10	66.30	93.80
5	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2								93.50	70.00	81.75	70.00	93.50
5	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2								99.80	86.30	93.05	86.30	99.80
5	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	100.00	97.00	-	-	-	99.80	91.30	97.03	91.30	100.00
9	Bandur 600 SC	3.0	99.50	91.00	98.80	99.80	98.50	100.00	92.50	98.80	95.00	97.10	91.00	100.00
LSD (P=0.05)			6.42	5.34	2.41	2.26	6.53	3.69	9.02	4.09	7.34			

Table 6. The efficacy of AKO 600 SC in control of VIOAR in potato – assessment at BBCH 37-39

Pest code			VIOAR											
Report code			A.T/2023/02 1/ZZ	A.T/2023/02 2/ZZ	A.T/2023/02 3/ZZ	A.T/2023/02 4/ZZ	AH/23/Z/27/ ZI/01	AH/23/Z/27/J ab/03	AH/23/Z/27/ Ry/04	AH/24/Z/6/ Dz/04	EA24H241- PL01			
Assessment date			16.06.2023	20.06.2023	23.06.2023	03.07.2023	06.07.2023	22.07.2023	19.08.2023	02.07.2024	01.08.2024			
Days after application DA-A			31 DA-A	41 DA-A	37 DA-A	48 DA-A	56 DA-A	67 DA-A	65 DA-A	57 DA-A	45 DA-A	Ave- rage	Mi- n.	Max
weeds density pcs/m²			12.0	7.0	5.0	10.0	7.3	5.8	5.3	5.8	12.3	7.8	5.0	12.3
N o.	Name	Rate (L, kg/ha)								↓	↓	↓	↓	↓
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	74.00	78.80	90.00	87.50	77.50	31.30	41.30	↓	↓	68.63	31.30	90.00
3	AKO 600 SC	1.4	87.00	79.50	91.30	93.80	85.00	52.50	56.30	↓	↓	77.91	52.50	93.80
4	AKO 600 SC	2.0	91.30	85.50	92.50	97.50	88.80	71.30	73.80	↓	↓	85.81	71.30	97.50
5	AKO 600 SC	2.5	98.80	89.30	92.50	100.00	97.00	100.00	81.30	↓	↓	94.13	81.30	100.00
6	AKO 600 SC	3.0	98.80	91.00	100.00	100.00	100.00	100.00	98.80	↓	↓	98.37	91.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	96.30	90.00	-	-	-	87.50	63.80	84.40	63.80	96.30
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2								94.80	66.30	80.55	66.30	94.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2								99.80	66.30	83.05	66.30	99.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	100.00	97.50	-	-	-	100.00	77.50	93.75	77.50	100.00
11	Bandur 600 SC	3.0	99.50	91.00	98.80	100.00	100.00	100.00	96.80	98.80	87.50	96.93	87.50	100.00
LSD (P=0.05)			6.42	5.34	2.79	2.67	4.30	6.47	6.91	3.16	9.25			

Table 7. The efficacy of AKO 600 SC in control of ECHCG in potato – assessment at weeds stage BBCH 12-14

Pest code			ECHCG									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	AH/24/Z/6/Pr/ 08	EA24H241- PL01			
Assessment date			07.06.2023	01.06.2023	25.05.2023	26.05.2023	16.05.2024	16.05.2024	29.06.2024			
Days after application DA-A			28 DA-A	15 DA-A	14 DA-A	14 DA-A	10 DA-A	7 DA-A	12 DA-A	Avera- ge	Min ↓	Max
weeds density pcs/m²			7.0	10.0	6.3	6.8	5.8	5.0	9.5	7.2	5.0	10.0
No ↓	Name	Rate (L, kg/ha)					↓	↓	↓	↓	↓	↓
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	83.80	80.00	40.00	50.00	↓	↓	↓	63.45	40.0 0	83.80
3	AKO 600 SC	1.4	91.30	87.50	50.00	50.00	↓	↓	↓	69.70	50.0 0	91.30
4	AKO 600 SC	2.0	98.80	95.00	55.00	55.00	↓	↓	↓	75.95	55.0 0	98.80
5	AKO 600 SC	2.5	98.80	98.80	55.00	65.00	↓	↓	↓	79.40	55.0 0	98.80
6	AKO 600 SC	3.0	100.00	100.00	57.50	70.00	↓	↓	↓	81.88	57.5 0	100.0 0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	92.50	-	-	70.00	65.00	88.80	79.08	65.0 0	92.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					80.00	67.50	92.50	80.00	67.5 0	92.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					85.00	78.80	96.30	86.70	78.8 0	96.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	95.00	-	-	91.30	86.30	97.50	92.53	86.3 0	97.50
11	Bandur 600 SC	3.0	100.00	100.00	57.50	72.50	87.50	86.30	98.80	86.09	57.5 0	100.0 0
LSD (P=0.05)			5.89	2.22	7.89	8.83	5.37	5.43	7.21			

Table 8. The efficacy of AKO 600 SC in control of ECHCG in potato – assessment up 2 weeks after first efficacy assessment

Pest code			ECHCG									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	AH/24/Z/6/Pr/ 08	EA24H241- PL01			
Assessment date			20.06.2023	15.06.2023	08.06.2023	09.06.2023	30.05.2024	30.05.2024	18.07.2024			
Days after application DA-A			41 DA-A	29 DA-A	28 DA-A	28 DA-A	24 DA-A	21 DA-A	31 DA-A	Avera- ge	Min !	Max.
weeds density pcs/m ²			7.0	12.0	6.5	7.5	5.8	5.0	13.5	8.2	5.0	13.5
No .	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	80.80	81.30	60.00	75.00				74.28	60.0 0	81.30
3	AKO 600 SC	1.4	88.80	87.50	62.50	81.30				80.03	62.5 0	88.80
4	AKO 600 SC	2.0	98.80	100.00	77.50	86.30				90.65	77.5 0	100.0 0
5	AKO 600 SC	2.5	100.00	100.00	85.00	82.50				91.88	82.5 0	100.0 0
6	AKO 600 SC	3.0	100.00	100.00	92.50	96.00				97.13	92.5 0	100.0 0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	100.00	-	-	88.80	88.80	82.50	90.03	82.5 0	100.0 0
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					95.80	94.80	82.50	91.03	82.5 0	95.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					99.80	99.80	90.00	96.53	90.0 0	99.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	100.00	-	-	100.00	100.00	92.50	98.13	92.5 0	100.0 0
11	Bandur 600 SC	3.0	100.00	100.00	91.30	98.30	100.00	98.00	92.50	97.16	91.3 0	100.0 0
LSD (P=0.05)			5.52	3.07	6.73	4.57	3.23	3.84	6.13			

Table 9. The efficacy of AKO 600 SC in control of ECHCG in potato – assessment at BBCH 37-39

Pest code			ECHCG									
Report code			A.T/2023/022/ ZZ	A.T/2023/023/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Gr/ 02	AH/24/Z/6/Dz/ 04	AH/24/Z/6/Pr/ 08	EA24H241- PL01			
Assessment date			20.06.2023	23.06.2023	06.07.2023	07.07.2023	02.07.2024	02.07.2024	01.08.2024			
Days after application DA-A			41 DA-A	37 DA-A	56 DA-A	56 DA-A	57 DA-A	54 DA-A	45 DA-A	Avera- ge	Min.	Max.
weeds density pcs/m ²			7.0	11.0	6.5	7.5	5.8	5.0	17.0	8.5	5.0	17.0
No .	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	80.80	82.50	73.80	82.50				79.90	73.80	82.50
3	AKO 600 SC	1.4	88.80	90.00	77.50	86.30				85.65	77.50	90.00
4	AKO 600 SC	2.0	98.80	100.00	88.80	92.50				95.03	88.80	100.00
5	AKO 600 SC	2.5	100.00	100.00	97.50	98.30				98.95	97.50	100.00
6	AKO 600 SC	3.0	100.00	100.00	100.00	100.00				100.00	100.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	100.00	-	-	90.00	91.30	72.50	88.45	72.50	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					95.80	94.80	76.30	88.97	76.30	95.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					99.80	99.80	81.30	93.63	81.30	99.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	100.00	-	-	100.00	100.00	83.80	95.95	83.80	100.00
11	Bandur 600 SC	3.0	100.00	100.00	100.00	100.00	100.00	98.00	85.00	97.57	85.00	100.00
LSD (P=0.05)			5.52	4.86	6.40	3.09	2.68	2.53	7.67			

Table 10. The efficacy of AKO 600 SC in control of BRSNW in potato – assessment at weeds stage BBCH 12-14

Pest code			BRSNW						
Report code			A.T/2023/022/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/ZA/01	EA24H241-PL03			
Assessment date			07.06.2023	13.06.2023	25.05.2023	29.06.2024			
Days after application DA-A			28 DA-A	28 DA-A	14 DA-A	12 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	72.5	6.5	7.3	22.8	5.0	72.5
No.	Name	Rate (L, kg/ha)							
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	81.50	72.50	55.00		69.67	55.00	81.50
3	AKO 600 SC	1.4	85.80	96.80	60.00		80.87	60.00	96.80
4	AKO 600 SC	2.0	85.00	97.50	60.00		80.83	60.00	97.50
5	AKO 600 SC	2.5	88.30	99.80	55.00		81.03	55.00	99.80
6	AKO 600 SC	3.0	90.00	100.00	57.50		82.50	57.50	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	81.30	-	68.80	75.05	68.80	81.30
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2				75.00	75.00	75.00	75.00
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2				92.50	92.50	92.50	92.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	97.50	-	98.80	98.15	97.50	98.80
11	Bandur 600 SC	3.0	86.50	100.00	57.50	100.00	86.00	57.50	100.00
LSD (P=0.05)			5.32	11.47	8.10	5.84			

Table 11. The efficacy of AKO 600 SC in control of BRSNW in potato – assessment up 2 weeks after first efficacy assessment

Pest code			BRSNW							
Report code			A.T/2023/021/ZZ	A.T/2023/022/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/ZI/01	EA24H241-PL03			
Assessment date			16.06.2023	20.06.2023	21.06.2023	08.06.2023	18.07.2024			
Days after application DA-A			31 DA-A	41 DA-A	36 DA-A	28 DA-A	29 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	5.0	5.0	6.5	8.5	6.0	5.0	8.5
No.	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	42.50	78.50	72.50	70.00		65.88	42.50	78.50
3	AKO 600 SC	1.4	77.00	80.80	95.00	72.50		81.33	72.50	95.00
4	AKO 600 SC	2.0	95.00	82.80	97.50	81.30		89.15	81.30	97.50
5	AKO 600 SC	2.5	95.00	86.50	98.80	93.80		93.53	86.50	98.80
6	AKO 600 SC	3.0	100.00	91.00	100.00	99.50		97.63	91.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	83.80	-	67.50	75.65	67.50	83.80
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					73.80	73.80	73.80	73.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					91.30	91.30	91.30	91.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	92.50	-	97.50	95.00	92.50	97.50
11	Bandur 600 SC	3.0	100.00	83.80	100.00	97.50	97.50	95.76	83.80	100.00
LSD (P=0.05)			11.57	6.94	7.48	6.08	7.41			

Table 12. The efficacy of AKO 600 SC in control of BRSNW in potato – assessment at BBCH 37-39

Pest code			BRSNW							
Report code			A.T/2023/021/ZZ	A.T/2023/022/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/ZI/01	EA24H241-PL03			
Assessment date			16.06.2023	20.06.2023	03.07.2023	06.07.2023	01.08.2024			
Days after application DA-A			31 DA-A	41 DA-A	48 DA-A	56 DA-A	43 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	5.0	5.0	6.5	10.3	6.4	5.0	10.3
No.	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	42.50	78.50	75.00	82.50		69.63	42.50	82.50
3	AKO 600 SC	1.4	77.00	80.80	96.30	87.50		85.40	77.00	96.30
4	AKO 600 SC	2.0	95.00	82.80	97.50	92.50		91.95	82.80	97.50
5	AKO 600 SC	2.5	95.00	86.50	98.80	99.80		95.03	86.50	99.80
6	AKO 600 SC	3.0	100.00	91.00	100.00	100.00		97.75	91.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	83.80	-	66.30	75.05	66.30	83.80
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					71.30	71.30	71.30	71.30
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					88.80	88.80	88.80	88.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	95.00	-	95.00	95.00	95.00	95.00
11	Bandur 600 SC	3.0	100.00	83.80	100.00	100.00	95.00	95.76	83.80	100.00
LSD (P=0.05)			11.57	6.94	6.29	2.77	5.67			

Table 13. The efficacy of AKO 600 SC in control of AMARE in potato – assessment at weeds stage BBCH 12-14

Pest code			AMARE										
Report code			AH/23/Z/27/G r/02	AH/23/Z/27/Ja b/03	AH/23/Z/27/R y/04	AH/23/Z/27/O w/05	AH/24/Z/6/B r/05	AH/24/Z/6/Z l/06	AH/24/Z/6/G r/07	EA24H241- PL02			
Assessment date			26.05.2023	06.06.2023	29.05.2023	03.06.2023	16.05.2024	23.05.2024	13.05.2024	29.06.2024			
Days after application DA-A			14 DA-A	21 DA-A	14 DA-A	14 DA-A	7 DA-A	9 DA-A	16 DA-A	12 DA-A	Ave- rage	Mi- n.	Max
weeds density pcs/m ²			4.5	5.3	5.0	5.3	6.0	6.3	6.8	8.3	5.9	4.5	8.3
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	47.50	27.50	27.50	38.80					35.33	27.50	47.50
3	AKO 600 SC	1.4	52.50	43.80	43.80	46.30					46.60	43.80	52.50
4	AKO 600 SC	2.0	52.50	60.00	58.80	57.50					57.20	52.50	60.00
5	AKO 600 SC	2.5	55.00	82.50	78.80	78.80					73.78	55.00	82.50
6	AKO 600 SC	3.0	55.00	85.00	85.00	85.00					77.50	55.00	85.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	-	52.50	45.00	50.00	83.80	57.83	45.00	83.80
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					57.50	57.50	62.50	87.50	66.25	57.50	87.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					62.50	91.30	70.00	97.50	80.33	62.50	97.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	-	65.00	67.50	70.00	100.00	75.63	65.00	100.00
11	Bandur 600 SC	3.0	57.50	87.50	81.30	87.50	70.00	62.50	70.00	100.00	77.04	57.50	100.00
LSD (P=0.05)			8.88	6.47	5.29	5.00	6.10	7.09	3.08	4.77			

Table 14. The efficacy of AKO 600 SC in control of AMARE in potato – assessment up 2 weeks after first efficacy assessment

Pest code			AMARE										
Report code			AH/23/Z/27/G r/02	AH/23/Z/27/Ja b/03	AH/23/Z/27/R y/04	AH/23/Z/27/O w/05	AH/24/Z/6/B r/05	AH/24/Z/6/Z l/06	AH/24/Z/6/G r/07	EA24H241- PL02			
Assessment date			09.06.2023	20.06.2023	12.06.2023	16.06.2023	30.05.2025	06.06.2024	27.05.2024	18.07.2024			
Days after application DA-A			28 DA-A	35 DA-A	28 DA-A	27 DA-A	21 DA-A	23 DA-A	30 DA-A	31 DA-A	Ave- rage	Mi- n.	Max
weeds density pcs/m ²			5.5	5.3	5.0	6.0	6.0	6.3	6.8	11.8	6.6	5.0	11.8
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	57.50	27.50	26.30	55.00					41.58	26.30	57.50
3	AKO 600 SC	1.4	62.50	45.00	47.50	68.80					55.95	45.00	68.80
4	AKO 600 SC	2.0	65.00	65.00	63.80	76.30					67.53	63.80	76.30
5	AKO 600 SC	2.5	72.50	83.80	84.30	83.80					81.10	72.50	84.30
6	AKO 600 SC	3.0	80.00	91.30	97.50	93.80					90.65	80.00	97.50
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	-	77.50	70.00	68.80	82.50	74.70	68.80	82.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					80.00	80.00	80.00	83.80	80.95	80.00	83.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					88.80	90.00	90.00	96.30	91.28	88.80	96.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	-	98.00	97.30	99.50	100.00	98.70	97.30	100.00
11	Bandur 600 SC	3.0	81.30	93.80	98.00	97.50	98.00	96.00	99.50	100.00	95.51	81.30	100.00
LSD (P=0.05)			9.25	5.13	4.87	7.54	3.77	5.88	4.65	4.39			

Table 15. The efficacy of AKO 600 SC in control of AMARE in potato – assessment at BBCH 37-39

Pest code			AMARE										
Report code			AH/23/Z/27/G r/02	AH/23/Z/27/Ja b/03	AH/23/Z/27/R y/04	AH/23/Z/27/O w/05	AH/24/Z/6/B r/05	AH/24/Z/6/Z l/06	AH/24/Z/6/G r/07	EA24H241- PL02			
Assessment date			07.07.2023	22.07.2023	19.08.2023	17.07.2023	02.07.2024	10.07.2024	08.07.2024	01.08.2024			
Days after application DA-A			56 DA-A	67 DA-A	65 DA-A	58 DA-A	54 DA-A	57 DA-A	70 DA-A	45 DA-A	Ave- rage	Min.	Max
weeds density pcs/m ²			5.5	5.3	5.0	6.8	6.0	6.3	6.8	13.3	6.9	5.0	13.3
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	78.80	31.30	32.50	58.80					50.35	31.30	78.80
3	AKO 600 SC	1.4	83.80	51.30	50.00	73.80					64.73	50.00	83.80
4	AKO 600 SC	2.0	86.30	67.50	68.80	82.50					76.28	67.50	86.30
5	AKO 600 SC	2.5	91.30	91.30	91.30	88.80					90.68	88.80	91.30
6	AKO 600 SC	3.0	97.00	98.80	98.50	97.50					97.95	97.00	98.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	-	80.00	72.50	71.30	80.00	75.95	71.30	80.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					81.30	81.30	82.50	80.00	81.28	80.00	82.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					90.00	91.30	91.30	92.50	91.28	90.00	92.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	-	98.00	97.30	99.80	95.00	97.53	95.00	99.80
11	Bandur 600 SC	3.0	98.00	99.80	98.80	100.00	98.00	96.00	99.50	93.80	97.99	93.80	100.00
LSD (P=0.05)			5.27	6.35	5.72	5.65	3.38	4.93	3.78	6.13			

Table 16. The efficacy of AKO 600 SC in control of POLCO in potato – assessment at weeds stage BBCH 12-14

Pest code			POLCO									
Report code			A.T/2023/024/ ZZ	AH/23/Z/27/Gr/ 02	AH/23/Z/27/Ow/ 05	AH/23/Z/27/Ko/ 06	AH/24/Z/6/Dz/ 04	AH/24/Z/6/Pr/ 08	EA24H241- PL03			
Assessment date			13.06.2023	26.05.2023	03.06.2023	05.06.2023	16.05.2024	16.05.2024	29.06.2024			
Days after application DA-A			28 DA-A	14 DA-A	14 DA-A	14 DA-A	10 DA-A	7 DA-A	12 DA-A	Avera- ge	Min !	Max.
weeds density pcs/m ²			5.0	5.3	5.0	6.3	6.0	7.3	7.0	6.0	5.0	7.3
No .	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	55.00	45.00	17.50	25.00				35.63	17.5 0	55.00
3	AKO 600 SC	1.4	72.50	50.00	31.30	36.30				47.53	31.3 0	72.50
4	AKO 600 SC	2.0	76.30	50.00	43.80	47.50				54.40	43.8 0	76.30
5	AKO 600 SC	2.5	76.30	52.50	48.80	53.80				57.85	48.8 0	76.30
6	AKO 600 SC	3.0	81.30	55.00	56.30	62.50				63.78	55.0 0	81.30
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	61.30	-	-	-	57.50	72.50	80.00	67.83	57.5 0	80.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					55.00	77.50	83.80	72.10	55.0 0	83.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					66.30	86.30	97.50	83.37	66.3 0	97.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	72.50	-	-	-	68.80	90.00	100.00	82.83	68.8 0	100.0 0
11	Bandur 600 SC	3.0	82.50	52.50	57.50	65.00	68.80	88.80	100.00	73.59	52.5 0	100.0 0
LSD (P=0.05)			6.88	9.31	7.03	5.63	7.14	4.42	3.45			

Table 17. The efficacy of AKO 600 SC in control of POLCO in potato – assessment up 2 weeks after first efficacy assessment

Pest code			POLCO										
Report code			A.T/2023/021/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/G r/02	AH/23/Z/27/O w/05	AH/23/Z/27/K o/06	AH/24/Z/6/D z/04	AH/24/Z/6/P r/08				EA24H241-PL03
Assessment date			16.06.2023	21.06.2023	09.06.2023	16.06.2023	19.06.2023	30.05.2024	30.05.2024				18.07.2024
Days after application DA-A			31 DA-A	36 DA-A	28 DA-A	27 DA-A	28 DA-A	24 DA-A	21 DA-A	29 DA-A	Ave- rage	Min	Max
weeds density pcs/m²			5.0	5.0	5.3	5.5	6.8	6.0	7.3	8.5	6.2	5.0	8.5
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	35.00	52.50	67.50	22.50	28.80				41.26	22.50	67.50
3	AKO 600 SC	1.4	45.00	72.50	70.00	36.30	40.00				52.76	36.30	72.50
4	AKO 600 SC	2.0	74.00	78.00	75.00	52.50	52.50				66.40	52.50	78.00
5	AKO 600 SC	2.5	83.80	77.50	86.30	61.30	66.30				75.04	61.30	86.30
6	AKO 600 SC	3.0	85.00	82.00	92.50	80.00	81.30				84.16	80.00	92.50
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	56.30	-	-	-	90.00	88.80	78.80	78.48	56.30	90.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						96.00	98.50	82.50	92.33	82.50	98.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						100.00	99.80	96.30	98.70	96.30	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	75.00	-	-	-	100.00	100.00	96.30	92.83	75.00	100.00
11	Bandur 600 SC	3.0	81.30	82.50	90.00	81.30	80.00	98.30	100.00	97.50	88.86	80.00	100.00
LSD (P=0.05)			7.02	5.75	4.79	6.65	6.68	3.33	1.95	4.92			

Table 18. The efficacy of AKO 600 SC in control of POLCO in potato – assessment at BBCH 37-39

Pest code			POLCO										
Report code			A.T/2023/021/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/G r/02	AH/23/Z/27/O w/05	AH/23/Z/27/K o/06	AH/24/Z/6/D z/04	AH/24/Z/6/P r/08	EA24H241-PL03			
Assessment date			16.06.2023	03.07.2023	07.07.2023	17.07.2023	17.07.2023	02.07.2024	02.07.2024	01.08.2024			
Days after application DA-A			31 DA-A	48 DA-A	56 DA-A	58 DA-A	56 DA-A	57 DA-A	54 DA-A	43 DA-A			
weeds density pcs/m²			5.0	5.0	5.3	5.8	6.3	6.0	7.3	10.3	Average	Min	Max
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	35.00	45.00	83.80	17.50	32.50				42.76	17.50	83.80
3	AKO 600 SC	1.4	45.00	68.80	82.50	37.50	43.80				55.52	37.50	82.50
4	AKO 600 SC	2.0	74.00	75.00	96.30	45.00	57.50				69.56	45.00	96.30
5	AKO 600 SC	2.5	83.80	78.80	94.80	60.00	68.80				77.24	60.00	94.80
6	AKO 600 SC	3.0	85.00	81.30	99.80	78.80	83.80				85.74	78.80	99.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	55.00	-	-	-	91.30	90.00	76.30	78.15	55.00	91.30
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	-	-	-	-	-	96.00	98.50	80.00	91.50	80.00	98.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	-	-	-	-	-	100.00	99.80	93.80	97.87	93.80	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	71.30	-	-	-	100.00	100.00	95.00	91.58	71.30	100.00
11	Bandur 600 SC	3.0	81.30	82.50	98.50	82.50	82.50	98.30	100.00	92.50	89.76	81.30	100.00
LSD (P=0.05)			7.02	4.30	4.39	7.93	6.35	3.08	1.51	4.16			

Table 19. The efficacy of AKO 600 SC in control of STEME in potato – assessment at weeds stage BBCH 12-14

Pest code			STEME									
Report code			A.T/2023/022/ ZZ	AH/23/Z/27/ZI/ 01	AH/23/Z/27/Ow/ 05	AH/23/Z/27/Ko/ 06	AH/24/Z/6/Dz/ 04	AH/24/Z/6/Pr/ 08	EA24H241- PL01			
Assessment date			07.06.2023	25.05.2023	03.06.2023	05.06.2023	16.05.2024	16.05.2024	29.06.2024			
Days after application DA-A			28 DA-A	14 DA-A	14 DA-A	14 DA-A	10 DA-A	7 DA-A	12 DA-A	Average	Min	Max
weeds density pcs/m ²			7.0	5.5	5.5	5.0	5.8	7.0	10.3	6.6	5.0	10.3
No	Name	Rate (L, kg/ha)										
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	82.50	32.50	35.00	38.80				47.20	32.50	82.50
3	AKO 600 SC	1.4	92.50	35.00	46.30	45.00				54.70	35.00	92.50
4	AKO 600 SC	2.0	93.80	45.00	57.50	58.80				63.78	45.00	93.80
5	AKO 600 SC	2.5	97.50	55.00	79.50	77.50				77.38	55.00	97.50
6	AKO 600 SC	3.0	98.80	55.00	87.00	87.50				82.08	55.00	98.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	-	72.50	60.00	90.00	74.17	60.00	90.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					75.00	71.30	92.50	79.60	71.30	92.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					77.50	78.80	97.50	84.60	77.50	97.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	-	82.50	81.30	97.50	87.10	81.30	97.50
11	Bandur 600 SC	3.0	100.00	57.50	86.30	88.80	83.80	81.30	98.80	85.21	57.50	100.00
LSD (P=0.05)			3.97	7.07	6.16	5.08	4.61	3.28	5.97			

Table 20. The efficacy of AKO 600 SC in control of STEME in potato – assessment up 2 weeks after first efficacy assessment

Pest code			STEME										
Report code			A.T/2023/022 /ZZ	A.T/2023/024 /ZZ	AH/23/Z/27/Z I/01	AH/23/Z/27/O w/05	AH/23/Z/27/K o/06	AH/24/Z/6/D z/04	AH/24/Z/6/P r/08	EA24H241- PL01			
Assessment date			20.06.2023	21.06.2023	08.06.2023	16.06.2023	19.06.2023	30.05.2024	30.05.2024	18.07.2024			
Days after application DA-A			41 DA-A	36 DA-A	28 DA-A	27 DA-A	28 DA-A	24 DA-A	21 DA-A	31 DA-A	Ave- rage	Min ↓	Max.
weeds density pcs/m²			7.0	5.0	6.0	6.0	6.3	5.8	7.0	14.5	7.2	5.0	14.5
N o.	Name	Rate (L, kg/ha)						↓	↓	↓	↓	↓	↓
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	83.80	85.80	52.50	51.30	52.50	↓	↓	↓	65.18	51.30	85.80
3	AKO 600 SC	1.4	90.00	100.00	62.50	61.30	61.30	↓	↓	↓	75.02	61.30	100.00
4	AKO 600 SC	2.0	96.30	100.00	67.50	75.00	75.00	↓	↓	↓	82.76	67.50	100.00
5	AKO 600 SC	2.5	100.00	100.00	67.50	86.30	87.50	↓	↓	↓	88.26	67.50	100.00
6	AKO 600 SC	3.0	100.00	100.00	77.50	98.80	100.00	↓	↓	↓	95.26	77.50	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	100.00	-	-	-	87.50	81.30	80.00	87.20	80.00	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						92.50	88.80	82.50	87.93	82.50	92.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						99.50	95.80	92.50	95.93	92.50	99.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	100.00	-	-	-	100.00	100.00	92.50	98.13	92.50	100.00
11	Bandur 600 SC	3.0	100.00	100.00	83.80	97.50	100.00	100.00	99.50	95.00	96.98	83.80	100.00
LSD (P=0.05)			2.38	0.78	8.87	3.50	4.97	3.71	3.65	7.03			

Table 21. The efficacy of AKO 600 SC in control of STEME in potato – assessment at BBCH 37-39

Pest code			STEME										
Report code			A.T/2023/022/ZZ	A.T/2023/024/ZZ	AH/23/Z/27/Z/01	AH/23/Z/27/Ow/05	AH/23/Z/27/Ko/06	AH/24/Z/6/Dz/04	AH/24/Z/6/Pr/08	EA24H241-PL01			
Assessment date			20.06.2023	03.07.2023	06.07.2023	17.07.2023	17.07.2023	02.07.2024	02.07.2024	01.08.2024			
Days after application DA-A			41 DA-A	48 DA-A	56 DA-A	58 DA-A	56 DA-A	57 DA-A	54 DA-A	45 DA-A	Ave- rage	Min	Max
weeds density pcs/m²			7.0	5.0	6.0	6.0	7.0	5.8	7.0	17.3	7.6	5.0	17.3
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	83.80	91.30	67.50	53.80	57.50				70.78	53.80	91.30
3	AKO 600 SC	1.4	90.00	100.00	78.00	67.50	65.00				80.10	65.00	100.00
4	AKO 600 SC	2.0	96.30	100.00	71.30	80.00	77.50				85.02	71.30	100.00
5	AKO 600 SC	2.5	100.00	100.00	87.50	88.80	90.00				93.26	87.50	100.00
6	AKO 600 SC	3.0	100.00	100.00	96.00	100.00	100.00				99.20	96.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	100.00	-	-	-	87.50	82.50	73.80	85.95	73.80	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						93.80	90.00	75.00	86.27	75.00	93.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						99.50	95.80	83.80	93.03	83.80	99.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	100.00	-	-	-	100.00	100.00	83.80	95.95	83.80	100.00
11	Bandur 600 SC	3.0	100.00	100.00	97.30	100.00	100.00	100.00	99.50	86.30	97.89	86.30	100.00
LSD (P=0.05)			2.38	3.06	5.33	5.02	5.29	3.49	3.14	11.43			

Table 22. The efficacy of AKO 600 SC in control of MATMA in potato – assessment at weeds stage BBCH 12-14

Pest code			MATMA							
Report code			A.T/2023/023/ZZ	AH/23/Z/27/ZI/01	AH/23/Z/27/Jab/03	AH/23/Z/27/Ry/04	EA24H241-PL03			
Assessment date			01.06.2023	25.05.2023	06.06.2023	29.05.2023	29.06.2024			
Days after application DA-A			15 DA-A	14 DA-A	21 DA-A	14 DA-A	12 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	5.0	5.0	6.0	4.3	5.1	4.3	6.0
No.	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	80.00	47.50	0.00	0.00		31.88	0.00	80.00
3	AKO 600 SC	1.4	85.00	52.50	40.00	38.80		54.08	38.80	85.00
4	AKO 600 SC	2.0	97.50	55.00	67.50	46.30		66.58	46.30	97.50
5	AKO 600 SC	2.5	100.00	55.00	83.80	76.30		78.78	55.00	100.00
6	AKO 600 SC	3.0	100.00	55.00	93.80	86.30		83.78	55.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	100.00	-	-	-	85.00	92.50	85.00	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					87.50	87.50	87.50	87.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					96.30	96.30	96.30	96.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	100.00	-	-	-	100.00	100.00	100.00	100.00
11	Bandur 600 SC	3.0	100.00	55.00	88.80	89.30	100.00	86.62	55.00	100.00
LSD (P=0.05)			1.50	6.81	7.25	4.56	5.80			

Table 23. The efficacy of AKO 600 SC in control of MATMA in potato – assessment up 2 weeks after first efficacy assessment

Pest code			MATMA							
Report code			A.T/2023/023/ZZ	AH/23/Z/27/ZI/01	AH/23/Z/27/Jab/03	AH/23/Z/27/Ry/04	EA24H241-PL03			
Assessment date			15.06.2023	08.06.2023	20.06.2023	12.06.2023	18.07.2024			
Days after application DA-A			29 DA-A	28 DA-A	35 DA-A	28 DA-A	29 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	5.5	5.0	6.0	6.0	5.5	5.0	6.0
No.	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	81.30	65.00	11.30	0.00		39.40	0.00	81.30
3	AKO 600 SC	1.4	90.00	72.50	42.50	45.00		62.50	42.50	90.00
4	AKO 600 SC	2.0	97.50	73.80	65.00	71.30		76.90	65.00	97.50
5	AKO 600 SC	2.5	100.00	83.80	81.30	87.50		88.15	81.30	100.00
6	AKO 600 SC	3.0	100.00	88.80	100.00	95.00		95.95	88.80	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	100.00	-	-	-	82.50	91.25	82.50	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					86.30	86.30	86.30	86.30
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					93.80	93.80	93.80	93.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	100.00	-	-	-	97.50	98.75	97.50	100.00
11	Bandur 600 SC	3.0	100.00	88.80	98.00	98.00	96.30	96.22	88.80	100.00
LSD (P=0.05)			1.90	7.34	8.34	6.33	4.04			

Table 24. The efficacy of AKO 600 SC in control of MATMA in potato – assessment at BBCH 37-39

Pest code			MATMA							
Report code			A.T/2023/023/ZZ	AH/23/Z/27/ZI/01	AH/23/Z/27/Jab/03	AH/23/Z/27/Ry/04	EA24H241-PL03			
Assessment date			23.06.2023	06.07.2023	22.07.2023	19.08.2023	01.08.2024			
Days after application DA-A			37 DA-A	56 DA-A	67 DA-A	65 DA-A	43 DA-A	Average	Min.	Max.
weeds density pcs/m ²			6.0	5.5	5.3	5.8	7.8	6.1	5.3	7.8
No.	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	85.00	75.00	0.00	18.80		44.70	0.00	85.00
3	AKO 600 SC	1.4	93.80	85.00	35.00	45.00		64.70	35.00	93.80
4	AKO 600 SC	2.0	100.00	88.80	68.80	65.00		80.65	65.00	100.00
5	AKO 600 SC	2.5	100.00	92.50	88.80	81.30		90.65	81.30	100.00
6	AKO 600 SC	3.0	100.00	87.00	100.00	86.30		93.33	86.30	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	100.00	-	-	-	81.30	90.65	81.30	100.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					83.80	83.80	83.80	83.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					91.30	91.30	91.30	91.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	100.00	-	-	-	95.00	97.50	95.00	100.00
11	Bandur 600 SC	3.0	100.00	98.30	99.00	92.50	93.80	96.72	92.50	100.00
LSD (P=0.05)			3.44	4.55	6.92	8.73	3.59			

Table 25. The efficacy of AKO 600 SC in control of GALAP in potato – assessment at weeds stage BBCH 12-14

Pest code			GALAP					
Report code			A.T/2023/024/ZZ	AH/23/Z/27/Gr/02	AH/24/Z/6/Pr/08			
Assessment date			13.06.2023	26.05.2023	16.05.2024			
Days after application DA-A			28 DA-A	14 DA-A	7 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	4.8	9.0	6.3	4.8	9.0
No.	Name	Rate (L, kg/ha)						
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	90.00	42.50		66.25	42.50	90.00
3	AKO 600 SC	1.4	96.30	57.50		76.90	57.50	96.30
4	AKO 600 SC	2.0	93.80	82.50		88.15	82.50	93.80
5	AKO 600 SC	2.5	98.80	57.50		78.15	57.50	98.80
6	AKO 600 SC	3.0	100.00	60.00		80.00	60.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	92.50	-	71.30	81.90	71.30	92.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			78.80	78.80	78.80	78.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			85.00	85.00	85.00	85.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	97.80	-	86.30	92.05	86.30	97.80
11	Bandur 600 SC	3.0	98.50	65.00	90.00	84.50	65.00	98.50
LSD (P=0.05)			5.81	5.46	2.84			

Table 26. The efficacy of AKO 600 SC in control of GALAP in potato – assessment up 2 weeks after first efficacy assessment

Pest code			GALAP					
Report code			A.T/2023/024/ZZ	AH/23/Z/27/Gr/02	AH/24/Z/6/Pr/08			
Assessment date			21.06.2023	09.06.2023	30.05.2024			
Days after application DA-A			36 DA-A	28 DA-A	21 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	6.0	9.0	6.7	5.0	9.0
No.	Name	Rate (L, kg/ha)						
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	86.30	57.50		71.90	57.50	86.30
3	AKO 600 SC	1.4	93.80	62.50		78.15	62.50	93.80
4	AKO 600 SC	2.0	95.00	70.00		82.50	70.00	95.00
5	AKO 600 SC	2.5	99.30	78.80		89.05	78.80	99.30
6	AKO 600 SC	3.0	100.00	85.00		92.50	85.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	93.80	-	91.00	92.40	91.00	93.80
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			98.50	98.50	98.50	98.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			100.00	100.00	100.00	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	97.80	-	100.00	98.90	97.80	100.00
11	Bandur 600 SC	3.0	100.00	86.30	100.00	95.43	86.30	100.00
LSD (P=0.05)			5.57	7.44	3.67			

Table 27. The efficacy of AKO 600 SC in control of GALAP in potato – assessment at BBCH 37-39

Pest code			GALAP					
Report code			A.T/2023/024/ZZ	AH/23/Z/27/Gr/02	AH/24/Z/6/Pr/08			
Assessment date			03.07.2023	07.07.2023	02.07.2024			
Days after application DA-A			48 DA-A	56 DA-A	54 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	6.0	9.0	6.7	5.0	9.0
No.	Name	Rate (L, kg/ha)						
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	87.50	72.50		80.00	72.50	87.50
3	AKO 600 SC	1.4	95.00	80.00		87.50	80.00	95.00
4	AKO 600 SC	2.0	96.30	85.00		90.65	85.00	96.30
5	AKO 600 SC	2.5	98.80	92.50		95.65	92.50	98.80
6	AKO 600 SC	3.0	100.00	96.00		98.00	96.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	93.80	-	92.30	93.05	92.30	93.80
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			98.50	98.50	98.50	98.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			100.00	100.00	100.00	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	96.30	-	100.00	98.15	96.30	100.00
11	Bandur 600 SC	3.0	100.00	96.30	100.00	98.77	96.30	100.00
LSD (P=0.05)			3.81	5.18	3.02			

Table 28. The efficacy of AKO 600 SC in control of POLPE in potato – assessment at weeds stage BBCH 12-14

Pest code			POLPE				
Report code			A.T/2023/023/ZZ	EA24H241-PL03			
Assessment date			01.06.2023	29.06.2024			
Days after application DA-A			15 DA-A	12 DA-A	Average	Min.	Max.
weeds density pcs/m ²			6.0	5.00	5.5	5.0	6.0
No.	Name	Rate (L, kg/ha)					
1	Untreated Check	-	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	70.00		70.0	70.0	70.0
3	AKO 600 SC	1.4	85.00		85.0	85.0	85.0
4	AKO 600 SC	2.0	85.00		85.0	85.0	85.0
5	AKO 600 SC	2.5	87.50		87.5	87.5	87.5
6	AKO 600 SC	3.0	85.00		85.0	85.0	85.0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	82.50	76.30	79.4	76.3	82.5
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2		83.80	83.8	83.8	83.8
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2		95.00	95.0	95.0	95.0
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	93.80	98.80	96.3	93.8	98.8
11	Bandur 600 SC	3.0	82.50	98.80	90.7	82.5	98.8
LSD (P=0.05)			6.98	5.45			

Table 29. The efficacy of AKO 600 SC in control of POLPE in potato – assessment up 2 weeks after first efficacy assessment

Pest code			POLPE					
Report code			A.T/2023/021/ZZ	A.T/2023/023/ZZ	EA24H241-PL03			
Assessment date			16.06.2023	15.06.2023	18.07.2024			
Days after application DA-A			31 DA-A	29 DA-A	29 DA-A	Average	Min.	Max.
weeds density pcs/m²			5.0	6.0	7.0	6.0	5.0	7.0
No.	Name	Rate (L, kg/ha)						
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	38.80	77.50		58.15	38.80	77.50
3	AKO 600 SC	1.4	71.30	80.00		75.65	71.30	80.00
4	AKO 600 SC	2.0	95.00	90.00		92.50	90.00	95.00
5	AKO 600 SC	2.5	97.50	90.00		93.75	90.00	97.50
6	AKO 600 SC	3.0	100.00	95.00		97.50	95.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	92.50	73.80	83.15	73.80	92.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			81.30	81.30	81.30	81.30
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			92.50	92.50	92.50	92.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	95.00	96.30	95.65	95.00	96.30
11	Bandur 600 SC	3.0	100.00	95.00	92.50	95.83	92.50	100.00
LSD (P=0.05)			7.62	4.88	5.67			

Table 30. The efficacy of AKO 600 SC in control of POLPE in potato – assessment at BBCH 37-39

Pest code			POLPE					
Report code			A.T/2023/021/ZZ	A.T/2023/023/ZZ	EA24H241-PL03			
Assessment date			16.06.2023	23.06.2023	01.08.2024			
Days after application DA-A			31 DA-A	37 DA-A	43 DA-A	Average	Min.	Max.
weeds density pcs/m ²			5.0	7.0	9.0	7.0	5.0	9.0
No.	Name	Rate (L, kg/ha)						
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	38.80	80.00		59.40	38.80	80.00
3	AKO 600 SC	1.4	71.30	82.50		76.90	71.30	82.50
4	AKO 600 SC	2.0	95.00	90.00		92.50	90.00	95.00
5	AKO 600 SC	2.5	97.50	90.00		93.75	90.00	97.50
6	AKO 600 SC	3.0	100.00	95.00		97.50	95.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	92.50	71.30	81.90	71.30	92.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			78.80	78.80	78.80	78.80
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			88.80	88.80	88.80	88.80
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	95.00	93.80	94.40	93.80	95.00
11	Bandur 600 SC	3.0	100.00	95.00	90.00	95.00	90.00	100.00
LSD (P=0.05)			7.62	3.85	3.72			

Table 31. The efficacy of AKO 600 SC in control of THLAR in potato – assessment at weeds stage BBCH 12-14

Pest code			THLAR										
Report code			AH/23/Z/27/ Gr/02	AH/24/Z/6/ Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6/ Zl/06	AH/24/Z/6/ Gr/07	EA24H241- PL02			
Assessment date			26.05.2023	23.05.2024	16.05.2024	13.05.2024	16.05.2024	23.05.2024	13.05.2024	29.06.2024			
Days after application DA-A			14 DA-A	9 DA-A	7 DA-A	16 DA-A	7 DA-A	9 DA-A	16 DA-A	12 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m ²			5.3	6.5	6.8	7.8	8.0	7.3	6.8	8.3	7.1	5.3	8.3
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	55.00	67.50	62.50	65.00					62.5	55.0	67.5
3	AKO 600 SC	1.4	55.00	77.50	71.30	71.30					68.8	55.0	77.5
4	AKO 600 SC	2.0	55.00	82.50	81.30	77.50					74.1	55.0	82.5
5	AKO 600 SC	2.5	57.50	86.30	83.80	85.00					78.2	57.5	86.3
6	AKO 600 SC	3.0	62.50	88.80	88.80	88.80					82.2	62.5	88.8
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-				60.00	55.00	57.50	97.50	67.5	55.0	97.5
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					62.50	58.80	60.00	98.80	70.0	58.8	98.8
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					70.00	72.50	70.00	100.00	78.1	70.0	100.0
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-				80.00	75.00	80.00	100.00	83.8	75.0	100.0
11	Bandur 600 SC	3.0	67.50	87.50	88.80	88.80	80.00	73.80	80.00	100.00	83.3	67.5	100.0
LSD (P=0.05)			7.72	5.06	5.79	2.81	3.08	6.20	3.08	2.81			

Table 32. The efficacy of AKO 600 SC in control of THLAR in potato – assessment up 2 weeks after first efficacy assessment

Pest code			THLAR										
Report code			AH/23/Z/27/ Gr/02	AH/24/Z/6/ Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6/ Zl/06	AH/24/Z/6/ Gr/07	EA24H241- PL02			
Assessment date			09.06.2023	06.06.2024	30.05.2024	27.05.2024	30.05.2024	06.06.2024	27.05.2024	18.07.2024			
Days after application DA-A			28 DA-A	23 DA-A	21 DA-A	30 DA-A	21 DA-A	23 DA-A	30 DA-A	31 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m ²			5.5	6.5	6.8	7.8	8.0	7.3	6.8	10.0	7.3	5.5	10.0
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	72.50	77.50	80.00	86.30					79.1	72.5	86.3
3	AKO 600 SC	1.4	80.00	85.00	88.80	94.80					87.2	80.0	94.8
4	AKO 600 SC	2.0	82.50	93.50	92.50	99.50					92.0	82.5	99.5
5	AKO 600 SC	2.5	85.00	99.30	99.50	100.00					96.0	85.0	100.0
6	AKO 600 SC	3.0	87.50	100.00	100.00	100.00					96.9	87.5	100.0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-				75.00	85.00	68.80	95.00	81.0	68.8	95.0
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					81.30	94.80	80.00	97.50	88.4	80.0	97.5
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					92.30	99.90	90.00	98.80	95.3	90.0	99.9
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-				100.00	100.00	99.50	98.80	99.6	98.8	100.0
11	Bandur 600 SC	3.0	88.80	99.80	100.00	100.00	100.00	100.00	99.50	98.80	98.4	88.8	100.0
LSD (P=0.05)			4.26	3.00	3.10	2.38	5.77	3.13	4.65	3.07			

Table 33. The efficacy of AKO 600 SC in control of THLAR in potato – assessment at BBCH 37-39

Pest code			THLAR										
Report code			AH/23/Z/27/ Gr/02	AH/24/Z/6/ Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6/ Zl/06	AH/24/Z/6/ Gr/07	EA24H241- PL02			
Assessment date			07.07.2023	10.07.2024	02.07.2024	08.07.2024	02.07.2024	10.07.2024	08.07.2024	01.08.2024			
Days after application DA-A			56 DA-A	57 DA-A	54 DA-A	72 DA-A	54 DA-A	57 DA-A	70 DA-A	45 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m ²			5.5	6.5	6.8	7.8	8.0	7.3	6.8	11.3	7.5	5.5	11.3
N o.	Name	Rate (L, kg/ha)											
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	85.00	80.00	82.50	87.50					83.8	80.0	87.5
3	AKO 600 SC	1.4	92.50	85.00	91.30	94.50					90.8	85.0	94.5
4	AKO 600 SC	2.0	94.80	94.80	92.50	99.50					95.4	92.5	99.5
5	AKO 600 SC	2.5	97.30	99.50	99.80	100.00					99.2	97.3	100.0
6	AKO 600 SC	3.0	98.50	100.00	100.00	100.00					99.6	98.5	100.0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-				75.00	86.30	86.30	91.30	84.7	75.0	91.3
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2					83.80	94.80	95.80	93.80	92.1	83.8	95.8
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2					93.50	99.80	99.80	92.50	96.4	92.5	99.8
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-				100.00	100.00	100.00	97.50	99.4	97.5	100.0
11	Bandur 600 SC	3.0	98.50	99.80	100.00	100.00	100.00	100.00	100.00	96.30	99.3	96.3	100.0
LSD (P=0.05)			3.25	2.24	2.60	2.69	5.11	2.69	3.53	4.28			

Table 34. The efficacy of AKO 600 SC in control of GASPA in potato – assessment at weeds stage BBCH 12-14

Pest code			GASPA							
Report code			A.T/2023/021/Z Z	AH/23/Z/27/Ow/0 5	AH/23/Z/27/Ko/0 6	AH/24/Z/6/Br/0 5	EA24H241- PL02			
Assessment date			06.06.2023	03.06.2023	05.06.2023	16.05.2024	29.06.2024			
Days after application DA-A			21 DA-A	14 DA-A	14 DA-A	7 DA-A	12 DA-A	Avera- ge	Min.	Max.
weeds density pcs/m²			5.0	7.5	6.0	5.3	8.5	6.5	5.0	8.5
No .	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	57.50	50.00	50.00			52.50	50.0 0	57.50
3	AKO 600 SC	1.4	73.80	60.00	61.30			65.03	60.0 0	73.80
4	AKO 600 SC	2.0	88.80	63.80	63.80			72.13	63.8 0	88.80
5	AKO 600 SC	2.5	91.30	82.50	82.50			85.43	82.5 0	91.30
6	AKO 600 SC	3.0	93.80	90.00	91.30			91.70	90.0 0	93.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	57.50	80.00	68.75	57.5 0	80.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2				70.00	82.50	76.25	70.0 0	82.50
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2				77.50	96.30	86.90	77.5 0	96.30
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	81.30	98.80	90.05	81.3 0	98.80
11	Bandur 600 SC	3.0	93.80	88.80	91.30	86.30	100.00	92.04	86.3 0	100.0 0
LSD (P=0.05)			4.18	4.75	4.19	4.05	5.40			

Table 35. The efficacy of AKO 600 SC in control of GASPA in potato – assessment up 2 weeks after first efficacy assessment

Pest code			GASPA								
Report code			A.T/2023/021/Z Z	AH/23/Z/27/Ow/0 5	AH/23/Z/27/Ko/0 6	AH/24/Z/6/Br/0 5	EA24H241- PL02				
Assessment date			16.06.2023	16.06.2023	19.06.2023	30.05.2024	18.07.2024				
Days after application DA-A			31 DA-A	27 DA-A	28 DA-A	21 DA-A	31 DA-A	Avera- ge	Min.	Max.	
weeds density pcs/m²			5.0	6.5	7.0	5.3	13.8	7.5	5.0	13.8	
No .	Name	Rate (L, kg/ha)									
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	AKO 600 SC	0.8	76.30	61.30	57.50			65.03	57.5 0	76.30	
3	AKO 600 SC	1.4	88.80	73.80	77.50			80.03	73.8 0	88.80	
4	AKO 600 SC	2.0	100.00	81.30	83.80			88.37	81.3 0	100.0 0	
5	AKO 600 SC	2.5	100.00	87.50	91.30			92.93	87.5 0	100.0 0	
6	AKO 600 SC	3.0	100.00	98.80	100.00			99.60	98.8 0	100.0 0	
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	86.30	77.50	81.90	77.5 0	86.30	
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2				91.30	80.00	85.65	80.0 0	91.30	
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2				98.50	92.50	95.50	92.5 0	98.50	
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	100.00	97.50	98.75	97.5 0	100.0 0	
11	Bandur 600 SC	3.0	100.00	100.00	100.00	100.00	98.80	99.76	98.8 0	100.0 0	
LSD (P=0.05)			2.38	4.54	5.40	2.59	6.13				

Table 36. The efficacy of AKO 600 SC in control of GASPA in potato – assessment at BBCH 37-39

Pest code			GASPA							
Report code			A.T/2023/021/Z Z	AH/23/Z/27/Ow/0 5	AH/23/Z/27/Ko/0 6	AH/24/Z/6/Br/0 5	EA24H241- PL02			
Assessment date			16.06.2023	17.07.2023	17.07.2023	02.07.2024	01.08.2024			
Days after application DA-A			31 DA-A	58 DA-A	56 DA-A	54 DA-A	45 DA-A	Avera- ge	Min.	Max.
weeds density pcs/m²			5.0	7.5	6.8	5.3	15.5	8.0	5.0	15.5
No .	Name	Rate (L, kg/ha)								
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	76.30	62.50	60.00			66.27	60.00	76.30
3	AKO 600 SC	1.4	88.80	76.30	80.00			81.70	76.30	88.80
4	AKO 600 SC	2.0	100.00	85.00	83.80			89.60	83.80	100.00
5	AKO 600 SC	2.5	100.00	92.50	95.00			95.83	92.50	100.00
6	AKO 600 SC	3.0	100.00	100.00	100.00			100.00	100.00	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	-	87.50	75.00	81.25	75.00	87.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2				91.30	77.50	84.40	77.50	91.30
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2				99.50	88.80	94.15	88.80	99.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	-	100.00	93.80	96.90	93.80	100.00
11	Bandur 600 SC	3.0	100.00	100.00	100.00	100.00	92.50	98.50	92.50	100.00
LSD (P=0.05)			2.38	4.41	5.56	2.27	4.92			

Table 37. The efficacy of AKO 600 SC in control of GAETE in potato – assessment at weeds stage BBCH 12-14

Pest code			GAETE						
Report code			AH/23/Z/27/Ow/05	AH/23/Z/27/Ko/06	AH/24/Z/6/ZI/06	AH/24/Z/6/Gr/07			
Assessment date			03.06.2023	05.06.2023	23.05.2024	13.05.2024			
Days after application DA-A			14 DA-A	14 DA-A	9 DA-A	16 DA-A	Average	Min.	Max.
weeds density pcs/m ²			6.0	7.0	8.8	5.3	6.8	5.3	8.8
No.	Name	Rate (L, kg/ha)							
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	40.00	43.80			41.90	40.00	43.80
3	AKO 600 SC	1.4	50.00	51.30			50.65	50.00	51.30
4	AKO 600 SC	2.0	57.50	60.00			58.75	57.50	60.00
5	AKO 600 SC	2.5	81.30	80.00			80.65	80.00	81.30
6	AKO 600 SC	3.0	88.80	88.80			88.80	88.80	88.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	57.50	62.50	60.00	57.50	62.50
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			67.50	70.00	68.75	67.50	70.00
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			75.00	77.50	76.25	75.00	77.50
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	77.50	80.00	78.75	77.50	80.00
11	Bandur 600 SC	3.0	87.50	90.00	78.80	80.00	84.08	78.80	90.00
LSD (P=0.05)			4.61	4.63	7.09	4.77			

Table 38. The efficacy of AKO 600 SC in control of GAETE in potato – assessment up 2 weeks after first efficacy assessment

Pest code			GAETE						
Report code			AH/23/Z/27/Ow/05	AH/23/Z/27/Ko/06	AH/24/Z/6/ZI/06	AH/24/Z/6/Gr/07			
Assessment date			16.06.2023	19.06.2023	06.06.2024	27.05.2024			
Days after application DA-A			27 DA-A	28 DA-A	23 DA-A	30 DA-A	Average	Min.	Max.
weeds density pcs/m ²			6.8	6.5	8.8	5.3	6.9	5.3	8.8
No.	Name	Rate (L, kg/ha)							
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	53.80	52.50			53.15	52.50	53.80
3	AKO 600 SC	1.4	62.50	66.30			64.40	62.50	66.30
4	AKO 600 SC	2.0	77.50	77.50			77.50	77.50	77.50
5	AKO 600 SC	2.5	86.30	87.50			86.90	86.30	87.50
6	AKO 600 SC	3.0	97.50	98.80			98.15	97.50	98.80
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	90.00	85.00	87.50	85.00	90.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			91.30	96.00	93.65	91.30	96.00
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			94.80	100.00	97.40	94.80	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	100.00	100.00	100.00	100.00	100.00
11	Bandur 600 SC	3.0	98.80	97.50	100.00	100.00	99.08	97.50	100.00
LSD (P=0.05)			4.29	4.41	2.73	3.44			

Table 39. The efficacy of AKO 600 SC in control of GAETE in potato – assessment at BBCH 37-39

Pest code			GAETE						
Report code			AH/23/Z/27/Ow/05	AH/23/Z/27/Ko/06	AH/24/Z/6/ZI/06	AH/24/Z/6/Gr/07			
Assessment date			17.07.2023	17.07.2023	10.07.2024	08.07.2024			
Days after application DA-A			58 DA-A	56 DA-A	57 DA-A	70 DA-A	Average	Min.	Max.
weeds density pcs/m ²			7.5	7.8	8.8	5.3	7.4	5.3	8.8
No.	Name	Rate (L, kg/ha)							
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	AKO 600 SC	0.8	56.30	57.50			56.90	56.30	57.50
3	AKO 600 SC	1.4	57.50	71.30			64.40	57.50	71.30
4	AKO 600 SC	2.0	78.80	80.00			79.40	78.80	80.00
5	AKO 600 SC	2.5	87.50	90.00			88.75	87.50	90.00
6	AKO 600 SC	3.0	98.80	100.00			99.40	98.80	100.00
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-	90.00	87.50	88.75	87.50	90.00
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2			91.30	96.00	93.65	91.30	96.00
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2			94.80	100.00	97.40	94.80	100.00
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-	100.00	100.00	100.00	100.00	100.00
11	Bandur 600 SC	3.0	100.00	100.00	100.00	100.00	100.00	100.00	100.00
LSD (P=0.05)			5.50	3.34	2.73	3.04			

Table 40. The efficacy of AKO 600 SC in control of POAAN in potato – assessment at weeds stage BBCH 12-14

Pest code			POAAN											
Report code			AH/23/Z/27/ Jab/03	AH/23/Z/27 /Ry/04	AH/24/Z/6 /Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6 /Zl/06	AH/24/Z/6/ Gr/07				EA24H241 -PL02
Assessment date			06.06.2023	29.05.2023	23.05.2024	16.05.2024	13.05.2024	16.05.2024	23.05.2024	13.05.2024				29.06.2024
Days after application DA-A			21 DA-A	14 DA-A	9 DA-A	7 DA-A	16 DA-A	7 DA-A	9 DA-A	16 DA-A	12 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m²			6.0	7.0	5.8	9.5	8.8	6.0	8.3	6.8	8.3	7.4	5.8	9.5
N o.	Name	Rate (L, kg/ha)												
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	25.00	45.00	52.50	66.30	65.00					50.8	25.0	66.3
3	AKO 600 SC	1.4	43.80	60.00	62.50	73.80	73.80					62.8	43.8	73.8
4	AKO 600 SC	2.0	61.30	71.30	65.00	81.30	85.00					72.8	61.3	85.0
5	AKO 600 SC	2.5	76.30	82.50	78.80	85.00	87.50					82.0	76.3	87.5
6	AKO 600 SC	3.0	86.30	88.80	83.80	91.30	90.00					88.0	83.8	91.3
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-				60.00	57.50	60.00	73.80	62.8	57.5	73.8
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						67.50	65.00	67.50	82.50	70.6	65.0	82.5
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						70.00	65.00	67.50	93.80	74.1	65.0	93.8
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-				72.50	65.00	70.00	98.80	76.6	65.0	98.8
11	Bandur 600 SC	3.0	87.50	87.50	83.80	92.50	92.50	76.30	70.00	70.00	100.00	84.5	70.0	100.0
LSD (P=0.05)			5.54	4.51	5.73	5.38	2.85	4.88	6.30	3.89	5.58			

Table 41. The efficacy of AKO 600 SC in control of POAAN in potato – assessment up 2 weeks after first efficacy assessment

Pest code			POAAN											
Report code			AH/23/Z/27/ Jab/03	AH/23/Z/27 /Ry/04	AH/24/Z/6 /Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6 /Zl/06	AH/24/Z/6/ Gr/07	EA24H241 -PL02			
Assessment date			20.06.2023	12.06.2023	06.06.2024	30.05.2024	27.05.2024	30.05.2024	06.06.2024	27.05.2024	18.07.2024			
Days after application DA-A			35 DA-A	28 DA-A	23 DA-A	21 DA-A	30 DA-A	21 DA-A	23 DA-A	30 DA-A	31 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m²			6.0	7.3	5.8	9.5	8.8	6.0	8.3	6.8	9.8	7.6	5.8	9.8
N o.	Name	Rate (L, kg/ha)												
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	26.30	43.80	81.30	85.00	82.50					63.8	26.3	85.0
3	AKO 600 SC	1.4	46.30	61.30	83.80	87.50	88.80					73.5	46.3	88.8
4	AKO 600 SC	2.0	65.00	73.80	87.50	93.50	86.00					81.2	65.0	93.5
5	AKO 600 SC	2.5	81.30	82.50	97.30	98.80	100.00					92.0	81.3	100.0
6	AKO 600 SC	3.0	94.30	94.30	100.00	99.80	100.00					97.7	94.3	100.0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-				87.50	82.50	83.80	71.30	81.3	71.3	87.5
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						88.80	91.30	87.50	80.00	86.9	80.0	91.3
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						98.50	99.00	98.30	91.30	96.8	91.3	99.0
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-				100.00	99.50	100.00	97.50	99.3	97.5	100.0
11	Bandur 600 SC	3.0	93.00	95.50	100.00	100.00	100.00	100.00	98.80	100.00	97.50	98.3	93.0	100.0
LSD (P=0.05)			6.47	5.59	2.78	3.71	2.21	2.53	2.37	3.96	4.72			

Table 42. The efficacy of AKO 600 SC in control of POAAN in potato – assessment at BBCH 37-39

Pest code			POAAN											
Report code			AH/23/Z/27/ Jab/03	AH/23/Z/27/ /Ry/04	AH/24/Z/6/ /Zl/01	AH/24/Z/6/ Br/02	AH/24/Z/6/ Gr/03	AH/24/Z/6/ Br/05	AH/24/Z/6/ /Zl/06	AH/24/Z/6/ Gr/07	EA24H241 -PL02			
Assessment date			22.07.2023	19.08.2023	10.07.2024	02.07.2024	08.07.2024	02.07.2024	10.07.2024	08.07.2024	01.08.2024			
Days after application DA-A			67 DA-A	65 DA-A	57 DA-A	54 DA-A	72 DA-A	54 DA-A	57 DA-A	70 DA-A	45 DA-A	Ave- rage	Mi n.	Ma x.
weeds density pcs/m²			6.0	7.3	5.8	9.5	8.8	6.0	8.3	6.8	10.8	7.7	5.8	10.8
N o.	Name	Rate (L, kg/ha)												
1	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
2	AKO 600 SC	0.8	30.00	38.80	83.80	82.50	83.80					63.8	30.0	83.8
3	AKO 600 SC	1.4	51.30	60.00	85.00	91.30	90.00					75.5	51.3	91.3
4	AKO 600 SC	2.0	71.30	75.00	88.80	92.50	96.00					84.7	71.3	96.0
5	AKO 600 SC	2.5	91.30	85.00	98.30	99.80	100.00					94.9	85.0	100.0
6	AKO 600 SC	3.0	93.00	98.80	100.00	100.00	100.00					98.4	93.0	100.0
7	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	-	-				87.50	83.80	85.00	68.80	81.3	68.8	87.5
8	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2						91.30	91.30	90.00	77.50	87.5	77.5	91.3
9	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2						99.50	99.00	98.30	88.80	96.4	88.8	99.5
10	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	-	-				100.00	99.50	100.00	93.80	98.3	93.8	100.0
11	Bandur 600 SC	3.0	91.30	97.50	100.00	100.00	100.00	100.00	98.80	100.00	93.80	97.9	91.3	100.0
LSD (P=0.05)			5.73	6.05	3.19	2.60	1.75	2.48	2.23	2.68	4.33			

Appendix 6 Summary of phytotoxicity trials data in summary form

Table 1 – data from phytotoxicity trials – potato

Report code	Treatment	Dose [L/ha]	Phytotoxicity in %					
A.T/2023/025/ZZ	Timing of assessment	DA-A	16 DA-A	27 DA-A	41 DA-A	-	-	-
	date		26.05.2023	06.06.2023	20.06.2023	-	-	-
	Untreated Check	-	0.00	0.00	0.00	-	-	-
	AKO 600 SC	3.0	0.50	0.00	0.00	-	-	-
	AKO 600 SC	6.0	2.00	0.00	0.00	-	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	1.50	0.00	0.00	-	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	3.30	0.00	0.00	-	-	-
	Bandur 600 SC	3.0	1.30	0.00	0.00	-	-	-
	Bandur 600 SC	6.0	1.50	0.00	0.00	-	-	-
	LSD (P=0.05)		1.900	-	-	-	-	-
A.T/2023/026/ZZ	Timing of assessment	DA-A	17 DA-A	28 DA-A	36 DA-A	48 DA-A	-	-
	date		02.06.2023	13.06.2023	21.06.2023	03.07.2023	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/23/Z/27/Gr/01	Timing of assessment	DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A	80 DA-A	98 DA-A

	date		19.05.2023	26.05.2023	09.06.2023	07.07.2023	31.07.2023	18.08.2023
	Untreated Check	-	0.00	0.00	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00	0.00	0.00
	AKO 600 SC	6.0	0.00	0.00	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	0.00	0.00
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-	-	-
AH/23/Z/27/Jab/02	Timing of assessment	DA-A	21 DA-A	28 DA-A	42 DA-A	72 DA-A	-	-
	date		06.06.2023	29.07.1903	27.06.2023	27.07.2023	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/23/Z/27/Ko/03	Timing of assessment	DA-A	10 DA-A	28 DA-A	63 DA-A	-	-	-
	date		01.06.2023	19.06.2023	24.07.2023	-	-	-
	Untreated Check	-	0.00	0.00	0.00	-	-	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-	-	-
	AKO 600 SC	6.0	0.00	0.00	0.00	-	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	-	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/24/Z/6/Pr/01	Timing of assessment	DA-A	6 DA-A	20 DA-A	54 DA-A	112 DA-A	-	-
	date		15.05.2024	29.05.2024	02.07.2024	29.08.2024	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-

	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/24/Z/6/Br/02	Timing of assessment	DA-A	7 DA-A	21 DA-A	54 DA-A	112 DA-A	-	-
	date		16.05.2024	30.05.2024	02.07.2024	29.08.2024	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/24/Z/6/Gr/03	Timing of assessment	DA-A	16 DA-A	30 DA-A	72 DA-A	121 DA-A	-	-
	date		13.05.2024	27.05.2024	08.07.2024	26.08.2024	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/24/Z/6/Dz/04	Timing of assessment	DA-A	9 DA-A	23 DA-A	59 DA-A	116 DA-A	-	-
	date		15.05.2024	29.05.2024	04.07.2024	30.08.2024	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-

	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-
AH/24/Z/6/ZI/05	Timing of assessment	DA-A	9 DA-A	23 DA-A	57 DA-A	111 DA-A	-	-
	date		23.05.2024	06.06.2024	20.07.2024	02.09.2024	-	-
	Untreated Check	-	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	AKO 600 SC + Boa Pro 480 EC	4.0 + 0.2	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00	-	-
	Bandur 600 SC	6.0	0.00	0.00	0.00	0.00	-	-
	LSD (P=0.05)		-	-	-	-	-	-

Table 2 – data from efficacy trials – potato

Report code	Treatment	Dose [L/ha]	Phytotoxicity in %			
A.T/2023/021/ZZ	Timing of assessment date	DA-A	14 DA-A	21 DA-A	31 DA-A	-
			30.05.202	06.06.2023	16.05.2023	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
LSD (P=0.05)			-	-	-	-
A.T/2023/022/ZZ	Timing of assessment date	DA-A	16 DA-A	22 DA-A	28 DA-A	41 DA-A
			26.05.2023	01.06.2023	07.06.2023	20.06.2023
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.30	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	2.50	0.00	0.00	0.00
	AKO 600 SC	3.0	0.50	0.00	0.00	0.00
	Bandur 600 SC	3.0	2.00	0.00	0.00	0.00
LSD (P=0.05)			1.89	-	-	-
A.T/2023/023/ZZ	Timing of assessment date	DA-A	15 DA-A	29 DA-A	37 DA-A	-
			01.06.2023	15.06.2023	23.06.2023	-
	Untreated Check	-	0.00	0.00	0.00	-

	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
A.T/2023/024/ZZ	Timing of assessment date	DA-A	17 DA-A	28 DA-A	36 DA-A	48 DA-A
			02.06.2023	13.06.2023	21.06.2023	03.07.2023
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/ZI/01	Timing of assessment date	DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A
			18.05.2023	25.06.2023	08.06.2023	06.07.2023
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00

	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/Gr/02	Timing of assessment	DA-A	7 DA-A	14 DA-A	28 DA-A	56 DA-A
	date		19.05.2023	26.05.2023	09.06.2023	07.07.2023
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/Jab/03	Timing of assessment	DA-A	21 DA-A	35 DA-A	67 DA-A	-
	date		06.06.2023	20.06.2023	22.07.2023	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/Ry/04	Timing of assessment	DA-A	14 DA-A	28 DA-A	65 DA-A	-
	date		29.05.2023	12.06.2023	19.07.2023	-

	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/Ow/05	Timing of assessment date	DA-A	14 DA-A	27 DA-A	58 DA-A	-
			03.06.2023	16.06.2023	17.07.2023	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
AH/23/Z/27/Ko/06	Timing of assessment date	DA-A	14 DA-A	28 DA-A	56 DA-A	-
			05.06.2023	19.06.2023	17.07.2023	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC	0.8	0.00	0.00	0.00	-
	AKO 600 SC	1.4	0.00	0.00	0.00	-
	AKO 600 SC	2.0	0.00	0.00	0.00	-
	AKO 600 SC	2.5	0.00	0.00	0.00	-
	AKO 600 SC	3.0	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-

AH/24/Z/6/ZI/01	Timing of assessment	DA-A	9 DA-A	23 DA-A	57 DA-A	111 DA-A
	date	-	23.05.2024	06.06.2024	10.07.2024	02.09.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-
AH/24/Z/6/Br/02	Timing of assessment	DA-A	7 DA-A	21 DA-A	54 DA-A	112 DA-A
	date	-	16.05.2024	30.05.2024	02.07.2024	29.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-
AH/24/Z/6/Gr/03	Timing of assessment	DA-A	16 DA-A	30 DA-A	72 DA-A	121 DA-A
	date	-	13.05.2024	27.05.2024	08.07.2024	26.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC	0.8	0.00	0.00	0.00	0.00
	AKO 600 SC	1.4	0.00	0.00	0.00	0.00
	AKO 600 SC	2.0	0.00	0.00	0.00	0.00
	AKO 600 SC	2.5	0.00	0.00	0.00	0.00
	AKO 600 SC	3.0	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-

AH/24/Z/6/Dz/04	Timing of assessment	DA-A	10 DA-A	24 DA-A	57 DA-A	115 DA-A
	date	-	16.05.2024	30.05.2024	02.07.2024	29.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-
AH/24/Z/6/Br/05	Timing of assessment	DA-A	7 DA-A	21 DA-A	54 DA-A	112 DA-A
	date	-	16.05.2024	30.05.2024	02.07.2024	29.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-
AH/24/Z/6/ZI/06	Timing of assessment	DA-A	9 DA-A	23 DA-A	57 DA-A	111 DA-A
	date	-	23.05.2024	06.06.2024	10.07.2024	02.09.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)	-	-	-	-	-
AH/24/Z/6/Gr/07	Timing of assessment	DA-A	16 DA-A	30 DA-A	72 DA-A	121 DA-A
	date	-	13.05.2024	27.05.2024	08.07.2024	26.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00

	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-
AH/24/Z/6/Pr/08	Timing of assessment	DA-A	7 DA-A	21 DA-A	54 DA-A	112 DA-A
	date	-	16.05.2024	30.05.2024	02.07.2024	29.08.2024
	Untreated Check	-	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	0.00
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	0.00
	Bandur 600 SC	3.0	0.00	0.00	0.00	0.00
	LSD (P=0.05)		-	-	-	-
EA24H241-PL01	Timing of assessment	DA-A	12 DA-A	31 DA-A	45 DA-A	-
	date	-	29.06.2024	18.07.2024	01.08.2024	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
EA24H241-PL02	Timing of assessment	DA-A	12 DA-A	31 DA-A	45 DA-A	-
	date	-	29.06.2024	18.07.2024	01.08.2024	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	-

	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-
EA24H241-PL03	Timing of assessment date	DA-A	10 DA-A	29 DA-A	43 DA-A	-
			29.06.2024	18.07.2024	01.08.2024	-
	Untreated Check	-	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	0.8 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.2 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	1.4 + 0.2	0.00	0.00	0.00	-
	AKO 600 SC + Boa Pro 480 EC	2.0 + 0.2	0.00	0.00	0.00	-
	Bandur 600 SC	3.0	0.00	0.00	0.00	-
	LSD (P=0.05)		-	-	-	-

Table 3 – data from phytotoxicity trials – potato

Test report (1)	Testing Unit GEP (2)	Country Region (3)	Dates of trials and GS (4)	Cultivar F/G (5) N/A (6)	Experimental design Test method (7) Replicates	Remarks
A.T/2023/021/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	Rakojady/ Poland	16.05.2023 BBCH 07-09	potato/ Partner F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.28
A.T/2023/022/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	Miława/ Poland	10.05.2023 BBCH 03-07	potato/ Skawa F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 5.7
A.T/2023/023/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	Mirowsław/ Poland	17.05.2023 BBCH 06-08	potato/ Vineta F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 6.5
A.T/2023/024/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	Lichnowy/ Poland	16.05.2023 BBCH 07-08	potato/ Boryna F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand 7.08 pH
AH/23/Z/27/ZI/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Złotniki/ Poland	11.05.2023 BBCH 08	potato/ Vineta F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0
AH/23/Z/27/Gr/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń/ Poland	12.05.2023 BBCH 01-08	potato/ Jurek F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.4
AH/23/Z/27/Jab/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Jabłowo Pałuckie/ Poland	16.05.2023 BBCH 03-07	potato/ Melody F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.7
AH/23/Z/27/Ry/04	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Rycerzewo/ Poland	15.05.2023 BBCH 07-09	potato/ Jelly F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 7.1
AH/23/Z/27/Ow/05	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Owczary/ Poland	20.05.2023 BBCH 05-09	potato/ Gala F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 6.4
AH/23/Z/27/Ko/06	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Kopanie/ Poland	22.05.2023 BBCH 05-09	potato/ Satina F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 6.9
AH/24/Z/6/ZI/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department;	Złotniki / Poland	14.05.2024 BBCH 00-08	potato/ Red Lady F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0

	ul. Wojska Polskiego 28, 60-637 Poznań, Poland					
AH/24/Z/6/Br/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Brody / Poland	09.05.2024 BBCH 05-08	potato/ Lord F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.2
AH/24/Z/6/Gr/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń / Poland	27.04.2024 BBCH 05	potato/ Jurek F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.4
AH/24/Z/6/Dz/04	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Dzierżążno / Poland	06.05.2024 BBCH 08	potato/ Satina F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.0
AH/24/Z/6/Br/05	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Brody / Poland	09.05.2024 BBCH 05-08	potato/ Lord F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.2
AH/24/Z/6/ZI/06	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Złotniki / Poland	14.05.2024 BBCH 08	potato/ Red Lady F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0
AH/24/Z/6/Gr/07	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń / Poland	27.04.2024 BBCH 05	potato/ Jurek F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.4
AH/24/Z/6/Pr/08	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Przybroda / Poland	09.05.2024 BBCH 08	potato/ Riviera F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.0
EA24H241-PL01	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	Dąbrowa/ Poland	17.06.2024 BBCH 06-08	potato/ Vineta F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0
EA24H241-PL02	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	Pilich / Poland	17.06.2024 BBCH 06-08	potato/ Vineta F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0
EA24H241-PL03	Agricola 200 Polska Sp. z o.o. ul. Akacyjowa 14, 86-011 Wtelno, Poland	Stary Dwór / Poland	19.06.2024 BBCH 06-08	potato/ Gala F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0
A.T/2023/025/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3 88-300 Mogilno, Poland	Miława/ Poland	10.05.2023 BBCH 03-07	potato/ Skawa F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 5.7
A.T/2023/026/ZZ	A.T Sp. z o.o. ul. Przemysłowa 3	Lichnowy/ Poland	16.05.2023	potato/ Boryna	Randomized blocks	Soil type: loamy sand

	88-300 Mogilno, Poland		BBCH 07-08	F N	EPPO PP 1/135 (4) 4	pH 7.08
AH/23/Z/27/Gr/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń/ Poland	12.05.2023 BBCH 01-08	potato/ Jurek F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.4
AH/23/Z/27/Jab/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Jabłowo Pałuckie/ Poland	16.05.2023 BBCH 03-07	potato/ Melody F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.7
AH/23/Z/27/Ko/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Kopanie/ Poland	22.05.2023 BBCH 05-09	potato/Satina F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: sandy loam pH 6.9
AH/24/Z/6/Pr/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Przybroda/ Poland	09.05.2024 BBCH 08	potato/Riviera F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.0
AH/24/Z/6/Br/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Brody/ Poland	09.05.2024 BBCH 05-08	potato/ Lord F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.2
AH/24/Z/6/Gr/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń/ Poland	27.04.2024 BBCH 05	potato/ Jurek F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.4
AH/24/Z/6/Dz/04	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Dzierżążno/ Poland	06.05.2024 BBCH 08	potato/Satina F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 6.0
AH/24/Z/6/Zl/05	Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department; ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Złotniki / Poland	14.05.2024 BBCH 08	potato/ Red Lady F N	Randomized blocks EPPO PP 1/135 (4) 4	Soil type: loamy sand pH 7.0

Notes:

- (1): test report number
- (2): Trial responsible entity/ officially recognized organization
- (3): precise place of the trial followed by the country
- (4): Crop growth stage at application timing
- (5): F= field trial, G=protected crop, specify
- (6): N=Natural infestation, A= Artificial inoculation
- (7): Test guideline used

Appendix 7 Summary of available studies: Adverse effects on beneficial organisms

None

Appendix 8 Summary of data on succeeding crop

None