

# FINAL REGISTRATION REPORT

## **Part B**

### **Section 3**

#### **Efficacy Data and Information**

Concise summary

Product code: BSK-FUN 500 SC

Product name: -

Chemical active substance:

Boscalid, 500 g/L

Central Zone

Zonal Rapporteur Member State: Poland

#### **CORE ASSESSMENT**

(authorization)

Applicant:

Pestila Sp. z o. o. and ProAgri International Sp. z o. o.

Submission date: April 2024

MS Finalisation date: October 2024; February 2025, June 2025

## Version history

When	What
October 2024	ZRMs evaluated dRR submitted by Applicant.
February 2025	The final Registration Report.
June 2025	The final Registration Report after RT to Boskalid 500 SC.

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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)

The process chosen by the zRMS to transform the dRR into a RR should be explained. Options are to rewrite the document (with track change or not) or to use commenting boxes such as the following:

Comments of zRMS:	Comments of ZRMs are presented in commenting boxes at the end of each chapter. The text of dRR was generally not changed or rewritten (small changes in the document are marked by grey colour).
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#### 3.1 Summary and conclusions of zRMS on Section 3: Efficacy (KCP 6)

##### Abstract

**Comments of ZRMs:** Overall summaries are not necessary here. It was provided at the end of each chapter of the dRR. However in briefly summary, **ZRMs accepted conditionally use against SEPTTR on winter wheat, PYRNTE on winter barley, RHYNSE on winter rye and LEPTMA on winter oilseed rape (spring application). Within 24 months after registration, Applicant should submitted at least 1-2 efficacy trials carried out on winter wheat against SEPTTR, winter barley against PYRNTE, winter rye against RHYNSE and winter oilseed rape against LEPTMA carried out in N-E EPPO zone. Use against SEPTTR on spring barley, winter triticale and spring triticale and against PYRNTE on spring barley and SCLESC on winter oilseed rape (spring application) are accepted. Use against PUCCRE and PSDCHA on winter wheat was excluded due to not enough trials and autumn application against SCLESC and LEPTMA and combination application (spring/autumn) in winter oilseed rape due to lack of trials. Recommended water volume for cereals is 200-300 L/ha and for winter oilseed rape: 300-400 L/ha.**

**T10able 3.1-1: Acceptability of intended uses (and respective fall-back GAPs, if applicable)**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use -No. *	Mem- ber state(s)	Crop and/ or situation  (crop destina- tion / purpose of crop)	F, Fn, Fnp G, Gn, Gnp 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/ synergist per ha, other dose rate expression, dose range (min-max)	zRMS Conclusion (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between ap- plications (days)	kg or L prod- uct / 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	Poland	Winter wheat	F	Septoria leaf blotch ( <i>Zymoseptoria tritici</i> ) SEPTTR  <del>Eyespot of cereals (<i>Oculimacula acuformis</i>) PSDCHA</del>  <del>Brown rust of cereals (<i>Puccinia recondita</i>) PUCCRE</del>	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g bos- calid b) 350 g bos- calid	<del>400</del> 200- 300 L/ha	56 days	N/A	Use against PSDCHA and PUCCRE – excluded. SEPTTR – accepted condition- ally. Recom- mended wa- ter volume is 200-300 L/ha
2	Poland	Spring wheat	F	Septoria leaf blotch ( <i>Zymoseptoria tritici</i> ) SEPTTR	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g bos- calid b) 350 g bos- calid	<del>400</del> 200- 300 L/ha	56 days	N/A	Acceptable. Recom- mended wa- ter volume is 200-300 L/ha
3	Poland	Winter triticale	F	Septoria leaf blotch ( <i>Zymoseptoria tritici</i> ) SEPTTR	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g bos- calid b) 350 g bos- calid	<del>400</del> 200- 300 L/ha	56 days	N/A	Acceptable. Recom- mended wa- ter volume is 200-300 L/ha

4	Poland	Spring triticale	F	Septoria leaf blotch ( <i>Zymoseptoria tritici</i> ) SEPTTR	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g boscalid b) 350 g boscalid	<del>100</del> 200-300 L/ha	56 days	N/A	Acceptable. Recommended water volume is 200-300 L/ha
5	Poland	Winter barley	F	Net blotch of barley ( <i>Pyrenophora teres</i> ) PYRNTE	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g boscalid b) 350 g boscalid	<del>100</del> 200-300 L/ha	56 days	N/A	PYRNTE – accepted conditionally. Recommended water volume is 200-300 L/ha
6	Poland	Spring barley	F	Net blotch of barley ( <i>Pyrenophora teres</i> ) PYRNTE	broadcast spraying	BBCH 30-49	1 a) 1 b) 1	-	0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g boscalid b) 350 g boscalid	<del>100</del> 200-300 L/ha	56 days	N/A	Acceptable. Recommended water volume is 200-300 L/ha
7	Poland	Winter oilseed rape	F	Black leg of crucifers ( <i>Leptosphaeria maculans</i> ) LEPTMA	broadcast spraying	Autumn BBCH 13-18 Spring BBCH 31-57	2 a) 1 b) 2	30 days	0.2–0.5 L/ha a) 0.5 L/ha b) 1 L/ha	100–250 g as/ha a) 250 g as/ha b) 500 g as/ha	100-400 L/ha	N/A	one in autumn; one in spring or 2 in spring, min. 14 days between applications	Not accepted.
8	Poland	Winter oilseed rape	F	Black leg of crucifers ( <i>Leptosphaeria maculans</i> ) LEPTMA	broadcast spraying	Spring BBCH 31-57	2 a) 1 b) 2	14 days	0.2–0.5 L/ha a) 0.5 L/ha b) 1 L/ha	100–250 g as/ha a) 250 g as/ha b) 500 g as/ha	100-400 L/ha	N/A	one in autumn; one in spring or 2 in spring, min. 14 days between applications	Not accepted
9	Poland	Winter oilseed rape	F	Black leg of crucifers ( <i>Leptosphaeria maculans</i> ) LEPTMA Cottony rot <i>Sclerotinia sclerotiorum</i> SCLESC	broadcast spraying	BBCH 57-71	2 a) 1 b) 2 (14 days)		0.2–0.4–0.5 L/ha a) 0.5 L/ha b) 1 L/ha	100–200-250 g as/ha a) 250 g as/ha b) 500 g as/ha	100–300–400 L/ha	N/A	-	SCLESC – accepted, LEPTMA – accepted conditionally. Recommended dose should be 0.4-0.5 L/ha and water volume 300-400 L/ha.

10	Poland	Winter rye	F	Leaf blotch of cereals ( <i>Rhynchosporium secalis</i> ) RHYNSE	broadcast spraying	BBCH 30-49	1 a) 1 b) 1		0.7 L/ha a) 0.7 L/ha b) 0.7 L/ha	350 g boscalid a) 350 g boscalid b) 350 g boscalid	<del>400</del> 200-300 L/ha	56 days	-	RHYNSE – accepted conditionally. Recommended water volume is 200-300 L/ha.
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\* 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

Column 15: zRMS conclusion.

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

## 3.2 Efficacy data (KCP 6)

### Introduction

This is the application for registration of a plant protection product under working name BSK-FUN 500 SC according to Article 33 of Regulation 1107/2009. BSK-FUN 500 SC is an suspension concentrate (SC) formula, containing 500 g/L of active substance – boscalid, to be used as a fungicide to control diseases in cereals and oilseed rape. This is a core dossier in order to allow the approval of BSK-FUN 500 SC in **Poland** (zRMS).

The trials of BSK-FUN 500 SC have been performed in cereals as well as in winter oilseed rape in 2023 season.

According to EPPO Standard PP 1/223 (2) *Efficacy evaluation of plant protection products*: the minimum number of trials required to establish acceptable efficacy depends on many factors, including: extent of knowledge of the active substance, extent of variability in the proposed area of use (e.g. plant health conditions, climatic differences, range of agricultural practices, uniformity of crops, importance of crop and target pest).

It is a common practice that trials on effectiveness and phytotoxicity (including, where relevant, measurement of yield) should be conducted over at least two growing seasons, unless results from a single season are considered to provide adequate confirmation of the validity of the proposed claims.

With this document applicant provided 37 efficacy trials in winter oilseed rape, winter wheat, spring wheat, winter triticale, spring triticale, winter barley, spring barley and winter rye performed in Poland territory in different regions with distinct environmental conditions. The results of those trials are comparable in efficacy and phytotoxicity so it has been assumed that they are adequate and sufficient for confirmation of the validity of the proposed claims.

Moreover, based on EPPO Standard PP 1/226 (3) *Number of efficacy trials*: the full number of trials is needed, particularly for plant protection products or active substances which not have been on the market in the EPPO region in which authorization is sought, or for intended uses for which no extrapolation of any aspect of efficacy from other uses is possible.

Boscalid is well known and “old” as well as known active substance, which is common use for protection cereals and winter oilseed rape against fungal diseases. There are many plant protection products registered in Poland recommended to use in winter oilseed rape and the same cereals, the same dose and against the same fungal diseases, as proposed for BSK-FUN 500 SC, so extrapolation from knowledge provided by others applicants is possible.

Considering the above, it was assumed, that the safety and effectiveness of the plant protection product BSK-FUN 500 SC, against fungal diseases for uses in cereals and winter oilseed rape, was confirmed on the basis of the studies submitted by the applicant, and knowledge about the active substance boscalid.

### Description of active substances

Active substance in BSK-FUN 500 SC fungicide is: boscalid (500 g/L) which is included into Annex I of Directive 91/414. Boscalid is on the list of approved active substances (*Commission Implementing Regulation (EU) No 540/2011 of 25 May 2011 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards the list of approved active substances*). The active substance of the product is well known and commonly used in Poland and other EU countries. Because of that one season of studies are presented in this application The efficacy of the substances has been proved in many trials and in crop protection practice.



## Mode of action

Boscalid is a fungicide active ingredient belonging to the pyridine-carboxamides group (also known as carboxins or oxathiins, group FRAC C2). The mode of action of Boscalid is the inhibition of the enzyme succinate dehydrogenase (SDH), also known as complex II in the mitochondrial electron transport chain (Kulka and von Schmeling 1995). Like other complexes of the respiratory chain, this enzyme is a component of the inner mitochondrial membrane. It consists of four nucleus-encoded subunits (SDH A, B, C, D). Two of these polypeptides (SDH C, D) anchor the complex in the membrane whilst the others project into the mitochondrial matrix where they catalyse the oxidation of succinate to fumarate as part of the tricarboxylic acid (TCA) cycle. The electrons so released are channelled into the electron transport chain via the co-substrate ubiquinol. Complex II occupies a key function in fungal metabolism. Not only does it deliver high energy electrons for energy production, it also forms an essential junction where components of the TCA cycle can be diverted to become the building blocks for amino acids and lipids. Through its inhibition of complex II, boscalid disrupts fungal growth by preventing energy production and also by eliminating the availability of the chemical building blocks for the synthesis of other essential cellular components.

**Table 3.2-1: Details of the active substances**

Active substance	Boscalid
Concentration	500 g/L
Chemical group	Pyridine-carboxamides
Mode of action	Inhibition of the enzyme succinate-dehydrogenase (also known as complex II)
Biological action	Fungicide with preventative and curative properties

## Description of the plant protection product

Boscalid 500 SC is an suspension concentrate (SC) containing 500 g/L boscalid.

**Table 3.2-2: Simplified table of requested uses for the product code.**

Uses		Member State	Requested rate(s)	Comments / Other relevant details on GAPs
Crop(s)	Target(s)			
Winter wheat	<b>Septoria leaf blotch</b> ( <i>Zymoseptoria tritici</i> ) SEPTTR <b>Brown rust of cereals</b> ( <i>Puccinia recondita</i> ) PUCCRE <b>Eyespot of cereals</b> ( <i>Oculimacula acuformis</i> ) PSDCHA	PL	0.7 L/ha	-
Spring wheat, Winter tritcale, Spring tritcale	<b>Septoria leaf blotch</b> ( <i>Zymoseptoria tritici</i> ) SEPTTR	PL	0.7 L/ha	-
Winter barley, Spring barley	<b>Net blotch of barley</b> ( <i>Pyrenophora teres</i> ) PYRNTE	PL	0.7 L/ha	-

Uses		Member State	Requested rate(s)	Comments / Other relevant details on GAPs
Crop(s)	Target(s)			
Winter rye	<b>Leaf blotch of cereals</b> ( <i>Rhynchosporium secalis</i> ) RHYNSE	PL	0.7 L/ha	-
Winter oilseed rape	<b>Dry rot of crucifers</b> ( <i>Plenodomus lingam</i> ) LEPTMA <b>Cottony rot</b> ( <i>Sclerotinia sclerotiorum</i> ) SCLESC	PL	0.2 – 0.5 L/ha	Recommended dose should be 0.4-0.5 L/ha. ZRMs accepted only spring application.

The applicant carried out efficacy trials on winter wheat, spring wheat, winter triticale, spring triticale, winter barley, spring barley, winter rye, winter oilseed rape. Selectivity trials are not required for fungicides, however phytotoxicity effect, along with yield and its quality analysis was assessed in each of the performed trial.

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*
ALTEBA	<i>Alternaria brassicae</i>	Dark spot of crucifers
ERYSGR	<i>Blumeria graminis</i>	Powdery mildew of cereals
LEPTMA	<i>Plenodomus lingam</i>	Dry rot of crucifers
PSDCHA	<i>Oculimacula acuformis</i>	Eyespot of cereals
PUCCHD	<i>Puccinia hordei</i>	Brown rust of barley
PUCCRE	<i>Puccinia recondita</i>	Brown rust of cereals
PUCCSI	<i>Puccinia striiformis f. sp. tritici</i>	Yellow rust of wheat
PYRNTE	<i>Pyrenophora teres</i>	Net blotch of barley
PYRNTR	<i>Pyrenophora tritici-repentis</i>	Tan spot of wheat
RHYNSE	<i>Rhynchosporium secalis</i>	Leaf blotch of cereals
SCLESC	<i>Sclerotinia sclerotiorum</i>	Cottony rot
SEPTTR	<i>Zymoseptoria tritici</i>	Septoria leaf blotch

\* optional

Agricultural crop production has been the main branch of plant production in Poland for years. Season 2022 was analysed in this document since data for this period is available on the Statistics Poland website. Taking into consideration season 2022, following numbers were presented:

Total arable land area reached 8 700 000 ha

<b>Crop:</b>	<b>Crop yield (t):</b>	<b>Sowing area (ha):</b>
Wheat	13 400 000	2 500 000
Barley	2 800 000	600 000
Winter rye	2 300 000	700 000
Triticale	5 500 000	1 200 000
Oilseed rape	3 600 000	1 100 000

The above presented numbers show that sown area of wheat, barley, winter rye and triticale in total exceeded 5 mln ha in 2022, while area where oilseed rape was sown was slightly above 1.1 mln hectares.

Hence, an appropriate protection in terms of weeds, fungal diseases and to control insects in the aforementioned crops, is inevitable. Chemical control of fungus-bourne diseases is highly important in production of agricultural crops, especially in cereals and oilseed rape. Uncontrolled, diseases can not only lower the yield and its quality, but in favourable conditions for pathogens, the plantation can be destroyed completely. Below can be found a short overview of the diseases which were found in BSK-FUN 500 SC field trials.

#### Wheat, triticale

Septoria leaf blotch – disease caused by the species *Zymoseptoria tritici*. It can be found around the whole world. Attacks mainly wheat and triticale. First symptoms of the disease are chlorotic, yellow-ish spots on the lower leaves and later climbing up, which are usually forming between the leave nerves (hence their usual, long shape). Later in the growing season, spots are getting bigger and they are turning into necrotic leasions. Within those blotches pycnidiums are being formed by the fungus. Leasions can cover the whole leaf, which leads to its death, and less leaves = less grains. Disease is most dangerous, and causes highest loss of yield when flag leaf is attacked. Yield decrease can reach up to 30%, high pest pressure can cause death of the plant. Economic injury level for this disease is 5-10% of the infected leaves. Fungus can also attack the blades of the plant, and cobs.

#### Barley

Net blotch of barley – is a disease caused by the fungus *Pyrenophora teres*. The species is a necrotrophic fungal pathogen and has highest economic significance in barley. Symptoms of the diseases are brown, necrotic spots on leaves. As time passes the spots are becoming bigger, and they are becoming brown lesions surrounded by the chlorotic halo. The diseases spreads within the areas limited by the conductive beams in the leave, however the disease can also spread within the leaf width. Symptoms oftenly occur as net-like shapes on the leaves, hence the common name of the disease. High severity of the disease can lead to leaves death, and in most critical cases plant death. The fungus can survive the winter on the straw left on the field. Yield decrease, in favourable conditions, can reach up to 40%.

#### Rye

Leaf blotch of cereals – caused by the *Rhynchosporium secalis*. This is one of the most important diseases of rye, barley, and other cereals particularly in wet seasons and in high humidity areas. The disease is one of the most destructive pathogens of cereals worldwide, causing disease which decreases yield by up to 40% and reduces grain quality. Rhynchosporium is a polycyclic disease, with the primary inoculum including conidia produced on crop debris, infected seeds and possibly as yet unidentified ascospores. Secondary disease spread is primarily by splash dispersal of conidia produced on infected leaves, which may be symptomless early in the growing season. Symptomless-infection and sporulation can also occur on 'resistant' cultivars. Similarly 'susceptible' cultivars do not always become symptomatic.

#### Oilseed rape

Dry rot of crucifers – caused by the *Plenodomus lingam*. Pathogen starts to attack plants in the autumn, and the autumn infections are the most dangerous, since oilseed rape seedlings can be attacked. Fungus survives the winter time in the oilseed rape debris (usually stalks, or part of the root system). Symptoms can be visible on cotyledons and first leaves, they are in the form of lightly brown (can also be gray or white), usually circle shaped, blotches of 3-20mm diameter, surrounded by dark brown halo. In the blotches area, pycnidiums can be observed. They are in the form of tiny, black spots. Fully developed pycnidiums are releasing conidial spores, when weather is damp and/or rainy, which are infecting other plants. Another symptom can be observed in spring in the root area – root neck or roots themselves can be narrower. This leads the stems to be weakened and easy to break. Such plants are ripening faster which causes yield to decrease.

Cottony rot – caused by the soilbourne pathogen *Sclerotinia sclerotiorum*. Species is a polyphage and attacks many species of plants (more than 400). Fungus survives the winter in the form of sclerotia and mycelium in the soil. When the winter ends, fungus spreads itself by the division of the mycelium and sclerotia. First symptoms of the disease in oilseed rape are visible after blooming. On the stem, blotches of whiteish – greyish colour occur, which are expanding within time. Later these blotches are covered by the white cottony mycelium, hence the disease name. Economic injury level for this disease is 1% of the infected plants. On species other than oilseed rape, cottony rot can also occur during the storage of plants.

Diseases present in field trials of BSK-FUN 500 SC are the known as serious cereals and winter oilseed rape competitors. The results are showing that these crops major diseases can be effectively controlled by the product (please see the table below for an abstract of trials summary).

Diseases presented in field trials	Winter wheat Dose rate (l/ha)	Spring wheat, Winter triticale, Spring triticale Dose rate (l/ha)	Winter triticale, Winter rye, Winter barley Dose rate (l/ha)	Winter barley, Spring barley Dose rate (l/ha)	Winter rye Dose rate (l/ha)	Winter oilseed rape Dose rate (l/ha)
ALTEBA <i>Alternaria brassicae</i> Dark spot of crucifers	x	x	x	x	x	0.2 0.4 <sup>mc</sup> -0.5
ERYSGR <i>Blumeria graminis</i> Powdery mildew of cereals	x	x	0.7	x	0.7	x
LEPTMA <i>Plenodomus lingam</i> Dry rot of crucifers	x	x	x	x	x	0.2 0.4 <sup>mc</sup> -0.5
PSDCHA <i>Oculimacula acuformis</i> Eyespot of cereals	0.7 <sup>mc</sup>	x	x	x	x	x
PUCCHD <i>Puccinia hordei</i> Brown rust of barley	x	x	x	0.7 <sup>mc</sup>	x	x
PUCCRE <i>Puccinia recondite</i> Brown rust of cereals	0.7	x	x	x	x	x
PUCCSI <i>Puccinia striiformis f. sp. tritici</i> Yellow rust of wheat	0.7 <sup>mc</sup>	x	x	x	0.7	
PYRNTE <i>Pyrenophora teres</i> Net blotch of barley	x	x	x	0.7	x	x
PYRNTR <i>Pyrenophora tritici-repentis</i> Tan spot of wheat	0.7	x	x	x	x	x
RHYNSE <i>Rhynchosporium secalis</i> Leaf blotch of cereals	x	x	x	x	0.7	x
SCLESC <i>Sclerotinia sclerotiorum</i> Cottony rot	x	x	x	x	x	0.2 0.4 <sup>ed</sup> -0.5
SEPTTR <i>Zymoseptoria tritici</i> Septoria leaf blotch	0.7	0.7	x	x	x	x

mc – moderate control  
red –reduction

r - resistant  
x – not present

According to Statistics Poland in 2020 (latest available data) 69 849.40 tonnes of pesticides were used in agricultural sector. According to Statistics Poland, sales of fungicides in Poland have reached 21 761.40 tonnes in 2020 (latest year available on Statistics Poland). From the fungicides group, almost 6 899.4 tonnes of fungicides based on imidazoles and triazoles (included pesticides based on boscalid) was used by farmers in Poland, which makes it 31.7% of total fungicide use for the year 2020 (Statistics Poland).

**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
Winter wheat	X		Septoria leaf blotch	X	
			Eyespot of cereals	X	
			Brown rust of cereals	X	
Spring wheat	X		Septoria leaf blotch	X	
Winter triticale	X		Septoria leaf blotch	X	
Spring triticale	X		Septoria leaf blotch	X	
Winter barley	X		Net blotch of barley	X	
Spring Barley	X		Net blotch of barley	X	
Winter rye	X		Leaf blotch of cereals	X	
Winter oilseed rape	X		Dark rot of crucifers	X	
			Cottony rot	X	

### Compliance with the Uniform Principles

The assessment was performed according to the uniform principles and EPPO guidelines and with the principles of GEP.

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

**Table 3.2-4: Presentation of trials (efficacy trials, preliminary trials...)**

Crop(s) *	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 zone		
Winter wheat	SEPTTR PSDCHA PUCCRE PUCCSI	Poland	2023	MED + E	8(8)	GEP	-

Crop(s) *	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 zone		
	PYRNTR						
Spring wheat	SEPTTR	Poland	2023	MED + E	2 (2)	GEP	-
Winter triticale	SEPTTR ERYSGR	Poland	2023	MED + E	2 (2)	GEP	-
Spring triticale	SEPTTR ERYSGR	Poland	2023	MED + E	2 (2)	GEP	-
Winter barley	PYRNTE PUCCHD PUCCRE ERYSGR	Poland	2023	MED + E	7(7)	GEP	-
Spring barley	PYRNTE	Poland	2023	MED + E	1 (1)	GEP	-
Winter rye	RHYNSE ERYSGR SEPTTR PUCCRE PUCCSI	Poland	2023	MED + E	8 (8)	GEP	-
Winter oilseed rape	LEPTMA, SCLESC ALTEBA	Poland	2023	MED + E	7(7)	GEP	-
<b>TOTAL</b>		<b>Poland</b>	<b>2023</b>	<b>MED + E</b>	<b>37(37)</b>	<b>GEP</b>	<b>-</b>

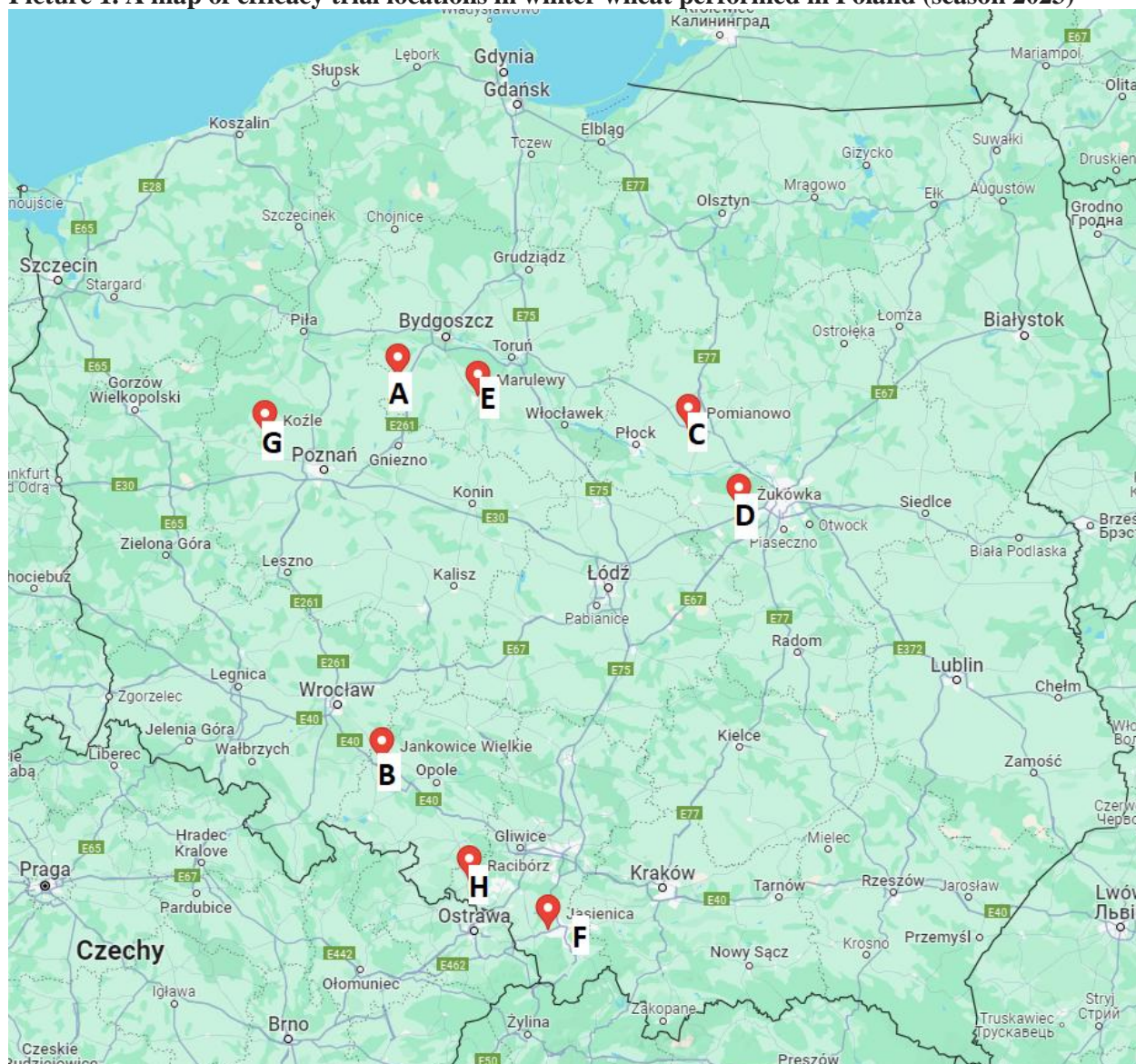
\* According to the GAP table. Timing of the application(s) can be added if relevant (e.g. Pre-mergence vs post-emergence, spring vs autumn).

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

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

Efficacy trials of BSK-FUN 500 SC fungicide were carried out during one growing season 2023 in different regions of Poland. Maps below presents locations of the trials in each crop.

**Picture 1. A map of efficacy trial locations in winter wheat performed in Poland (season 2023)**



Eight BSK-FUN 500 SC trials in winter wheat during spring 2023 season were performed in Poland. Trials were set in five voivodeships: Masovian, Kujavian-Pomeranian, Greater Poland, Opole and Silesia.

Trials were set in 2023 and conducted by Eurofins Agrosience Green & Property Consulting in the locations below:

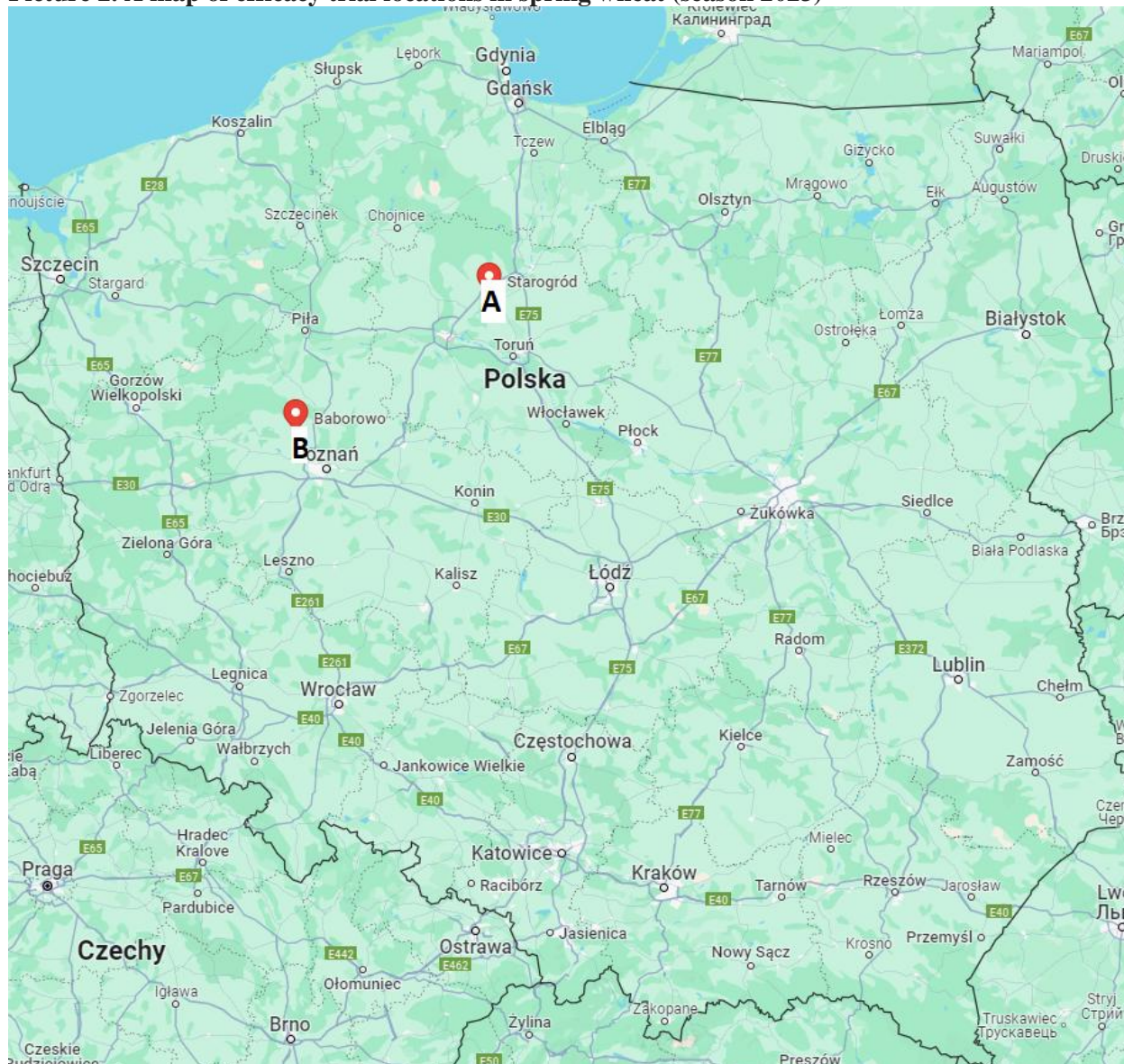
	Year	Coun-try	Trial ID	Location	Variety	Soil type	pH
A	2023	PL	018GPSE202301	Gorzyce	Belissa	clayey sand	6.4
B	2023	PL	018GPSE202302	Jankowice Wielkie	Patras	clay sandy loam	6.9
C	2023	PL	018GPSE202303	Pomianowo	Hondia	sandy clay	7.2
D	2023	PL	018GPSE202304	Żukówka	Jantarka	sandy clay	5.8
E	2023	PL	S23-103648-01	Marulewy	Kilimanjaro	sandy loam	7.2
F	2023	PL	S23-103648-02	Jasienica	Formacja	clay	6.2
G	2023	PL	S23-103648-03	Koźle	Rotax	sandy loam	7.1
H	2023	PL	S23-103648-04	Racibórz	Opoka	silty clay loam	5.2

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application day between crop BBCH 31 and



48. First assessment after application was performed 7 - 51 days after application A and second 30 - 70 days after application A. Evaluations were done in accordance with EPPO PP 1/26 (4) “Foliar and ear diseases on cereals” guideline and EPPO PP 1/28 (3) “Eyespot of cereals” guideline.

**Picture 2. A map of efficacy trial locations in spring wheat (season 2023)**



Two BSK-FUN 500 SC trials in spring wheat during spring 2023 season were performed in Poland. Trials were set in two voivodeships: Kuiavian-Pomeranian and Greater Poland.

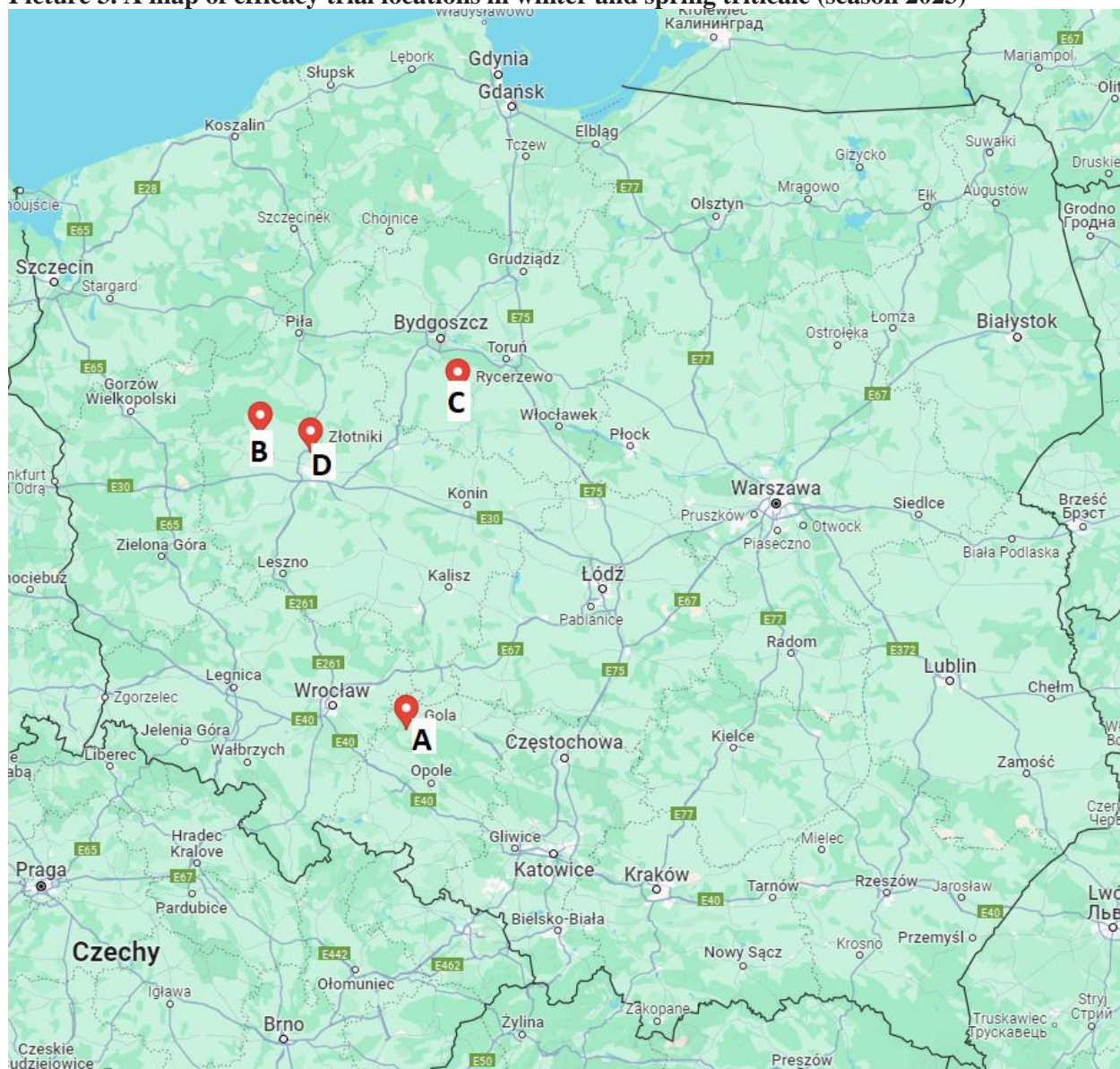
Trials were set in 2023 and conducted by Eurofins Agrosience Green & Property Consulting in the locations below:

	Year	Coun-try	Trial ID	Location	Variety	Soil type	pH
A	2023	PL	018GPSE202305	Starogród	Carusum	fine silty clay	6.6
B	2023	PL	S23-103648-05	Baborowo	Goplana	sandy loam	7.9

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application day between crop BBCH 41 and 45. First assessment after application was performed 15 - 21 days after application A and second 34 - 39 days after application A. Evaluations were done in accordance with EPPO PP 1/26 (4) “Foliar and ear diseases on cereals” guideline.



**Picture 3. A map of efficacy trial locations in winter and spring triticale (season 2023)**



Four BSK-FUN 500 SC efficacy trails in triticale (winter and spring) during spring 2023 season were performed in Poland. Trials were set in three voivodeships: Kuiavian-Pomeranian, Opole and Greater Poland.

Trials were set in 2023 and conducted by Eurofins Agrosience Green & Property Consulting in the locations below:

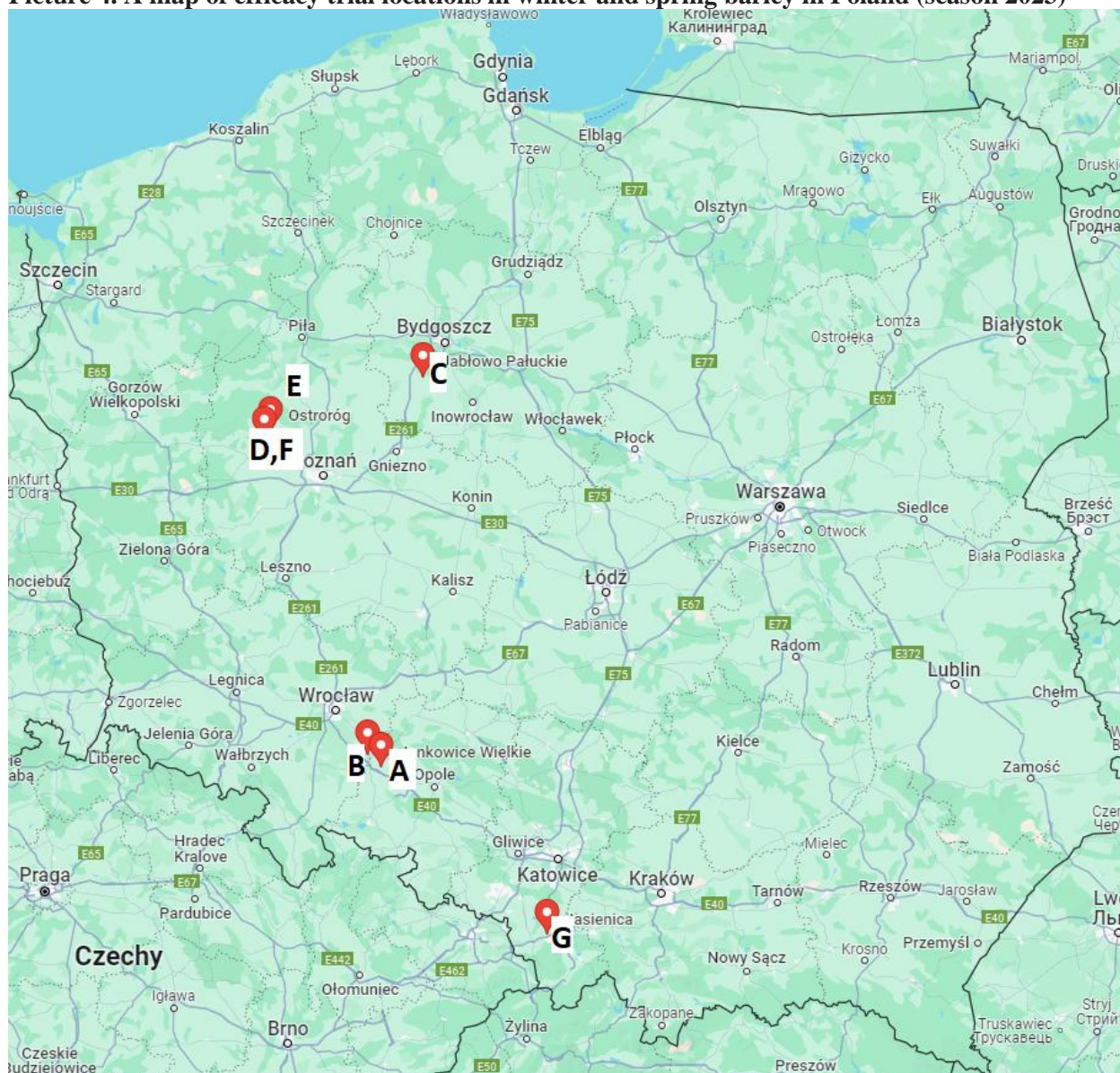
	Year	Coun-try	Trial ID	Location	Variety	Soil type	pH
	Winter triticale						
A	2023	PL	018GPSE202306	Gola	Meloman	sandy loam	6.3
B	2023	PL	S23-103648-06	Koźle	Rotondo	loamy sand	6.6
	Spring triticale						
C	2023	PL	018GPSE202307	Rycerzewo	Kargo	sandy loam	7.1
D	2023	PL	S23-103648-07	Złotniki	Dublet	loamy sand	6.4

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application day between crop BBCH 32 and 49. First assessment after application was performed 14 - 57 days after application A and second 35 - 47



days after application A. Evaluations were done in accordance with EPPO PP 1/26 (4) “Foliar and ear diseases on cereals” guideline.

**Picture 4. A map of efficacy trial locations in winter and spring barley in Poland (season 2023)**



Eight BSK-FUN 500 SC trails in winter and spring barley during spring 2023 season were performed in Poland. Trials were set out in five Poland’s voivodeships: Masovian, Kuiavian-Pomeranian, Greater Poland, Lower Silesia and Silesia.

Trials were set in 2023 and conducted by Eurofins Agrosience Green & Property Consulting in the locations below:

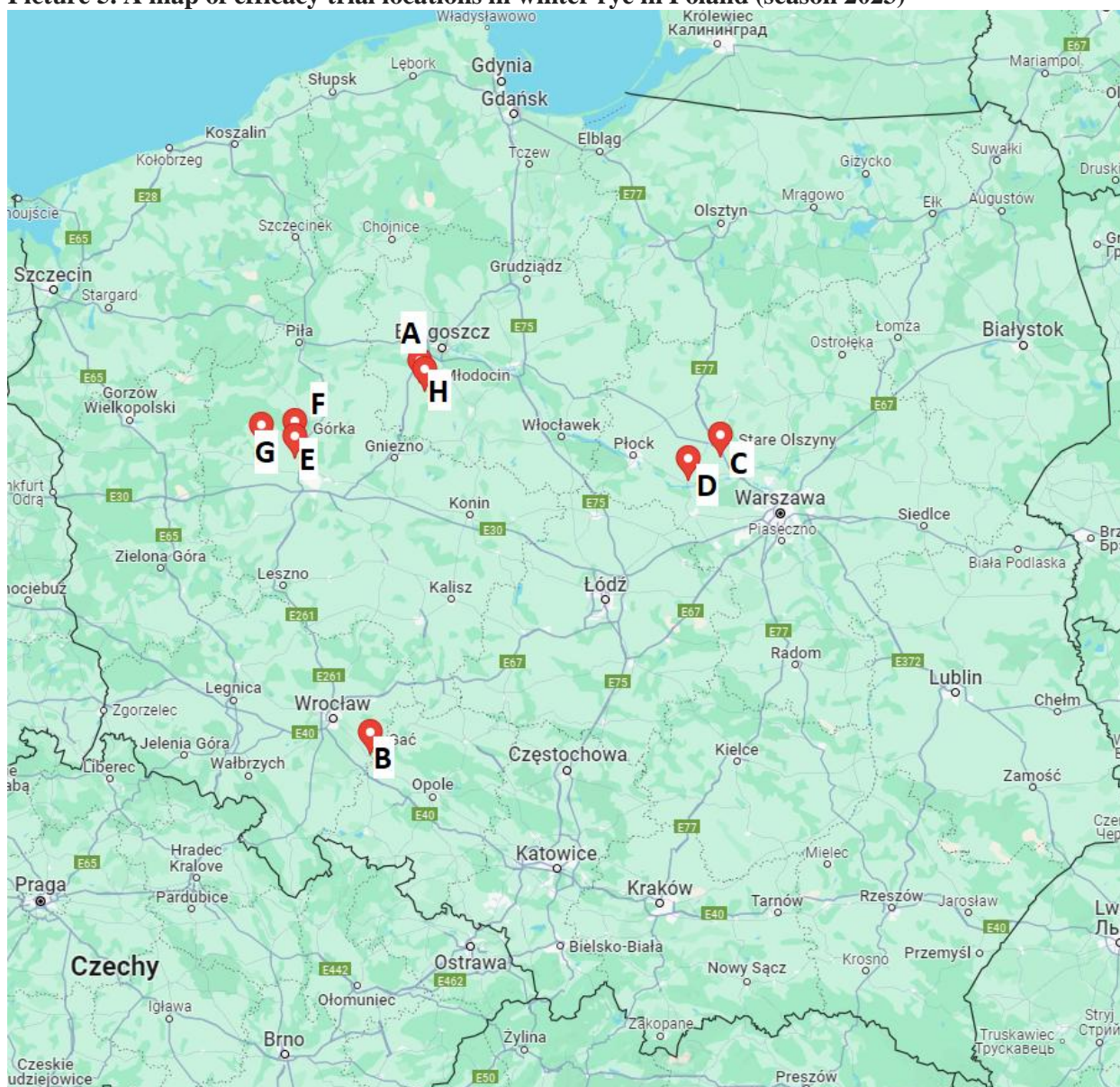
	Year	Country	Trial ID	Location	Variety	Soil type	pH
A	2023	PL	018GPSE202312	Jankowice Wielkie	KWS Kosmos	sandy loam	6.3
B	2023	PL	018GPSE202313	Owczary	Wootan	loamy sand	6.6
C	2023	PL	018GPSE202314	Jabłowo Pałuckie	Yukon	loamy sand	6.3
D	2023	PL	S23-103648-13	Koźle	Yukon	sandy loam	4.8
E	2023	PL	S23-103648-14	Ostroróg	Zenek	loamy sand	5.6



F	2023	PL	S23-103648-15	Koźle	Jakubus	loamy sand	7.2
G	2023	PL	S23-103648-16	Jasienica	Astaire	clayey sand	6.5
Spring barley							
H	2023	PL	S23-103648-12	Koźle	Melius	sandy loam	7.1

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application day between crop BBCH 32 and 45. First assessment after application was performed 15 - 21 days after application A and second 34- 49 days after application A. Evaluations were done in accordance with EPPO PP 1/26 (4) “Foliar and ear diseases on cereals” guideline.

**Picture 5. A map of efficacy trial locations in winter rye in Poland (season 2023)**



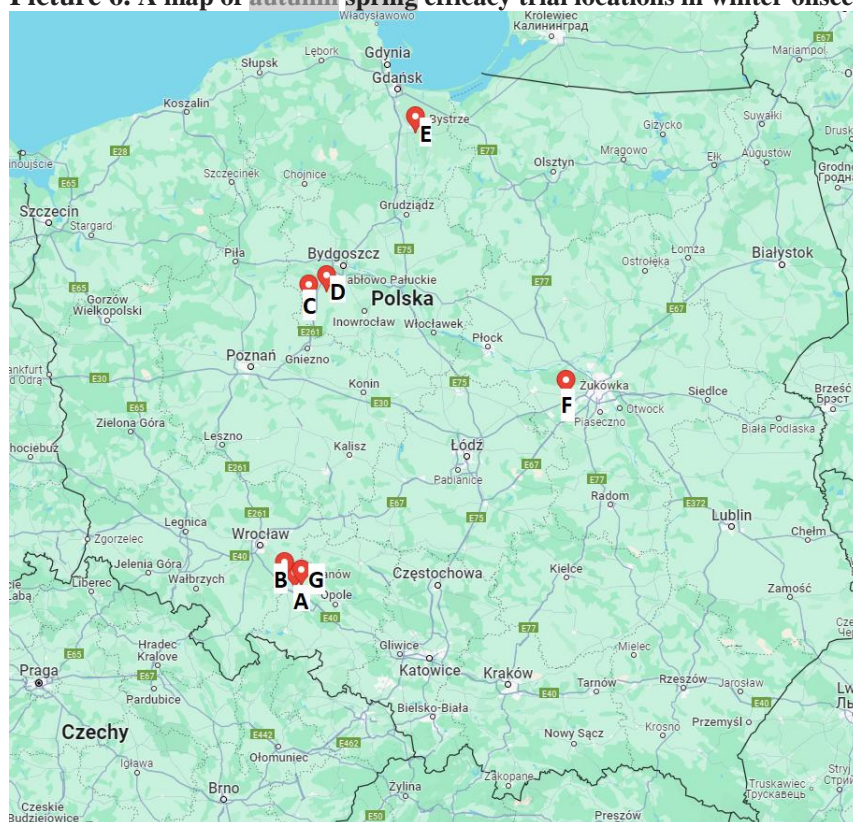
Eight BSK-FUN 500 SC trials in winter rye during 2023 season were performed. Trials were set out in four Poland’s voivodeships: Masovian, Kuiavian-Pomeranian, Greater Poland and Lower Silesian.

Trials were set in 2023 and conducted by Eurofins Agrosience Green & Property Consulting in the locations below:

	Year	Country	Trial ID	Location	Variety	Soil type	pH
A	2023	PL	018GPSE202308	Jabłowo-Pałuckie	Stanko	sandy loam	6.5
B	2023	PL	018GPSE202309	Gać	KWS Dolaro	loamy clay	6.8
C	2023	PL	018GPSE202310	Stare Olszyny	Antonińskie	sandy clay loam	4.9
D	2023	PL	018GPSE202311	Wyszogród	Dańkowskie Złote	sandy clay	5.8
E	2023	PL	S23-103648-08	Mrowino	Dańkowskie Diament	loamy sand	4.5
F	2023	PL	S23-103648-09	Górka	Dańkowskie Złote	loamy sand	6.3
G	2023	PL	S23-103648-10	Koźle	Dańkowskie Diament	loamy sand	6.5
H	2023	PL	S23-103648-11	Młodocin	Dańkowskie Dragon	sandy clay	6.2

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application day between crop BBCH 32 and 41. First assessment after application was performed 14 - 21 days after application A and second 34 - 43 days after application A. Evaluations were done in accordance with EPPO PP 1/26 (4) “Foliar and ear diseases on cereals” guideline.

**Picture 6. A map of autumn and spring efficacy trial locations in winter oilseed rape in Poland (season 2023)**



Seven BSK-FUN 500 SC trials in winter oilseed rape during spring 2023 season were performed. Trials were set out in five Poland's voivodeships: Masovian, Kuiavian-Pomeranian, Pomeranian, Opole and Lower Silesian.



Trials were set in 2023 and conducted by Green & Property Consulting in the locations below:

	Year	Country	Trial ID	Location	Variety	Soil type	pH
A	2021	PL	019GPSE202301	Jankowice Wielkie	KUGA	clay loam	6.4
B	2021	PL	019GPSE202302	Owczary	Stefano KWS F1	sandy loam	6.9
C	2021	PL	019GPSE202303	Słebowo	SY Ilona	clayey sand	6.6
D	2021	PL	019GPSE202304	Jabłowo Pałuckie	SY Talisman	loamy sand	6.6
E	2021	PL	019GPSE202305	Bystrze	Momento	silt loam	5.9
F	2021	PL	019GPSE202306	Żukówka	Temptation	sandy clay	6.1
G	2023	PL	019GPSE202307	Janów	Kadore	clay loam	6.6

All of the abovementioned trials were conducted in randomized complete block design in four replications. Primary disease infection levels assessments were done at the application A day between crop BBCH 59 and 62. First assessment after application was performed 14 - 22 days after application A and second 28 - 43 days after application A. Evaluations were done in accordance with EPPO PP 1/78 (3) "Root, stem, foliar and pod diseases on oilseed rape" guideline.

**Table 3.2-5: Presentation of reference standards used in trials (efficacy trials)**

Crop(s)	Reference standard	Country(ies) where the product is registered <sup>(1)</sup>	Authorization number	Active substance(s)	Formulation		Registered application rate <sup>(3)</sup>	Application rate in trials (per treatment)	Remark <sup>(4)</sup>
					Type <sup>(2)</sup>	Concentration of a.s.			
Winter wheat; Spring wheat; Winter triticale; Spring triticale Spring barley; Winter barley; Winter rye	Empartis	PL	R-140/2020	Boscalid; kresoxim-methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applications per season; 100-300 L/ha of spray volume; foliar spray
Winter wheat; Spring wheat; Winter triticale; Spring triticale Spring barley; Winter barley; Winter rye	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applications per season; 100-300 L/ha of spray volume; foliar spray
Winter oilseed rape	Royalty	PL	R-32/2018	Boscalid	WG	500 g/kg (boscalid)	0.5 L/ha	0.5 L/ha	1. application per season; 200-400 L/ha of spray volume; foliar spray

(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.).

**ZRMs comments:**

This document summarizes the information related to the efficacy of the plant protection product –BSK-FUN 500 SC (product code). BSK-FUN 500 SC is a suspension concentrate (SC) containing 500 g/L Boscalid.

Boscalid is a fungicide that is particularly effective against a range of fungal diseases affecting crops such as winter and spring cereals and winter oilseed rape. It belongs to the carboxamide chemical class, and its mode of action primarily involves inhibiting fungal respiration. Boscalid have many benefits. It offers control over a variety of fungal pathogens, including powdery mildew, rusts and septoria leaf blotch in cereals and diseases like sclerotinia stem rot in oilseed rape. It works well as part of an integrated pest management strategy, offering a different mode of action compared to other fungicides, thus helping to delay the development of resistance. Generally considered safe for humans when used as directed. Proper protective equipment should be worn during application to minimize exposure. While it is effective, there are considerations regarding its environmental impact. It is relatively persistent in soil and can affect non-target organisms, so care is required to avoid runoff to water bodies. Boscalid is a versatile and effective fungicide for managing a range of fungal diseases in winter and spring cereals and winter oilseed rape. When used according to guidelines, it provides significant benefits in disease control, contributing to healthy crop yields.

For now, this mentioned active substance (Boscalid) is on the list of approved active substances. All necessary information's about tested plant protection product, active substance, studied fungal diseases, reference products, etc. are correctly presented in this dossier by Applicant. In Poland, 44 plant protection products containing Boscalid as an active compound are already registered (on the basis of Ministry Register dated 18.09.2024).

The product –BSK-FUN 500 SC containing Boscalid by Pestila Sp. z o. o. and ProAgri International Sp. z o. o. was evaluated by Poland as a ZRMs. No cMS was presented by Applicant. BSK-FUN 500 SC will be sold as a trade name Boscalix 500 SC by Pestila Sp. z o. o and Boscalid 500 SC by ProAgri International Sp. z o. o.

### **3.2.1 Preliminary tests (KCP 6.1)**

No results of the preliminary range-finding tests are presented since no screening trials were carried out. However, the active substance used in BSK-FUN 500 SC, boscalid have been commonly used in agricultural practice for many years.

**ZRMs comments:**

Boscalid has been used as a fungicide since its introduction in the early 2000s. It was first registered by BASF in 2002 and has since become widely adopted in agriculture for its effectiveness in controlling a broad spectrum of fungal diseases in various crops. Boscalid works by inhibiting fungal respiration, thus protecting crops like fruits, vegetables and cereals from damaging pathogens. So, it has been in use for roughly two decades. In Poland, Boscalid was first registered in Poland in 2005.

Large scale efficacy trials are available to evaluate the effectiveness of products containing boscalid. So, preliminary tests were not necessary in this case in our opinion. Also, some formulations of boscalid 500 g/L which are currently authorized on cereals and oilseed rape (OSR) against the same target diseases requested for BSK-FUN 500 SC. For example, in Poland over 40 plant protection product with boscalid are registered.

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

Minimum effective dose tests were not carried out. However, several doses of BSK-FUN 500 SC were

tested during efficacy studies and the lowest effective dose was selected. The tests were conducted in accordance with EPPO standard PP 1/225 (2) '*Minimum effective dose*', which advises on the minimum requirements necessary to ensure consistency of decision making.

### Cereals and winter oilseed rape diseases

37 field trials were set out to present the control of the diseases in cereals and winter oilseed rape. BSK-FUN 500 SC was tested in rates from 0.42 L/ha to 0.7 L/ha (210-350 g/ha of boscalid) in order to determine the minimum effective dose in cereals for the control of leaf diseases in winter wheat, and to determine MED in winter oilseed rape the doses used were: 0.2 L/ha to 0.5 L/ha (100 -250 g/ha of boscalid) for spring application. The rates reflect the proposed label rates, 60%, 71%, 85% of the recommended rate in cereal trials and spring trials and 40%, 60%, 80% of the full rate in winter oilseed rape. Which, in applicant opinion, covers the requirements from the EPPO standard PP 1/225 (2) '*Minimum effective dose*'.

#### Cereals:

For the BBCH 31-49, the 0.42 L/ha and 0.5 L/ha doses of BSK-FUN 500 SC provided inferior control when compared to 0.7 L/ha of BSK-FUN 500 SC in 30 trials out of 30 trials.

#### Winter oilseed rape:

For the BBCH 59-62, the 0.2 L/ha and 0.3 L/ha doses of BSK-FUN 500 SC provided inferior control when compared to 0.5 L/ha of BSK-FUN 500 SC in 7 trials out of 7 trials.

**Table 3.2-7: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 31-48 against diseases in winter wheat.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
PSDCHA	2	34.45%	20.1-48.8%	40	38-42	42	39-45	56.5	52-61	67	61-73
PUCCSI	1	31.6%	31.6-31.6%	25	25-25	35	35-35	45	45-45	68	68-68
PUCCRE	2	8.6%	5.4-10.8%	34.95	19-51	54.95	52-58	80.7	64-97	89.25	81-98
PYRNTR	1	6.1%	6.1-6.1%	71	71-71	86	86-86	87	87-87	90	90-90
SEPTTR	5	6.5%	5.1-8.7%	62.8	50-76	82.8	72-95	91.2	84-99	95.4	86-100

**Table 3.2-8: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 34-39 against diseases in spring wheat.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
SEPTTR	2	7%	6.3-7.7%	59	24-94	77	57-97	89.5	80-99	92.5	87-98

**Table 3.2-9: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 32-33 against diseases in winter tritcale.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
ERYSGR	2	11.25%	5.1-17.4%	38	29-47	68	56-80	81.5	63-100	90	80-100
SEPTTR	1	7.9%	7.9-7.9%	74	74-74	88	88-88	91	91-91	92	92-92

**Table 3.2-10: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 39-49 against diseases in spring tritcale.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
ERYSGR	1	6.6%	6.6-6.6%	85	85-85	92	92-92	99	99-99	99	99-99
SEPTTR	1	9.3%	9.3-9.3%	29	29-29	60	60-60	83	83-83	86	86-86



**Table 3.2-11: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 32-45 against diseases in winter barley.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
ERYSGR	1	7.7%	7.7-7.7%	51	51-51	67	67-67	80	80-80	81	81-81
PUCCHD	1	41.1%	41.1-41.1%	30	30-30	56	56-56	66	66-66	70	70-70
PUCCRE	1	5.4%	5.4-5.4%	25	25-25	26	26-26	40	40-40	54	54-54
PYRNTE	5	5.72%	5.72-5.72%	62.4	16-78	80	47-93	89.6	79-94	92.8	83-96

**Table 3.2-12: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 32 against diseases in spring barley.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
PYRNTE	1	13.4%	13.4-13.4%	89	89-89	93	93-93	98	98-98	99	99-99

**Table 3.2-13: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 60%, 71% and 85% of the recommended dose rate at BBCH 32-41 against diseases in winter rye.**

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.42 L/ha (60% of the recommended rate)		0.5 L/ha (71 % the recommended rate)		0.6 L/ha (85% the recommended rate)		0.7 L/ha (Recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
ERYSGR	2	8.15%	6.4-9.9%	47	36-58	66	66-66	81.5	80-83	88	86-90
PUCCRE	2	7.1%	7-7.2%	60.5	42-79	73	56-90	79	64-94	79.5	62-97
PUCCSI	1	15.4%	15.4-15.4%	66	66-66	77	77-77	82	82-82	92	92-92
RHYNSE	5	7.96%	5.1-11.8%	55	30-79	75.4	63-100	84.8	80-100	89.8	84-100
SEPTTR	2	6.55%	5.1-8%	60	53-67	67.5	65-70	77	70-84	90.5	89-92

In case of ERYSGR A1 assessment was considered (14-21 days after the application A) in 2 out of 2 trials because at A2 assessment timing ERYSGR was not visible anymore.

**Table 3.2-14: Minimum effective dose. Efficacy of BSK-FUN 500 SC at proposed label rates, at 40%, 60% and 80% of the full recommended dose rate at BBCH 59-62 against diseases in winter oilseed rape (spring application).**

Grouping *	Num- ber of trials	Infestation of the untreated control (unit)		% control with BSK-FUN 500 SC							
				0.2 L/ha (40% of the full rec- ommended rate)		0.3 L/ha (60 % the full recom- mended rate)		0.4 L/ha (80% the full recom- mended rate)		0.5 L/ha (Full recommended rate)	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
ALTEBA	1	17.7%	17.7- 17.7%	60	60-60	79	79-79	89	89-89	90	90-90
LEPTMA	5	14.6%	8.8-16.3%	61.21	42-74	72.32	54-86	82.26	72-90	87.54	78-94
SCLESC	7	38.2%	5.1-62%	54.28	9-84	72.68	47-100	79.63	67-100	85.83	76-100

Due to weather conditions and late LEPTMA disease development, A3 - 51 days after the application A (at crop BBCH 83) assessment was taken into the consideration in 1 out of 5 trials.

Due to weather conditions and late SCLESC disease development, A3 - 51 days after the application A (at crop BBCH 83) assessment was taken into the consideration in 4 out of 7 trials. In 019GPSE202306 trial assessment with infected pods infestation was taken into consideration.

Results are clearly showing that for the control of the abovementioned diseases, rate of 0.7 L/ha has to be considered as the minimum effective dose in cereals and 0.5 L/ha in oilseed rape

## Summary and conclusions on the minimum effective dose

**Table – Summary for minimum effective dose of BSK-FUN 500 SC in cereals and winter oilseed rape.**

Pest EPPO code	Crop*	Number of trials	Detailed tables that describe the assessment type used to juxtapose mean are presented above															
			Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC		Mean % efficacy of BSK-FUN 500 SC	
			0.42 L/ha		0.5 L/ha		0.6 L/ha		0.7L/ha		0.2 L/ha		0.3 L/ha		0.4 L/ha		0.5 L/ha	
			( 210g a.s./ha)		(250 g a.s./ha)		(300 a.s./ha)		(350 g a.s./ha)		(100 g a.s./ha)		(150g a.s./ha)		(200 g a.s./ha)		(250 g a.s./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
ALTEBA	BRSNW	1	-	-	-	-	-	-	-	-	60	60-60	79	79-79	89	89-89	90	90-90
ERYSGR	TTLWI	2	38	29-47	68	56-80	81.5	63-100	90	80-100	-	-	-	-	-	-	-	-
	TTLSO	1	85	85-85	92	92-92	99	99-99	99	99-99	-	-	-	-	-	-	-	-
	HORVW	1	51	51-51	67	67-67	80	80-80	81	81-81	-	-	-	-	-	-	-	-
	SECCW	2	47	36-58	66	66-66	81.5	80-83	88	86-90	-	-	-	-	-	-	-	-
LEPTMA	BRSNW	5	-	-	-	-	-	-	-	-	61.21	42-74	72.32	54-86	82.26	72-90	87.54	78-94
PSDCHA	TRZAW	2	40	38-42	42	39-45	56.5	52-61	67	61-73	-	-	-	-	-	-	-	-
PUCCHD	HORVW	1	30	30-30	56	56-56	66	66-66	70	70-70	-	-	-	-	-	-	-	-
PUCCRE	TRZAW	2	34.95	19-51	54.95	52-58	80.7	64-97	89.25	81-98	-	-	-	-	-	-	-	-
	HORVW	1	25	25-25	26	26-26	40	40-40	54	54-54	-	-	-	-	-	-	-	-
	SECCW	2	60.5	42-79	73	56-90	79	64-94	79.5	62-97	-	-	-	-	-	-	-	-
PUCCSI	TRZAW	1	25	25-25	35	35-35	45	45-45	68	68-68	-	-	-	-	-	-	-	-
	SECCW	1	60.5	42-79	73	56-90	79	64-94	79.5	62-97	-	-	-	-	-	-	-	-
PYRNTE	HORVW	5	62.4	16-78	80	47-93	89.6	79-94	92.8	83-96	-	-	-	-	-	-	-	-
	HORVS	1	89	89-89	93	93-93	98	98-98	99	99-99	-	-	-	-	-	-	-	-
PYRNTR	TRZAW	1	71	71-71	86	86-86	87	87-87	90	90-90	-	-	-	-	-	-	-	-
RHYNSE	SECCW	5	55	30-79	75.4	63-100	84.8	80-100	89.8	84-100	-	-	-	-	-	-	-	-
SCLESC	BRSNW	7	-	-	-	-	-	-	-	-	54.28	9-84%	72.68	47-100	79.63	67-100	85.83	76-100
SEPTTR	TRZAW	5	62.8	50-76	82.8	72-95	91.2	84-99	95.4	86-100	-	-	-	-	-	-	-	-
	TRZAS	2	59	24-94	77	57-97	89.5	80-99	92.5	87-98	-	-	-	-	-	-	-	-
	TTLWI	1	74	74-74	88	88-88	91	91-91	92	92-92	-	-	-	-	-	-	-	-
	TTLSO	1	29	29-29	60	60-60	83	83-83	86	86-86	-	-	-	-	-	-	-	-
	SECCW	2	60	53-67	67.5	65-70	77	70-84	90.5	89-92	-	-	-	-	-	-	-	-

Level of effectiveness	Label claim appropriate
80% and above	Control
60-80%	Partial/moderate/useful level of control
40-60%	Reduction/some control
below 40%	No control

#### Winter wheat

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Septoria leaf blotch** was controlled when 0.5-0.7 L/ha rates were used, moderate control was observed when dose 0.42 L/ha was used.

As a result, the proposed rate range of 0.5-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of the septoria leaf blotch in winter wheat.

#### Spring wheat

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Septoria leaf blotch** was controlled when 0.6-0.7 L/ha rates were used, moderate control was observed when dose 0.5 L/ha was used, at dose 0.42 L/ha reduction of the symptoms were observed.

As a result, the proposed rate range of 0.6-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of the septoria leaf blotch in spring wheat.

#### Winter triticale

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Septoria leaf blotch** was controlled when 0.5-0.7 L/ha rates were used, moderate control was observed when dose 0.42 L/ha was used.

As a result, the proposed rate range of 0.5-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of the winter triticale diseases.

#### Spring triticale

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Septoria leaf blotch** was controlled when 0.6-0.7 L/ha rates were used, moderate control was observed when dose 0.6 L/ha was used, at dose 0.42 L/ha no control was observed.

As a result, the proposed rate range of 0.6-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of the spring triticale diseases.

#### Winter barley

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Net blotch of barley** was controlled when 0.5-0.7 L/ha rates were used, moderate control was observed when dose 0.42 L/ha was used.

As a result, the proposed rate range of 0.5-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of net blotch of barley in winter barley.

#### Spring barley

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71% of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Net blotch of barley** was controlled when 0.42-0.7 L/ha rates were used.

As a result, the proposed rate range of 0.42-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of net blotch of barley in spring barley.

#### Winter rye

4 doses of the BSK-FUN 500 SC were tested: 0.42 L/ha (60% of the target dose); 0.5 L/ha (71%

of the target dose), 0.6 L/ha (85% of the target dose) and 0.7 L/ha (target dose).

**Leaf blotch of cereals** was controlled when 0.6-0.7 L/ha rates were used, moderate control was observed when dose 0.5 L/ha was used, at dose 0.42 L/ha reduction of the symptoms were observed.

As a result, the proposed rate range of 0.6-0.7 L/ha used in the spring, should be considered as the minimum effective dose to deliver satisfying control of powdery mildew of cereals in winter rye.

#### Winter oilseed rape

Spring application – 4 doses of the BSK-FUN 500 SC were tested: 0.2 L/ha (40% of the target dose); 0.3 L/ha (60% of the target dose), 0.4 L/ha (80% of the target dose) and 0.5 L/ha (full dose).

- **Dry rot of crucifers** was controlled when 0.4-0.5 L/ha rates were used, moderate control was observed when doses 0.2-0.3 L/ha was used. In case of **cottony rot**, was controlled when 0.5 L/ha rate was used, moderate control was observed when doses 0.3-0.4 L/ha was used, at dose 0.42 L/ha reduction of the symptoms were observed

As a result, the proposed rate of 0.2-0.5 L/ha should be considered as the minimum effective dose to deliver satisfying control of the dry rot of crucifers and cottony rot in winter oilseed rape treated in spring. Lower doses are intended to use when there is not much infestation on the field.

#### ZRMs comments:

The minimum effective dose of Boscalid can vary depending on factors such as the specific crop, fungal pathogen and local agricultural guidelines. Typical application rates range for cereals from 125 to 250 grams of Boscalid per hectare. For winter oilseed rape recommended rates are also range around 150 to 250 grams per hectare. It is crucial to follow the specific product label instructions and regulations.

The Applicant has proposed doses of BSK-FUN 500 SC that reflect those of currently authorised boscalid products across the EU. To provide information to establish the minimum effective dose, some of the trials conducted to demonstrate efficacy should include at least two lower dose(s) than recommended dose. In the appropriate research of efficacy were tested differ doses and to register was chosen the lowest effective, which is in line to EPPO 1/225(2).

Applicant did not presented any separate MED trials. Minimum effective dose was studied during efficacy trials (37 trials in total). All trials were carried out in Poland (N-E EPPO zone) on winter wheat (8 trials), spring wheat (2 trials), winter triticale (2 trials), spring triticale (2 trials), winter barley (7 trials), spring barley (1 trial), winter rye (8 trials) and winter oilseed rape (7 trials). Those trials were carried out in one growing season (2023).

#### Following fungal diseases were studied during trials:

- ✓ *winter wheat*: PSDCHA (2 trials), PUCCSI (1 trial), PUCCRE (2 trials), PYRNTR (1 trial), SEPTTR (5 trials).
- ✓ *spring wheat*: SEPTTR (2 trials)
- ✓ *winter triticale* : ERYSYGR (2 trials), SEPTTR (1 trial)
- ✓ *spring triticale*: ERYSYGR (1 trial), SEPTTR (1 trial)
- ✓ *winter barley*: ERYSGR (1 trial), PUCCHD (1 trial), PUCCRE (1 trial), PYRNTE (5 trials)
- ✓ *spring barley*: PYRNTE (1 trial)
- ✓ *winter rye*: ERYSYGR (2 trials), PUCCRE (2 trials), PUCCSI (1 trial), RHYNSE (5 trials), SEPTTR (2 trials)
- ✓ *winter oilseed rape*: ALTEBA (1 trial), LEPTMA (5 trials) and SCLESC (7 trials).

During trials carried out on cereals following doses were studied: 0.42 L/ha (0.6N); 0.50 L/ha (0.71N); 0.6 L/ha (0.85N) and 0.70 L/ha (N recommended dose).

During trials carried out on winter oilseed rape following doses were studied: 0.2 L/ha (0.4N); 0.3 L/ha (0.6N) ; 0.4 L/ha (0.8N) and 0.5 L/ha (N dose recommended).

On the basis of table presented by Applicant for the summary for minimum effective dose in cereals and winter oilseed rape it can be concluded that for the most of studied fungal diseases in cereals the most effective dose was 0.7 L/ha and for winter oilseed rape – dose 0.4-0.5 L/ha. Dose 0.2-0.3 L/ha in winter oilseed rape and doses 0.42-0.60 l/ha in cereals were characterized by worse efficacy and should not be recommended for use.

**Based on results achieved on fungal diseases in the submitted trials, it can be concluded that BSK-FUN 500 SC applied at 0.7 L/ha in cereals and applied at dose 0.4-0.5 L/ha in winter oilseed rape achieved good to excellent control on several target diseases. Dose 0.4 L/ha in winter oilseed rape should be used only in case of low level of occurrence the diseases like LEPTMA and SCLESC. The higher recommended dose should be applied in the case of high pressure of LEPTMA and SCLESC or worse weather conditions.** Doses 0.2 L/ha and 0.3 L/ha should be excluded from GAP and label project due to worse efficacy than noted for doses 0.4 and 0.5 L/ha. Inferior efficacy at the level of intermediate eradication or reduction of disease incidence still significantly increases the risk of resistance to boscalid by these pathogens and should therefore not be recommended for use in the opinion of ZRMs. Autumn use and combination application (1 in spring and 1 in autumn) in winter oilseed rape should be excluded due to lack of trials.

The proposed rates (0.7 L/ha for cereals and 0.4-0.5 L/ha for winter oilseed rape for spring application) should be considered the minimum effective dose to deliver broad spectrum control of the target diseases on cereals and winter oilseed rape under a wide range of environmental conditions in the context of trials and existing knowledge on the active substance and other relevant formulations with boscalid on the market.

### 3.2.3 Efficacy tests (KCP 6.2)

A total of 37 trials were carried out in year 2023 to evaluate the efficacy of BSK-FUN 500 SC for the control of diseases in winter and spring cereals and winter oilseed rape in seven different regions of Poland, which differentiated by the type of soil and climatic conditions.

All trials were conducted in randomized complete block design in four replications. All treatments were performed using specialized plot application equipment, with 100-400 litres of working solution per hectare. All trials were conducted in compliance with GEP principles and following appropriate EPPO guidelines: EPPO PP 1/26 (4), EPPO PP 1/78 (3), EPPO PP 1/135 (4), EPPO PP 1/152 (4), EPPO PP 1/181 (4). Also EPPO PP 1/225 (2) guideline was considered when choosing BSK-FUN 500 SC doses for minimum effective dose.

**Table 3.2-15: Details on methodology of efficacy trials in winter wheat**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4), PP 1/28(3)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	15-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter wheat (8)
	Varieties per crop	Winter wheat: Belissa, Patras, Hondia, Jantarka, Kilimanjaro, Formacja, Rotax, Opoka
	Sowing period	Winter wheat: 05.10-15.10.2022
<b>Application</b>	Crop stage (BBCH)* at application	Winter wheat: BBCH 31-48
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	1
	Intervals between applications	N/A

	Spray volumes	200-300 L/ha
<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 7-51 DA-A, A2 40-70 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Clayey sand, clay sandy loam, sandy clay, sandy loam, clay silty clay loam pH range 5.2-7.2
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-16: Details on methodology of efficacy trials in spring wheat**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	24-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Spring wheat (2)
	Varieties per crop	Spring wheat: Carusum, Goplana
	Sowing period	Spring wheat: 24-29.03.2023
<b>Application</b>	Crop stage (BBCH)* at application	Spring wheat: BBCH 41-45
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	1
	Intervals between applications	N/A
<b>Assessment</b>	Spray volumes	200-300 L/ha
	Assessment types	The frequency and the intensity of infection (%)
<b>Other relevant information</b>	Assessment dates	A1 15-21 DA-A, A2 34-39 DA-A
	e.g. Soil type, pH (in case of soil active substance ...)	Fine silty clay, sandy loam pH range 6.6-7.9
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-17: Details on methodology of efficacy trials in winter triticale**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	21-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter triticale (2)
	Varieties per crop	Winter triticale: Meloman, Rotondo
	Sowing period	Winter triticale: 05.10.2022
<b>Application</b>	Crop stage (BBCH)* at application	Winter triticale: BBCH 32-33
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	1
	Intervals between applications	N/A
	Spray volumes	200-300 L/ha

<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 16-19 DA-A, A2 35-47 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Loamy sand, sandy loam pH range 6.3-6.6
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-18: Details on methodology of efficacy trials in spring triticale**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	24-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Spring triticale (2)
	Varieties per crop	Spring triticale: Kargo, Dublet
	Sowing period	Spring triticale: 30.03.2023 – 03.04.2023
<b>Application</b>	Crop stage (BBCH)* at application	Spring triticale: BBCH 39-49
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	1
	Intervals between applications	N/A
	Spray volumes	200-300 L/ha
<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 14-20 DA-A, A2 36-40 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Loamy sand, sandy loam pH range 6.4-7.1
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-19: Details on methodology of efficacy trials in winter barley**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	20-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter barley (7)
	Varieties per crop	Winter barley: KWS Kosmos, Wootan, Yukon, Zenek, Jakubus, Astaire
	Sowing period	Winter barley: 08-24.09.2022
<b>Application</b>	Crop stage (BBCH)* at application	Winter barley: BBCH 32-45
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	1
	Intervals between applications	N/A
	Spray volumes	200-300 L/ha



<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 15-21 DA-A, A2 34-49 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Loamy sand, sandy loam, clayey sand pH range 4.8-7.2
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-20: Details on methodology of efficacy trials in spring barley**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Spring barley: (1)
	Varieties per crop	Spring barley: Melius
	Sowing period	Spring barley: 25.03.2023
<b>Application</b>	Crop stage (BBCH)* at application	Spring barley: BBCH 32
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications Intervals between applications	1 N/A
	Spray volumes	200 L/ha
<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 18 DA-A, A2 35 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Sandy loam pH range 7.1
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-21: Details on methodology of efficacy trials in winter rye**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	15-30 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter rye: (8)
	Varieties per crop	Winter rye: Stanko, KWS Dolaro, Antonińskie, Dańkowskie Złote, Dańkowskie Diamant, Dańkowskie Dragon
	Sowing period	Winter rye: 20.09-04.11.2023
<b>Application</b>	Crop stage (BBCH)* at application	Winter rye: BBCH 32-39
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications Intervals between applications	1 N/A
	Spray volumes	200-300 L/ha

<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 14-21 DA-A; A2 30-43 DA-A; A3 41 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Sandy loam, loamy clay, sandy clay loam, sandy clay, loamy sand pH range 4.9-6.8
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-22: Details on methodology of efficacy trials in winter oilseed rape (spring application)**

<b>Guidelines</b>	General guidelines	EPPO PP 1/135 (4), 1/152 (4), 1/181 (4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
<b>Experimental design</b>	Plot design	Randomized Complete Block RCBD
	Plot size	20-24 m <sup>2</sup>
	Number of replications	4
<b>Crop</b>	Trials per crop	Winter oilseed rape: (7)
	Varieties per crop	Winter oilseed rape: KUGA, Stefano KWS F1, SY Ilona, SY Talisman, Momento, Temptation, Kadore
	Sowing period	Winter oilseed rape: 20.08-02.09.2022
<b>Application</b>	Crop stage (BBCH)* at application	Winter oilseed rape: A – 59-62; B- 65-69
	Timing Pest stage at application (1)	preventive / curative application
	Number of applications	2
	Intervals between applications	14-22 days
	Spray volumes	300-400 L/ha
<b>Assessment</b>	Assessment types	The frequency and the intensity of infection (%)
	Assessment dates	A1 14 22 DA-A; A2 28-43 DA-A; A3 51-71 DA-A
<b>Other relevant information</b>	e.g. Soil type, pH (in case of soil active substance ...)	Sandy clay loam, sandy loam, sandy clay, loamy sand, loamy clay sand, silt loam, clayey sand. pH range 5.51 – 7.6
	e.g. Natural / artificial inoculation...	Natural
	e.g. Field / Greenhouse...	Field

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

**Table 3.2-23: Efficacy of active substance components in BSK-FUN 500 SC trials in winter wheat**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis/Entargo Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha / Boscalid 350 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
PSDCHA	2	34.45	20.1-48.8	40	38-42	42	39-45	56.5	52-61	67	61-73	67.5	63-72	1 trial > 1 trial <
PUCCSI	1	31.6	31.6-31.6	25	25-25	35	35-35	45	45-45	68	68-68	67	67-67	1 trial >
PUCCRE	2	8.6	5.4-10.8	34.95%	19-51	54.95	52-58	80.7	64-97	89.25	81-98	88	79-97	2 trial >
PYRNTR	1	6.1	6.1-6.1	71	71-71	86	86-86	87	87-87	90	90-90	87	87-87	1 trial >
SEPTTR	5	6.5	5.1-8.7	62.8	50-76	82.8	72-95	91.2	84-99	95.4	86-100	94.6	85-100	3 trial > 2 trial =

\* 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

For the efficacy against PSDCHA, PUCCSI, PUCCRE, PYRNTR and SEPTTR A2 (40-70 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of septoria leaf blotch in winter wheat at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

**Table 3.2-24: Efficacy of active substance components in BSK-FUN 500 SC trials in spring wheat**

[illegible]

SEPTTR	2	7%	6.3-7.7	59	24-94	77	57-97	89.5	80-99	92.5	87-98	91	84-98	1 trial > 1 trial =
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- \* 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

For the efficacy against SEPTTR A2 (34-39 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of septoria leaf blotch in spring wheat at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

Only two trials for spring wheat were conducted due to the fact that differences between spring and winter cultivars are minor, or there are no such, in terms of their physiology during time of the application (they are the same species basically), and due to the fact that septoria leaf blotch is caused by the exactly same fungus, no matter if it is spring or winter wheat. It is also worth mentioning that Polish authority has issued an official extrapolation tables which are giving the applicant specific information on efficacy trial results extrapolations between crops, prepared for many pests. Among them, guideline states that efficacy results from winter wheat can be extrapolated onto spring wheat, when applicant will submit 1-2 efficacy trials performed on spring wheat.

**Table 3.2-25: Efficacy of active substance components in BSK-FUN 500 SC trials in winter triticale**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis/Entargo Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha / Boscalid 350 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
ERYSGR	2	11.25	5.1- 17.4	38	29-47	68	56-80	81.5	63-100	90	80-100	88.5	77-100	1 trial > 1 trial =
SEPTTR	1	7.9	7.9-7.9	74	74-74	88	88-88	91	91-91	92	92-92	91	91-91	1 trial >

- \* 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

For the efficacy against ERYSGR and SEPTTR A2 (35-47 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of septoria leaf blotch in winter triticale at

the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

Only two trials for winter triticale were conducted due to the fact that this hybrid crop shares many traits with winter wheat, and due to the fact that both septoria leaf blotch and powdery mildew are caused by the exactly same fungus species, no matter if it is wheat or triticale. It is also worth mentioning that Polish authority has issued an official extrapolation tables which are giving the applicant specific information on efficacy trial results extrapolations between crops, prepared for many pests. Among them, guideline states that efficacy results from winter wheat can be extrapolated onto winter triticale, when applicant will submit 1-2 efficacy trials performed on winter triticale.

**Table 3.2-26: Efficacy of active substance components in BSK-FUN 500 SC trials in spring triticale**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose  is >, <, =  compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis/Entargo Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha / Boscalid 350 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
ERYSGR	1	6.6	6.6-6.6	85	85-85	92	92-92	99	99-99	99	99-99	99	99-99	1 trial =
SEPTTR	1	9.3	9.3-9.3	29	29-29	60	60-60	83	83-83	86	86-86	86	86-86	1 trial =

\* 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

For the efficacy against ERYSGR and SEPTTR A2 (36-40 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of septoria leaf blotch in spring triticale at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

Only two trials for spring triticale were conducted due to the fact that this hybrid crop shares many traits with winter wheat, and due to the fact that both septoria leaf blotch and powdery mildew are caused by the exactly same fungus species, no matter if it is wheat or triticale. It is also worth mentioning that Polish authority has issued an official extrapolation tables which are giving the applicant specific information on efficacy trial results extrapolations between crops, prepared for many pests. Among them, guideline states that efficacy results from winter wheat can be extrapolated onto spring triticale, when applicant will submit 1-2 efficacy trials performed on spring triticale.

**Table 3.2-27: Efficacy of active substance components in BSK-FUN 500 SC trials in winter barley**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis/Entargo Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha / Boscalid 350 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
ERYSGR	1	7.7	7.7-7.7	51	51-51	67	67-67	80	80-80	81	81-81	89	89-89	1 trial <
PUCCHD	1	41.1	41.1- 41.1	30	30-30	56	56-56	66	66-66	70	70-70	79	79-79	1 trial <
PUCCRE	1	5.4	5.4-5.4	25	25-25	26	26-26	40	40-40	54	54-54	91	91-91	1 trial <
PYRNTE	5	5.72	5.72- 5.72	62.4	16-78	80	47-93	89.6	79-94	92.8	83-96	93	79-98	2 trial > 3 trial <

\* 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

For the efficacy against ERYSGR, PUCCHD, PUCCRE and PYRNTE A2 (34-49 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of net blotch of barley in winter barley at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

**Table 3.2-28: Efficacy of active substance components in BSK-FUN 500 SC trials in spring barley**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
PYRNTE	1	13.4	13.4- 13.4	89	89-89	93	93-93	98	98-98	99	99-99	99	99-99	1 trial =

\* 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

For the efficacy against PYRNTE A2 (35 days after the application A) assessment was taken into the consideration in the table above.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of net blotch of barley in spring barley at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis at recommended label rate of 1.5 L/ha.

Only one trial for spring barley was conducted due to the fact that differences between spring and winter cultivars of barley are minor, or there are no such, in terms of their physiology during time of the application (they are the same species basically), and due to the fact that net blotch of barley is caused by the exactly same fungus, no matter if it is spring or winter barley. It is also worth mentioning that Polish authority has issued an official extrapolation tables which are giving the applicant specific information on efficacy trial results extrapolations between crops, prepared for many pests. Among them, guideline states that efficacy results from winter barley can be extrapolated onto spring barley (and backwards), when applicant will submit 1-2 efficacy trials performed on spring barley.

**Table 3.2-29: Efficacy of active substance components in BSK-FUN 500 SC trials in winter rye**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 210 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		BSK-FUN 500 SC Boscalid 300 g/ha		BSK-FUN 500 SC Boscalid 350 g/ha		Empartis/Entargo Boscalid 300 g/ha, kres- oxim-methyl 150 g/ha / Boscalid 350 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
ERYSGR	2	8.15	6.4-9.9	47	36-58	66	66-66	81.5	80-83	88	86-90	85	82-88	2 trial >
PUCCRE	2	7.1	7-7.2	60.5	42-79	73	56-90	79	64-94	79.5	62-97	91	83-99	2 trial <
PUCCSI	1	15.4	15.4- 15.4	66	66-66	77	77-77	82	82-82	92	92-92	87	87-87	1 trial >
RHYNSE	5	7.96	5.1- 11.8	55	30-79	75.4	63-100	84.8	80-100	89.8	84-100	88.2	81-100	4 trial > 1 trial =
SEPTTR	2	6.55	5.1-8	60	53-67	67.5	65-70	77	70-84	90.5	89-92	89.5	87-92	1 trial > 1 trial =

- \* 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

For the efficacy against PUCCRE, PUCCSI, RHYNSE and SEPTTR A2 (30-43 days after the application A) assessment was taken into the consideration in the table above. In case of ERYSGR A1 assessment was considered (14-21 days after the application A) in 2 out of 2 trials because at A2 assessment timing ERYSGR

was not visible anymore.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of leaf blotch of cereals in winter rye at the proposed rate of 0.7 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Empartis/Entargo at recommended label rate of 1.5 L/ha / 0.7 L/ha.

**Table 3.2-30: Efficacy of active substance components in BSK-FUN 500 SC spring trials in winter oilseed rape**

Grouping *	Number of trials	Infestation of the untreated control (number of plants)		% control										No of trials where BSK-FUN 500 SC at full recommended dose  is >, <, = compared to stand- ard(s)**
				BSK-FUN 500 SC Boscalid 100 g/ha		BSK-FUN 500 SC Boscalid 150 g/ha		BSK-FUN 500 SC Boscalid 200 g/ha		BSK-FUN 500 SC Boscalid 250 g/ha		Royalty Boscalid 250 g/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
	[-]	%	%	%	%	%	%	%	%	%	%	%	%	[-]
ALTEBA	1	17.7	17.7- 17.7	60	60-60	79	79-79	89	89-89	90	90-90	92	92-92	1 trial <
LEPTMA	5	14.6	8.8- 16.3	61.21%	42-74	72.32%	54-86	82.26	72-90	87.54	78-94	86.78	78-96	2 trial > 1 trial < 2 trial =
SCLESC	7	38.2	5.1-62	54.28	9-84%	72.68	47-100	79.63	67-100	85.83	76-100	84.95	71-100	2 trial > 1 trial < 3 trial =

\* 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

For the efficacy against ALTEBA, LEPTMA and SCLESC mostly A2 (30-43 days after the application A) assessment was taken into the consideration in the table above. Due to weather conditions and late LEPTMA disease development, A3 - 51 days after the application A (at crop BBCH 83) assessment was taken into the consideration in 1 out of 5 trials. Due to weather conditions and late SCLESC disease development, A3 – 51-71 days after the application A (at crop BBCH 83) assessment was taken into the consideration in 4 out of 7 trials. In 019GPSE202306 trial assessment with infected pods infestation was taken into consideration.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of dry rot of crucifers in winter oilseed rape at the full rate of 0.5 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Royalty at recommended label rate of 0.5 L/ha.

According to statistical analysis, data assessed in trials demonstrated that the efficacy of BSK-FUN 500 SC in control of cottony rot in winter oilseed rape at the full rate of 0.5 L/ha was equivalent (there was no statistically significant difference between the results) to the efficacy of Royalty at recommended label rate of 0.5 L/ha.



## Minor use

Not relevant.

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

8 trials in Poland were carried out in 2023 on winter wheat, they revealed no negative impact of BSK-FUN 500 SC on quantity and quality of yield.

A summary of the yield data from efficacy trials is presented in Table 3.2-10.

The objective was to confirm the yield response of BSK-FUN 500 SC in the presence of disease.

**Table 3.2-31: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in winter wheat**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	8	a) 100% b) 6.12	N/A 4.07-9.1	a) 104.9% b) 6.41	96.4-112.1% 3.7-8.33	a) 107.6% b) 6.63	100-11.4% 3.3-8.38	a) 108.3% b) 6.67	98.2-115.4% 3.7-10.5	a) 111.7% b) 6.83	109.1-118.2% 3.9-10.2	a) 109.9% b) 6.75	109.1-114.3% 3.6-10.3	5 trials > 3 trials <

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7L/ha had positive effect on the yield of winter wheat in the presence of disease. In fact, there was average 11.7% increase in yield over the untreated.

**Table 3.2-32: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in winter wheat**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	8	6.12	4.07-9.1	6.41	3.7-8.33	6.63	3.3-8.38	6.67	3.7-10.5	6.83	3.9-10.2	6.75	3.6-10.3
Moisture (%)	8	13.79	12.2-14.9	13.75	12.2-14.8	13.8	12.3-14.8	13.74	12.1-14.8	13.63	12.2-14.7	13.7	12.1-14.9
Weight of 1000 grains (g)	8	40.39	32.53-49.1	41.02	32.67-50	40.82	32.55-49.4	40.94	32.55-49.5	41.01	33.33-50	41.26	32.36-50.4
Test weight (kg/hl)	8	74.44	70.2-82.5	74.89	68.9-83.83	74.99	69.8-83.23	74.4	68.5-82.8	74.83	69.6-82.67	75.19	69.9-84.3

8 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in winter wheat.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha in both trials had no negative impact on the grain yield. It is worth mentioning that in one trial, used product had quite significant positive effect on the yield of winter wheat in the presence of disease (18.2% increase when compared to control in case of 0.7L/ha rate. In comparison, reference product had just 9.1% of yield increase when compared to control).

**Table 3.2-33: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in spring wheat**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	2	a) 100% b) 6.62	N/A 5.11-8.13	a) 109.2% b) 7.15	103.8-114.7% 5.86-8.44	a) 117.8% b) 7.62	106.2-129.4% 6.61-8.63	a) 115.2% b) 7.46	104.2-126.2% 6.45-8.47	a) 118.3% b) 7.65	106-130.5% 6.67-8.62	a) 118.4% b) 7.64	105.3-131.5% 6.72-8.56	1 trials > 1 trials <

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 7 L/ha in both trials had positive impact on the grain yield. In fact, there was average 18.3% increase in yield over the untreated.

**Table 3.2-34: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in spring wheat**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	2	6.62	5.11-8.13	7.15	5.86-8.44	7.62	6.61-8.63	7.46	6.45-8.47	7.65	6.67-8.62	7.64	6.72-8.56
Moisture (%)	2	13.67	13.28-14.05	13.62	13.25-13.98	13.46	13.38-13.53	13.67	13.43-13.9	13.57	13.23-13.9	13.57	13.18-13.95
Weight of 1000 grains (g)	2	46.91	43.94-49.88	47.85	45.92-49.77	47.64	45.51-49.76	48.14	46.31-49.96	47.76	45.72-49.80	47.43	45.21-49.65
Test weight (kg/hl)	2	74.26	74.31-74.2	75.13	74.85-75.40	75.45	74.57-76.33	74.65	75.12-74.18	74.49	75.68-73.30	76.15	75.61-76.68

2 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in spring wheat.

**Table 3.2-35: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in winter triticale**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	2	a) 100% b) 6.91	N/A 5.62-8.2	a) 112.8% b) 7.91	104.1-121.6% 5.85-9.97	a) 111.7% b) 7.80	105.7-117.7% 5.94-9.65	a) 119.2% b) 8.31	113.3-125.0% 6.37-10.25	a) 117.2% b) 8.11	116.0-118.3% 6.52-9.7	a) 115.3% b) 7.97	115.3-115.2% 6.48-9.45	2 trials >

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha in both trials had positive impact on the grain yield.

**Table 3.2-36: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in winter triticale**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	2	6.91	5.62-8.2	7.91	5.85-9.97	7.80	5.94-9.65	8.31	6.37-10.25	8.11	6.52-9.7	7.97	6.48-9.45
Moisture (%)	2	11.90	11.39-12.40	12.09	11.57-12.60	11.82	11.23-12.40	11.91	11.32-12.50	11.83	11.16-12.50	11.90	11.10-12.70
Weight of 1000 grains (g)	2	42.09	41.98-42.2	43.02	42.80-43.24	43.45	43.09-43.8	43.43	43.26-43.6	43.56	43.41-43.7	43.90	43.60-44.19
Test weight (kg/hl)	2	70.52	60.9-80.13	71.17	62.20-80.13	72.67	63.90-81.43	71.10	61.90-80.30	71.54	63.10-79.98	71.42	63.10-79.73

2 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in winter triticale.

**Table 3.2-37: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in spring triticale**

Grouping	Number of trials	Untreated control		c) % yield relative to the untreated										No of trials where BSK-FUN 500 SC is >, <=, compared to standard(s)*
		a) Percent	b) Absolute figures (t/ha)	a) absolute figures (t/ha)										
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	2	a) 100% b) 4.63	N/A 3.45-5.8	a) 108.1% b) 4.97	105.2-111% 3.83-6.1	a) 110.7% b) 5.06	105.2-116.2% 4.01-6.1	a) 110.6% b) 5.05	105.2-115.9% 4-6.1	a) 113.3% b) 5.19	108.6-118% 4.07-6.3	a) 114.3% b) 5.26	112.1-116.5% 4.02-6.5	1 trials > 1 trials <

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha in both trials had positive impact on the grain yield.

**Table 3.2-38: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in spring triticale**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	2	4.63	3.45-5.8	4.97	3.83-6.1	5.06	4.01-6.1	5.05	4-6.1	5.19	4.07-6.3	5.26	4.02-6.5
Moisture (%)	2	14.08	13.70-14.45	13.94	13.60-14.28	13.73	13.70-13.75	13.70	13.60-13.80	13.60	13.50-13.70	13.77	13.60-13.93
Weight of 1000 grains (g)	2	45.81	43.99-47.62	46.12	44.44-47.79	46.24	44.38-48.10	45.95	44.47-47.43	46.24	44.45-48.03	46.02	44.45-47.58
Test weight (kg/hl)	2	69.46	65.3-73.61	69.38	65.83-72.93	70.17	66.28-74.06	69.24	66.00-72.47	70.23	67.15-73.31	69.58	66.43-72.73

2 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in spring triticale.

**Table 3.2-39: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in spring barley**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis at 1.5 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	1	a) 100% b) 5.9	N/A 5.9-5.9	a) 105.4% b) 6.22	105.4-105.4% 6.22-6.22	a) 110.7% b) 6.53	110.7-110.7% 6.53-6.53	a) 109.3% b) 6.45	109.3-109.3% 6.45-6.45	a) 111.4 b) 6.57	111.4-111.4% 6.57-6.57	a) 106.4 b) 6.28	106.4-106.4% 6.28-6.28	1 trial >

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha in one trial had positive impact on the grain yield.

**Table 3.2-40: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in spring barley**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis at 1.5 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	1	5.9	5.9-5.9	6.22	6.22-6.22	6.53	6.53-6.53	6.45	6.45-6.45	6.57	6.57-6.57	6.28	6.28-6.28
Moisture (%)	1	10.5	10.5-10.5	10.5	10.5-10.5	10.5	10.5-10.5	10.6	10.6-10.6	10.8	10.8-10.8	10.8	10.8-10.8
Weight of 1000 grains (g)	1	41.23	41.23-41.23	43.70	43.7-43.7	43.55	43.55-43.55	44.43	44.43-44.43	43.52	43.52-43.52	42.67	42.67-42.67
Test weight (kg/hl)	1	74.9	74.9-74.9	74.98	74.98-74.98	74.54	74.54-74.54	74.43	74.43-74.43	74.36	74.36-74.36	73.81	73.81-73.81

1 efficacy trial was carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in spring barley.

**Table 3.2-41: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in winter barley**

Grouping	Number of trials	Untreated control		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
		a) Percent	b) Absolute figures (t/ha)	BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	7	a) 100% b) 7.45	N/A 5.2-11.23	a) 104.2% b) 7.77	100-107.6% 5.48-12.05	a) 106.2% b) 7.92	103.1-110.4% 5.39-12.33	a) 107.8% b) 8.06	101.6-114.5% 5.74-12.86	a) 111.6% b) 8.33	103.2-120.3% 5.65-11.73	a) 108.1 b) 8.01	103.2%-118.6% 5.65-11.73	6 trials > 1 trial =

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha had positive effect on the yield of winter barley in the presence of disease.

**Table 3.2-42: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in winter barley**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	7	7.45	5.2-11.23	7.77	5.48-12.05	7.92	5.39-12.33	8.06	5.74-12.86	8.33	5.65-11.73	8.01	5.65-11.73
Moisture (%)	7	13.20	10.8-16.13	13.12	10.8-15.55	13.14	10.8-15.55	13.10	10.7-15.88	13.20	10.7-15.73	13.11	10.7-15.75
Weight of 1000 grains (g)	7	43.83	35.14-52.7	44.96	36.17-52.9	45.34	36.18-54.5	45.18	35.85-53.6	45.15	36.54-52.5	45.31	36.33-53.3
Test weight (kg/hl)	7	65.88	60.4-71.64	66.30	60.4-74.51	66.28	60.7-72.53	66.33	60.3-73.6	66.86	60.6-72.91	66.47	60.2-73.04

7 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in winter barley.

**Table 3.2-43: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in winter rye**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	8	a) 100% b) 5.03	N/A 2.5-6.9	a) 105.8% b) 5.35	79.3-116.2% 2.3-7.25	a) 107.3% b) 5.44	82.8-127.4% 2.4-7.08	a) 110.2% b) 5.59	79.3-132.4% 2.3-7.4	a) 114.5% b) 5.8	82.8-133% 2.4-7.75	a) 111.1% b) 5.64	86.2-128.5% 2.5-7.68	7 trials > 1 trials <

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label rate of 0.7 L/ha had positive effect on the yield of winter barley in the presence of disease in 7 out of 8 trials..

**Table 3.2-44: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in winter rye**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.42 L/ha		BSK-FUN 500 SC at 0.5 L/ha		BSK-FUN 500 SC at 0.6 L/ha		BSK-FUN 500 SC at 0.7 L/ha		Empartis/Entargo at 1.5 L/ha/0.7 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	8	5.03	2.5-6.9	5.35	2.3-7.25	5.44	2.4-7.08	5.59	2.3-7.4	5.8	2.4-7.75	5.64	2.5-7.68
Moisture (%)	8	12.28	8-13.9	12.38	9-13.7	12.29	9-13.8	12.25	9-13.7	12.35	9-13.5	12.41	9-13.7
Weight of 1000 grains (g)	8	29.23	23.12-35.35	29.36	23.06-35.43	29.35	23.89-35.53	29.54	23.16-35.45	29.62	23.32-35.6	29.40	22.98-35.55
Test weight (kg/hl)	8	71.23	66.5-77.83	71.52	67.3-78.01	71.53	66.83-77.88	71.44	66.8-78.27	71.52	66.75-77.97	71.44	67.2-77.98

8 efficacy trials were carried out in 2023, there was no significant effect of dose 0.7 L/ha BSK-FUN 500 SC on grain yield component in winter rye.

**Table 3.2-45: Yield effect of BSK-FUN 500 SC in efficacy trials on fungal diseases in winter oilseed rape (spring application)**

Grouping	Number of trials	Untreated control a) Percent b) Absolute figures (t/ha)		a) % yield relative to the untreated b) absolute figures (t/ha)										No of trials where BSK-FUN 500 SC is >, <, = compared to standard(s)*
				BSK-FUN 500 SC at 0.2 L/ha		BSK-FUN 500 SC at 0.3 L/ha		BSK-FUN 500 SC at 0.4 L/ha		BSK-FUN 500 SC at 0.5 L/ha		Royalty at 0.5 L/ha		
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	
Fungal diseases	7	a) 100% b) 4.01	N/A 2.68-6.9	a) 107% b) 4.3	102.2-113.9% 2.9-7.8	a) 111.4% b) 4.47	102.2-122.9% 2.96-7.9	a) 114.7% b) 4.58	104.4-131.4% 2.97-7.9	a) 115.1% b) 4.61	106.7-122.9% 3.11-8.1	a) 114.5% b) 4.58	102.2-125.7% 3.1-8.1	4 trials > 2 trials < 1 trials =

\* Optional.

Mean value of yield quality in untreated control is treated as 100%.

BSK-FUN 500 SC at the proposed label full rate of 0.5 L/ha had positive effect on the yield of winter oilseed rape in the presence of disease.



**Table 3.2-46: Yield (quality) effect of BSK-FUN 500 SC and its impact on grain yield component in winter oilseed rape (spring application)**

Grain yield component	Number of trials	Untreated control		BSK-FUN 500 SC at 0.2 L/ha		BSK-FUN 500 SC at 0.3 L/ha		BSK-FUN 500 SC at 0.4 L/ha		BSK-FUN 500 SC at 0.5 L/ha		Royalty at 0.5 L/ha	
		Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max	Mean	Min & Max
Yield (t/ha)	7	4.01	2.68-6.9	4.3	2.9-7.8	4.47	2.96-7.9	4.58	2.97-7.9	4.61	3.11-8.1	4.58	3.1-8.1
Moisture (%)	7	8.54	7.7-9.75	8.13	7.6-9.65	8.35	7.6-9.68	8.37	7.55-9.68	8.36	7.6-9.85	8.23	7.6-9.75
Weight of 1000 grains (g)	7	4.20	3.81-4.55	4.34	4-4.72	4.43	3.98-4.93	4.40	3.95-4.83	4.50	4.01-5.04	4.49	4.01-4.91
Oil content (%)	7	43.15	41.63-44.23	43.48	42.68-44.23	43.58	43-44.48	43.59	42.8-44.05	43.40	42.8-44.05	43.41	42.88-44.35

7 efficacy trials were carried out in 2023, there was no statistically significant effect of full dose 0.5 L/ha BSK-FUN 500 SC on grain yield component in winter oilseed rape.

### Summary and conclusions on the efficacy tests

There were 37 efficacy trials conducted in Poland in growing season 2023 on winter wheat, spring wheat, winter triticale, spring triticale, winter barley, spring barley, winter rye and winter oilseed rape as major crops and these trials were carried out to evaluate the efficacy of BSK-FUN 500 SC for the control of fungal diseases. All set up trials were conducted in compliance with GEP principles and were carried out appropriate EPPO guidelines. The efficacy of the BSK-FUN 500 SC at the proposed rates of 0.7 L/ha was equivalent to the efficacy of the reference products containing the same amount of the active substance – boscalid, at rates 0.7 and 1.5 L/ha against fungal diseases in cereals and 0.5 L/ha in winter oilseed rape.

### Summary and conclusion

37 trials total were conducted to confirm efficacy of BSK-FUN 500 SC in control of diseases in cereals (winter and spring wheat, winter and spring triticale, winter and spring barley, winter rye) and in winter oilseed rape. BSK-FUN 500 SC showed its effectiveness in control of diseases listed below, at the proposed label rates:

#### 0.7 L/ha –

##### Controlled diseases:

Winter wheat

**Septoria leaf blotch** (*Zymoseptoria tritici*) SEPTTR

Spring wheat

**Septoria leaf blotch** (*Zymoseptoria tritici*) SEPTTR

Winter triticale

**Septoria leaf blotch** (*Zymoseptoria tritici*) SEPTTR

Spring triticale

**Septoria leaf blotch** (*Zymoseptoria tritici*) SEPTTR

Winter barley

**Net blotch of barley** (*Pyrenophora teres*) PYRNTE

Spring barley

**Net blotch of barley** (*Pyrenophora teres*) PYRNTE

Winter rye

**Leaf blotch of cereals** (*Rhynchosporium secalis*) RHYNSE

#### 0.2 0.4-0.5 L/ha –

##### Controlled diseases:

Winter oilseed rape (spring application)

**Dry rot of crucifers** (*Plenodomus lingam*) LEPTMA

**Cottony rot** (*Sclerotinia sclerotiorum*) SCLESC

#### **ZRMs comments:**

On the basis on literature data, boscalid is effective against several key fungal disease affecting cereals, like: septoria leaf blotch, net blotch, rhynchosporium, brown rust, powdery mildew and sclerotinia stem rot, phoma stem canker and alternaria leaf spot and pod spot in winter oilseed rape. It is recommended to use it as a part of an integrated disease management program, including rotating fungicides with different modes of action and applying fungicides based on diseases risk.

Trials were conducted according to the EPPO guidelines. The GEP certificates of the official testing organizations were provided. EPPO Standard PP 1/226 provides guidance on the number of trials in

target crops needed to demonstrate the efficacy of a plant protection product at the recommended dose. Where authorization is sought across a range of diverse conditions, such as across an authorization zone (PP 1/278), then the number of trials conducted may need to increase. These trials should be done across the range of climatic and environmental conditions likely to be encountered, and over at least 2 years. Applicant submitted in total 37 efficacy trials carried out in N-E EPPO zone (Poland) in one growing season (2023). Conducting trials only in one growing season is not in line to EPPO standard 1/181. However, at the start of this dossier, Applicant submitted explanations about conducting only one season. These clarifications were accepted by ZRMs. Boscalid is a fungicide commonly used on both cereals (such as wheat, barley, etc.) and winter oilseed rape. It is particularly valued for its broad-spectrum activity against key fungal diseases in these crops, though it is often applied in mixtures with other fungicides to enhance its efficacy and prevent resistance development.

The Applicant was notified that according to PP 1/226 at least 6 trials in case of major crop are required. In the opinion of ZRMs, number of trials for winter wheat (8 trials), winter barley (7 trials), winter rye (8 trials) and winter oilseed rape (7 trials) is acceptable. Spring wheat (2 trials), winter triticale (2 trials), spring triticale (2 trials) and spring barley (1 trial) can be also accepted on the basis on the extrapolating results from cereals represented by sufficient number of trials in line to harmonization agreements.

**Cereals:** Number of trials for studied diseases is also important. Major diseases should be represented by at least 6 valid trials. However, SEPTTR in winter wheat, PYRNTE in winter barley and RHYNSE in winter rye were represented by only 5 trials carried out in one growing season. All those trials were characterized by acceptable level of infestation. In special cases where the results of the tests are consistent, a reduction to 5 tests, carried out in 2 seasons, is possible. All noted results were consistent, but considering the fact that testing will only be carried out in one season and that there are only a limited number of plant protection products with boscalid in a similar formulation to the product under consideration, registration will only be possible conditionally. Within 24 months after registration, Applicant should submitted 1-2 additional efficacy trials carried out on winter wheat against SEPTTR, winter barley against PYRNTE and winter rye against RHYNSE in N-E EPPO zone. PUCCRE (2 trials) and PSDCHA (2 trials) on winter wheat should be excluded from GAP and label project due to not enough number of trials (at least 6 are required). SEPTTR on spring wheat (2 trials), winter triticale (1 trial) and spring triticale (1 trial) can be accepted on the basis on extrapolating results from winter wheat. PYRNTE on spring barley (1 trial) can be accepted on the basis on extrapolating results from winter barley.

Following application window was studied during 30 cereals trials: BBCH 30-51. ZRMs accepted proposed by Applicant application window (BBCH 30-49) as compatible with submitted trials. Following water volume: 200-300 L/ha was studied during trials. In the opinion of ZRMs, accepted water volume for cereals should be 200-300 L/ha, not 100-300 L/ha.

✓ **Winter wheat:**

**SEPTTR** (5 trials) – accepted conditionally. It is a major diseases in winter wheat. It can be concluded that BSK-FUN 500 SC at recommended dose (0.7 L/ha) effectively control SEPTTR on winter wheat (95.4% eff.). Results were compared to st. ref. product (94.6% eff.). Level of infestation of the untreated control was accepted in all trials (average 6.5%, range 5.1-8.7%).

**PUCCRE** (2 trials) – not accepted due to limited number of trials (at least 6 should be presented). Major disease in winter wheat. It is a major disease in winter wheat. On the submitted documentation, registration of this disease is not possible.

**PSDCHA** (2 trials) – not accepted due to limited number of trials (at least 6 should be presented). Major disease in winter wheat. It is a major disease in winter wheat. On the submitted documentation, registration of this disease is not possible.

✓ **Spring wheat:**

**SEPTTR** (2 trials) – accepted on the basis of extrapolating results from winter wheat. Major disease in spring wheat. On the submitted results it can be stated that BSK-FUN 500 SC effectively control (92.5% eff.) SEPTTR on spring wheat at recommended dose (0.7 L/ha). Results were compared to st. ref. product (91.0% eff.). Level of infestation of the untreated control was accepted in all trials (average 7.0%, range

6.3-7.7%).

✓ **Winter triticale:**

**SEPTTR** (1 trial) – accepted on the basis of extrapolating results from winter wheat. It is not included as a major disease in integrated production methodologies. However, triticale, being a hybrid cereal that combines the characteristics of wheat and rye, is susceptible to many diseases that affect wheat, including septoria leaf blotch. The symptoms of the disease in triticale are similar to those found in wheat – small, dark spots appear on the leaves, which can gradually cause leaf necrosis, limiting photosynthesis and reducing yield. Septoria leaf blotch can particularly threaten triticale yields in conditions favourable to the disease's development, such as high humidity and moderate temperatures. Therefore, it is important to monitor triticale crops for symptoms of this disease and apply appropriate plant protection measures, including fungicides, if the first signs of infection appear. On the submitted results it can be stated that BSK-FUN 500 SC effectively control SEPTTR on winter triticale (92.0% eff.). Results were comparable to st. ref. product (91.0% eff.). Level of infestation of the untreated control was accepted in all trials (7.9%).

✓ **Spring triticale:**

**SEPTTR** (1 trial) – accepted on the basis of extrapolating results from winter wheat. It is not included as a major disease in integrated production methodologies. On the submitted results it can be stated that BSK-FUN 500 SC effectively control SEPTTR on spring triticale (86.0% eff.). Results were comparable to st. ref. product (86.0% eff.). Level of infestation of the untreated control was accepted in all trials (9.3%).

✓ **Winter barley:**

**PYRNTE** (5 trials) – accepted conditionally. It is a major disease in winter barley. On the submitted results it can be stated that BSK-FUN 500 SC effectively control (92.8% eff.) PYRNTE on winter barley at recommended dose (0.7 L/ha). Results were compared to st. ref. product (93.0% eff.). Level of infestation of the untreated control was accepted in all trials (average 5.7%).

✓ **Spring barley:**

**PYRNTE** (1 trial) – accepted on the basis of extrapolating results from winter barley. It is a major disease in spring barley. On the submitted results it can be stated that BSK-FUN 500 SC effectively control PYRNTE on spring barley (99.0% eff.). Results were comparable to st. ref. product (99% eff.). Level of infestation of the untreated control was accepted in all trials (13.4%).

✓ **Winter rye:**

**RHYNSE** (5 trials) – accepted conditionally. It is a major disease in winter rye. On the submitted results it can be stated that BSK-FUN 500 SC effectively control (89.8% eff.) RHYNSE on winter rye at recommended dose (0.7 L/ha). Results were compared to st. ref. product (88.2% eff.). Level of infestation of the untreated control was accepted in all trials (average 7.96%).

**Winter oilseed rape:** All trials (7) were studied spring application. Lack of efficacy trials for autumn application and combine application (1 in spring and 1 in autumn). Due to lack of autumn efficacy trials, this use should be excluded from GAP table and label project. Only registration of spring application is possible. Following application window was studied during 7 trials: BBCH 57-69. ZRMs accepted proposed by Applicant application window (BBCH 57-71) as compatible with submitted trials for spring application. BSK-FUN 500 SC was applied two times in spring (May) with 14 days interval. Following water volume: 300-400 L/ha was studied during trials. In the opinion of ZRMs, accepted water volume for winter oilseed rape should be 300-400 L/ha, not 100-400 L/ha.

ZRMs did not agree for registration use number 7 (autumn BBCH 13-18 and spring BBCH 31-57 against LEPTMA) and use number 8 (spring BBCH 31-57 against LEPTMA). Those uses were not represented by submitted documentation for BSK-FUN 500 SC. Only registration of use number 9 (spring BBCH 57-71 against LEPTMA and SCLESC) is possible in line to documentation. Below, ZRMs presented results supporting registration use number 9 in winter oilseed rape:

Major diseases should be represented by at least 6 valid trials. However, LEPTMA in winter oilseed rape

were represented by only 5 trials carried out in one growing season. All those trials were characterized by acceptable level of infestation. In special cases where the results of the tests are consistent, a reduction to 5 tests, carried out in 2 seasons, is possible. All noted results were consistent, but considering the fact that testing will only be carried out in one season and that there are only a limited number of plant protection products with boscalid in a similar formulation to the product under consideration, registration will only be possible conditionally. Within 24 months after registration, Applicant should submitted 1-2 additional efficacy trials carried out on winter oilseed rape against LEPTMA in N-E EPPO zone. SCLESC (7 trials) were characterized by acceptable number of trials.

**LEPTMA** (5 trials) – accepted conditionally. It is a major disease. On the submitted results it can be stated that BSK-FUN 500 SC effectively control (82.26% eff. and 87.54) LEPTMA on winter oilseed rape at recommended dose (0.4 L/ha and 0.5 L/ha). Results were compared to st. ref. product (96.78% eff.). Level of infestation of the untreated control was accepted in all trials (average 14.6%).

**SCLESC** (7 trials) – accepted. It is a major disease. On the submitted results it can be stated that BSK-FUN 500 SC moderately effectively (79.6% control SCLESC on winter oilseed rape at recommended dose 0.4 L/ha and effectively control (85.83% eff.) SCLESC on winter oilseed rape at recommended dose 0.5 L/ha. Results were compared to st. ref. product (84.95% eff.). Level of infestation of the untreated control was accepted in all trials (average 38.2%). Given the high level of infestation and the fact that the product at 0.4 L/ha had an efficacy of almost 80% and at 0.5 L/ha an efficacy of more than 80%, the ZRMS is of the opinion that this disease should be classified as susceptible to BSK-FUN 500 SC.

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

According to FRAC active substance boscalid belongs to the pyridine-carboxamides group (also known as carboxins or oxathiins, group FRAC C2). The mode of action of boscalid is the inhibition of the enzyme succinate dehydrogenase (SDH), also known as complex II in the mitochondrial electron transport chain. Like other complexes of the respiratory chain, this enzyme is a component of the inner mitochondrial membrane. FRAC describes risk of resistance occurrence for this group as medium.

Strategies and General Guidelines for management of SDHI fungicide resistance in all crops:

- Strategies for the management of SDHI fungicide resistance, in all crops, are based on the statements listed below. These statements serve as a fundamental guide for the development of local resistance management programs.
- Resistance management strategies have been designed in order to be proactive and to prevent or delay the development of resistance to SDHI fungicides.
- A fundamental principle that must be adhered to when applying resistance management strategies for SDHI fungicides is that:
  - The SDHI fungicides (benodanil, benzovindiflupyr, bixafen, boscalid, carboxin, cyclobutylfluram, fenfuram, fluindapyr, fluopyram, flutolanil, fluxapyroxad, furametpyr, inpyr-fluxam, isofetamid, isoflucypram, isopyrazam, mepronil, oxycarboxin, penflufen, penthiopyrad, pydiflumetofen, sedaxane, thifluzamide) are in the same cross-resistance group.
- Fungicide programs must deliver effective disease management. Apply SDHI fungicide-based products at effective rates and intervals according to manufacturers' recommendations.
- Effective disease management is a critical component to delay the build-up of resistant pathogen populations.
- The number of applications of SDHI fungicide-based products within a total disease management program must be limited.
- When mixtures are used for SDHI fungicide resistance management, applied as tank mix or as a co-formulated mixture, the mixture partner:

- should provide satisfactory disease control when used alone on the target disease.
- must have a different mode of action.
- Mixtures of two or more SDHI fungicides can be applied to provide good biological efficacy; however, they do not provide an anti-resistance strategy and must be treated as a solo SDHI for resistance management. Each application of such a mixture when used in a spray program counts as one SDHI application.
- SDHI fungicides should be used preventively or at the early stages of disease development.
- Please refer to the “mixture document” for more information on fungicide mixtures for resistance management.
- Species can carry different mutations which affect SDHIs. A few mutations can lead to different sensitivities depending on the chemical structure of the active ingredient.
- As SDHIs are cross-resistant, resistance management must be the same for all SDHIs.
- All monitoring and guideline related statements refer to the entire group of SDHIs.

Strategies and General Guidelines for management of SDHI fungicide resistance in cereals:

- Apply SDHI fungicides always in mixtures
- The mixture partner should provide satisfactory disease control when used alone on the target disease and must have a different mode of action.
- Apply a maximum of 2 SDHI fungicide containing sprays per cereal crop.
- Apply the SDHI fungicide preventively or as early as possible in the disease cycle. Do not rely only on the curative potential of SDHI fungicides.
- Strongly reduced rate programs including multiple applications must not be used. Refer to manufacturers’ recommendations for rates.

Strategies and General Guidelines for management of SDHI fungicide resistance in oilseed rape:

Extensive monitoring programs have been carried out. Reduced sensitivity has been detected in *S. sclerotiorum*. Further monitoring programs will continue and clarify the necessity for a specific crop guideline. The general guidelines for the use of SDHIs are currently considered to be sufficient because current data shows sporadic detection, no consistent increase and spread of resistant mutations. In addition, the life cycle of the pathogen, its distribution and rotation with non-host crops confirm that Sclerotinia in oilseed rape justify the classification as a low risk pathogen.

#### **ZRMs comments:**

The development of resistance to Boscalid in fungal populations is a concern, as with any fungicide. Boscalid is a succinate dehydrogenase inhibitor (SDHI), and resistance to SDHI fungicides has been documented in several pathogen species affecting different crops.

Fungicide resistance is a critical barrier for managing disease effectively in agricultural systems. Determining the fungicide sensitivity of field isolates is one of the indispensable steps in assessing the resistant risk. Depending on the recent reports, many pathogens’ sensitivity to SDHI fungicides is slowly shifting, indicating that quantitative resistance is developing for them. At present, the risk for development of resistance to SDHI fungicides has been assessed as moderate to high by FRAC, due to the high intrinsic activity, specificity for their target, and their continual use in recent years.

#### **Cereals:**

Resistance development in fungi such as *Mycosphaerella graminicola* (cause of Septoria leaf blotch) and *Pyrenophora teres* (cause of Net blotch) has been reported. Monitoring and studies have noted reduced sensitivity in several cereal pathogens, making resistance management strategies crucial.

#### **Winter oilseed rape:**

Pathogens like *Alternaria brassicae* and *Sclerotinia sclerotiorum* are targets of Boscalid in winter oilseed rape but have the potential to develop resistance. While specific cases in oilseed rape may be less documented compared to cereals, ongoing vigilance is essential.

**Mitigation strategies:**

- ✓ *Rotation and mixtures.* Use Boscalid in rotation with fungicides having different modes of action and as part of mixtures to reduce resistance build-up.
- ✓ *Integrated pest management (IPM):* Incorporate non-chemical control methods and use fungicides judiciously.
- ✓ *Adhere to guidelines.* Follow recommended application rates and frequency as detailed on product labels to avoid under- or overuse.
- ✓ *Resistance monitoring.* Participate in or consult regional resistance monitoring programs to stay informed about current resistance levels and management recommendations.

By adhering to these strategies, the risk of resistance development can be minimized, ensuring Boscalid remains an effective tool for managing fungal diseases.

Effective resistance management for Boscalid, an SDHI fungicide, relies on adopting a multifaceted approach to minimize the risk and impact of resistance development in target fungal populations. Below, are presented some detailed strategies:

- <sup>1)</sup> *Rotate modes of action.* Use Boscalid as part of a fungicide rotation program. Avoid consecutive applications of Boscalid or other SDHIs. Instead, alternate with fungicides that have different modes of action, such as DMI fungicides or QoI fungicides.
- <sup>2)</sup> *Formulate mixtures.* Apply Boscalid in combination with another active ingredient that has a different mode of action. This can reduce the selection pressure on the pathogen population since it is exposed to multiple mechanisms of attack simultaneously.
- <sup>3)</sup> *Integrated Pest Management.* Implement crop rotation and diversification to disrupt the life cycle of pathogens. Use resistant crop varieties when available to reduce disease pressure. Employ proper crop sanitation measures, such as removing crop debris that can harbour pathogens. Regularly scout fields to detect early signs of disease and assess the effectiveness of fungicide applications.
- <sup>4)</sup> *Optimized application practices:* Follow the label recommendations regarding application rates, timing and the number of treatments per season. Overuse or underuse can contribute to resistance development.
- <sup>5)</sup> *Resistance monitoring.* Keep records of fungicide performance and any incidences of reduced efficacy for future reference and decision making.

**Specific FRAC Recommendations for cereals**

- ✓ Apply SDHI fungicides always in mixtures
- ✓ The mixture partner should provide satisfactory disease control when used alone on the target disease and must have a different mode of action.
- ✓ Apply a maximum of 2 SDHI fungicide containing sprays per cereal crop.
- ✓ Apply the SDHI fungicide preventively or as early as possible in the disease cycle. Do not rely only on the curative potential of SDHI fungicides.
- ✓ Strongly reduced rate programs including multiple applications must not be used. Refer to manufacturers' recommendations for rates.

**Specific FRAC Recommendations for winter oilseed rape:**

Extensive monitoring programs have been carried out. Reduced sensitivity has been detected in *S. sclerotiorum*.

Further monitoring programs will continue and clarify the necessity for a specific crop guideline. The general guidelines for the use of SDHIs are currently considered to be sufficient because current data

shows sporadic detection, no consistent increase and spread of resistant mutations. In addition, the life cycle of the pathogen, its distribution and rotation with non-host crops confirm that Sclerotinia in OSR justify the classification as a low risk pathogen.

### 3.4 Adverse effects on treated crops (KCP 6.4)

The applicant carried out 37 efficacy trials in which selectivity of the BSK-FUN 500 SC was assessed according to EPPO general and crop specific guidelines:

- 8 trials in winter wheat
- 2 trials in spring wheat
- 2 trials in winter tritcale
- 2 trials in spring tritcale
- 7 trials in winter barley
- 1 trial in spring barley
- 8 trials in winter rye
- 7 trials in winter oilseed rape (spring application)

EPPO PP 1/226(3) standard states - it is not required to conduct phytotoxicity trials for fungicides. However, phytotoxicity was evaluated in each type of the performed efficacy trials, also yield and its quality traits was evaluated according to EPPO guidelines.

All the trials have been presented in point 3.4 – 1.

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

Crop*	Country	Type of trial**	Number of trials (North-East zone)	Years	GEP, non-GEP, official***	Comments (any other relevant information)
Winter wheat	Poland	Y + Q	8	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Spring wheat	Poland	Y + Q	2	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Winter tritcale	Poland	Y + Q	2	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Spring tritcale	Poland	Y + Q	2	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Winter barley	Poland	Y + Q	7	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Spring barley	Poland	Y + Q	1	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.



Crop*	Country	Type of trial**	Number of trials (North-East zone)	Years	GEP, non- GEP, official***	Comments (any other relevant information)
Winter wheat	Poland	Y + Q	8	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Winter rye	Poland	Y + Q	8	2023	GEP	Yield assessment was performed, moisture, HLW and TGW was measured.
Winter oilseed rape (spring)	Poland	Y + Q	7	2023	GEP	Yield assessment was performed, moisture, TGW and oil content was measured.
<b>TOTAL</b>	-	Y + Q	<b>37</b>	-	-	

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...)**

Trial number	Crop(s)	Reference standards	Country(ies) where the product is registered <sup>(1)</sup>	Authorization number	Active substance(s) (a.s)	Formulation		Registered application rate <sup>(3)</sup>	Application rate in trials (per treatment)	Remark <sup>(4)</sup>
						Type <sup>(2)</sup>	Concentration of a.s.			
III 6.1.3/01 (E-WW-PL-2023-018GPSE202301) III 6.1.3/02 (E-WW-PL-2023-018GPSE202302) III 6.1.3/03 (E-WW-PL-2023-018GPSE202303) III 6.1.3/04 (E-WW-PL-2023-018GPSE202304)	Winter wheat	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applications per season; 100-300 L/ha of spray volume; foliar spray
III 6.1.3/05 (E-WW-PL-2023-S23-103648-01) III 6.1.3/06 (E-WW-PL-2023-S23-103648-02) III 6.1.3/07 (E-WW-PL-2023-S23-103648-03) III 6.1.3/08 (E-WW-PL-2023-S23-103648-04)	Winter wheat	Empartis	PL	R-140/2020	Boscalid; kresoxim-methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applications per season; 100-300 L/ha of spray volume; foliar spray
III 6.1.3/09	Spring wheat	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applications per

Trial number	Crop(s)	Refer- ence stand- ards	Coun- try(ies) where the prod- uct is regis- tered <sup>(1)</sup>	Authoriza- tion num- ber	Active sub- stance(s) (a.s)	Formulation		Registered applica- tion rate <sup>(3)</sup>	Applica- tion rate in trials (per treat- ment)	Remark <sup>(4)</sup>
						Type <sup>(2)</sup>	Concentra- tion of a.s.			
(E-SW-PL-2023-018GPSE202305)										season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/10 (E-SW-PL-2023-S23-103648-05)	Spring wheat	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/11 (E-WT-PL-2023-018GPSE202306)	Wtinter triticale	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/12 (E-WT-PL-2023-S23-103648-06)	Wtinter triticale	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/13 (E-ST-PL-2023-018GPSE202307)	Spring triticale	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/14 (E-ST-PL-2023-S23-103648-07)	Spring triticale	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/23 (E-SB-PL-2023-S23-103648-12)	Spring barley	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/24 (E-WB-PL-2023-018GPSE202312) III 6.1.3/25 (E-WB-PL-2023-018GPSE202313) III 6.1.3/26	Winter barley	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applica- tions per season; 100-300 L/ha of

Trial number	Crop(s)	Refer- ence stand- ards	Coun- try(ies) where the prod- uct is regis- tered <sup>(1)</sup>	Authoriza- tion num- ber	Active sub- stance(s) (a.s)	Formulation		Registered applica- tion rate <sup>(3)</sup>	Applica- tion rate in trials (per treat- ment)	Remark <sup>(4)</sup>
						Type <sup>(2)</sup>	Concentra- tion of a.s.			
(E-WB-PL-2023-018GPSE202314)										spray vol- ume; foliar spray
III 6.1.3/27 (E-WB-PL-2023-S23-103648-13) III 6.1.3/28 (E-WB-PL-2023-S23-103648-14) III 6.1.3/29 (E-WB-PL-2023-S23-103648-15) III 6.1.3/30 (E-WB-PL-2023-S23-103648-16)	Winter barley	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/15 (E-WR-PL-2023-018GPSE202308) III 6.1.3/16 (E-WR-PL-2023-018GPSE202309) III 6.1.3/17 (E-WR-PL-2023-018GPSE202310) III 6.1.3/18 (E-WR-PL-2023-018GPSE202311)	Winter rye	Entargo	PL	R-29/2020	Boscalid	SC	500 g/L	0.7 L/ha	0.7 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/19 (E-WR-PL-2023-S23-103648-08) III 6.1.3/20 (E-WR-PL-2023-S23-103648-09) III 6.1.3/21 (E-WR-PL-2023-S23-103648-10) III 6.1.3/22 (E-WR-PL-2023-S23-103648-11)	Winter rye	Empartis	PL	R-140/2020	Boscalid; kresoxim- methyl	SC	200 g/L; 100g/L	1.5 L/ha	1.5 L/ha	1. applica- tions per season; 100-300 L/ha of spray vol- ume; foliar spray
III 6.1.3/31 (E-WOSR-PL-2023-019GPSE202301) III 6.1.3/32 (E-WOSR-PL-2023-019GPSE202302) III 6.1.3/33 (E-WOSR-PL-2023-019GPSE202303) III 6.1.3/34 (E-WOSR-PL-2023-019GPSE202304) III 6.1.3/35 (E-WOSR-PL-2023-019GPSE202305) III 6.1.3/36 (E-WOSR-PL-2023-019GPSE202306) III 6.1.3/37 (E-WOSR-PL-2023-019GPSE202307)	Winter oilseed rape	Royalty	PL	R-32/2018	Boscalid	WG	500 g/kg (bo- scalid)	0.5 L/ha	0,5 L/ha	1. applica- tion per season; 200-400 L/ha of spray vol- ume; foliar spray

- (1) only on use(s) applied for (with the test product)  
(2) e.g.WP (wetable powder), EC (emulsifiable concentrate), etc.

- (3) Dose / dose range authorized in the country  
(4) Other relevant information (e.g. uses, number of applications, spray volume, method of application...)

### 3.4.1 Phytotoxicity to host crop (KCP 6.4.1)

**Table 3.4-3: Phytotoxicity of product to winter wheat**

Number of trials with...		Efficacy trials (8 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	8	8
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	8	8
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

8 trials were carried out on winter wheat in Poland in year 2023 on a wide range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on winter wheat, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-4: Phytotoxicity of product to spring wheat**

Number of trials with...		Efficacy trials (2 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

2 trials were carried out on spring wheat in Poland, in year 2023 on a range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on spring wheat, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-5: Phytotoxicity of product to winter triticales**

Number of trials with...		Efficacy trials (2 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

2 trials were carried out on winter triticales in Poland, in year 2023 on a range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on winter triticales, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-6: Phytotoxicity of product to spring triticales**

Number of trials with...		Efficacy trials (2 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	2	2
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

2 trials were carried out on spring triticales in Poland, in year 2023 on a range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on spring triticales, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-6: Phytotoxicity of product to spring barley**

Number of trials with...		Efficacy trials (1 trial)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	1	1
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	1	1
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

1 trial was carried out on spring barley in Poland, in year 2023 on a commercially grown variety.

No phytotoxicity symptoms were recorded in all of the trials performed on spring barley, when proposed label rate of 0.7 of BSK-FUN 500 SC was used.

**Table 3.4-7: Phytotoxicity of product to winter barley**

Number of trials with...		Efficacy trials (7 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	7	7
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	7	7
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

7 trials were carried out on winter barley in Poland, in year 2023 on a wide range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on winter barley, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-7: Phytotoxicity of product to ~~winter~~ winter rye**

Number of trials with...		Efficacy trials (8 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	8	8
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	8	8
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

8 trials were carried out on winter barley in Poland, in year 2023 on a wide range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on winter rye, when proposed label rate of 0.7 L/ha of BSK-FUN 500 SC was used.

**Table 3.4-8: Phytotoxicity of product to winter oilseed rape (spring application)**

Number of trials with...		Efficacy trials (7 trials)	
		Test product	Standard 1
		N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	7	7
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0
Level of symptoms at the last assessments	0% to 5%	7	7
	>5% to 10%	0	0
	>10% to 15%	0	0
	>15 %	0	0

7 trials were carried out on winter oilseed rape in Poland, in year 2023 on a wide range of commercially grown varieties.

No phytotoxicity symptoms were recorded in all of the trials performed on winter oilseed rape, when proposed label rate of 2x 0.5 L/ha of BSK-FUN 500 SC was used.

**ZRMs comments:**

Boscalid is generally effective and safe when used according to guidelines. However, when applied at higher than recommended doses, Boscalid can cause phytotoxicity, which may manifest as stunted

growth, chlorosis or necrosis. Repeated and excessive use of Boscalid can lead to the development of resistance in fungal populations, reducing its effectiveness over time. This can necessitate the use of higher doses or additional fungicides, potentially increasing the risk of adverse effects. Using Boscalid responsibly and adhering to integrated pest management practices can help minimize adverse effects while maintaining its benefits in controlling fungal diseases in cereals and winter oilseed rape.

Both, EU Directive 91/414 (EU, 1991 and EPPO PP 1/226(3) – requires testing phytotoxicity at normal (N) and double (2N) recommended dose. However, EPPO 1/135 (3) states: ‘*EPPO Standards on fungicides, insecticides and plant growth regulators, on the other hand, include only a relatively simple special section on phytotoxicity assessment, because, for these types of plant protection products, phytotoxic effects will be less frequent*’. *Selectivity trials were not required, which is in accordance with EPPO 1/135 (3).*” Boscalid is used for many years in agriculture practice and there is lack of information’s about any adverse effects than already knows. So, no specials studies are required in the opinion of ZRMs.

The crops safety of applying BSK-FUN 500 SC at recommended dose for cereals (0.7 L/ha) and winter oilseed rape (0.4-0.5 L/ha) was evaluating during efficacy trials carried out in N-E EPPO zone (Poland). Phytotoxicity effect was assessed during 37 efficacy trials carried out on winter wheat (8 trials), spring wheat (2 trials), winter triticale (2 trials), spring triticale (2 trials), winter barley (7 trials), spring barley (1 trial), winter rye (8 trials) and winter oilseed rape (7 trials). Number of trials for winter wheat, winter rye and winter oilseed rape is sufficient in line to EPPO standards. Number of trials for spring wheat, winter triticale, spring triticale is also acceptable in line to harmonization agreements (for extrapolating results from other cereal are required at least 1-2 trials. Considering that boscalid is a well-known and widely used substance in fungicides, only one study conducted on spring barley should also be acceptable, even though the number of studies for this crop does not meet the extrapolation requirements.

No adverse effects on cereals (winter: wheat, triticale, barley, rye and spring: wheat, triticale, barley) and winter oilseed rape regarding phytotoxicity were observed in any of submitted efficacy trials (37) treated with BSK-FUN 500 SC in N-E EPPO zone. In conclusion, **no negative impact of the product BSK-FUN 500 SC is to be expected when at the intended rate and used according to the label recommendations.**

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

Not relevant. This part concerns only trials in pest-free conditions.

#### **ZRMs comments:**

Boscalid effectively controls diseases such as *Sclerotinia sclerotinum* in oilseed rape and septoria, rusts and powdery mildew in cereals. Improved disease control generally leads to healthier plants and increased yields. Weather conditions influence disease pressure and fungicide performance. In wet, humid conditions where fungal diseases are more prevalent, the yield benefits from Boscalid treatments can be more pronounced. In conclusion, the use of Boscalid fungicide has the potential to positively impact the yield of winter oilseed rape and cereals through effective disease management, provided it’s used judiciously and in combination with other agronomic practices. However, the specific yield responses can vary depending on disease pressure, environmental conditions and how well the fungicide application is managed.

In conclusion, no negative impact of the product BSK-FUN 500 SC on the yield is to be expected when at the intended rate and used according to label recommendations. Detailed results were presented in point 3.2.3 Efficacy tests in tables: Table 3.2.31 to Table 3.2.-46. Yield was assessed in 37 trials carried out on winter wheat (8 trials), spring wheat (2 trials), winter triticale (2 trials), spring triticale (2 trials), winter barley (7 trials), spring barley (1 trial), winter rye (7 trials) and winter oilseed rape (7 trials). Those results show that BSK-FUN 500 SC will have no adverse effect on yield and in the presence of disease are likely to result in a significant increase. Results were comparable to st. reference product.



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

37 efficacy studies conducted in 2023 seasons in Poland on winter and spring wheat, winter and spring triticale, winter and spring barley, winter rye and winter oilseed rape. Trials have showed that BSK-FUN 500 SC fungicide had no negative impact on treated plants, their yield and yield quality traits. BSK-FUN 500 SC applied once in rate 0.7 L/ha (cereals) and twice in rate 0.5 L/ha (winter oilseed rape) did not cause any adverse effects on yield quantities and quality traits which were analysed in efficacy trials of the product.

In none of the trials done, no phytotoxic effect (f.e. changes in growth, plant height, tillering, dates of succeeding growth stages, thinning out of plants, discolorations, necroses, deformations) caused by any tested rate of BSK-FUN 500 SC was recorded.

#### **ZRMs comments:**

Effective diseases control generally leads to improved plant health, which can translate into higher yields. Healthier plants produce better-quality seeds, which in turn can improve the quality of oil extracted from winter oilseed rape. The oil might have better fatty acid profiles and reduced levels of undesirable compounds. Healthier cereal plants often produce grain with better protein content. This is particularly important for cereals like wheat where protein content can affect baking quality. In summary, the judicious use of Boscalid fungicide can significantly enhance the quality and yield of winter oilseed rape and cereals by controlling diseases.

Quality of yield was assessed during 37 efficacy trials carried out on winter wheat (8 trials), spring wheat (2 trials), winter triticale (2 trials), spring triticale (2 trials), spring barley (1 trial), winter barley (7 trials), winter rye (8 trials) and winter oilseed rape (7 trials). Following quality parameters of quality were studied: moisture (cereals, winter oilseed rape), weight of 1000 grains (cereals, winter oilseed rape), test weight (cereals) and oil content (winter oilseed rape). Those results show that BSK-FUN 500 SC will have no adverse effect on the quality of yield and in the presence of disease are likely to result in a significant increase. Results were comparable to st. reference product.

### 3.4.4 Effects on transformation processes (KCP 6.4.4)

According to the EPPO guideline PP 1/243(1) “ [...] regulation (e.g. Commission Regulation 284/2013, EU, 2013) may require investigation of possible adverse effects if there are indications that the use of a plant protection product could have an influence on transformation processes (e.g. use of plant growth regulators or fungicides close to harvest or after harvest), or where use of similar products has been found to have an adverse influence. [...] If the applicant can demonstrate that residues are undetectable, or that any residues will not affect yield, a reasoned case may be sufficient to address these requirements.”

For BSK-FUN 500 SC no processing trials were performed. There is no indication from agricultural practice that fungicides containing the active substance boscalid have affected the processing of harvested cereal grains in the past. Furthermore, the test product is intended for application in BBCH 29-65 of cereals and, for oilseed rape, BBCH 13-19 and 61-72. With plenty of time to commercial harvest and very short period of boscalid dissipation in plant matrix, product is considered as having no effects on transformation processes.

According to DAR for nicobifen (boscalid) from November 2002, under conditions designed to mimic pasteurisation, baking, brewing, boiling and sterilization there was no significant degradation of boscalid following incubation at different pH values and temperatures. Boscalid is stable under conditions representative of pasteurisation, baking, brewing, boiling and sterilisation, and no additional metabolites are formed in processed commodities as compared to raw agricultural commodities.

#### **ZRMs comments:**

Boscalid is a fungicide, effective in reducing fungal diseases. Baking might degrade some Boscalid residues, although not necessarily to non-detectable levels. It is important to monitor and potential residue levels post-baking to ensure safety. Boscalid residue interactions would depend on the microorganisms used and fermentation conditions. Some pesticide might be metabolized by microbes, potentially reducing residue levels. The seeds are often cold-pressed or solvent-extracted to obtain oil. Boscalid might partition differently between the oil and the remaining seed cake.

In summary, each processing method can potentially alter the residue profile of Boscalid. Mitigating any risk involves strict residue monitoring and understanding processing-specific impacts on residue levels to ensure consumer safety. Since, the market introduction no effects on transformation processes have been recorded for any of these products have any label restrictions concerning their use on crops destined for processing. In the opinion of ZRMs, no undesirable effects are expected on transformation processes. On the basis of data from DAR for nicobifen (boscalid) from 2022 it can be concluded that boscalid is stable under conditions representative of pasteurisation, baking, brewing, boiling and sterilisation, and no additional metabolites are formed in processed commodities as compared to raw agricultural commodities.

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

37 studies conducted in 2023 season in Poland on winter and spring wheat, winter and spring triticale, winter and spring barley, winter rye and winter oilseed rape revealed no negative impact of BSK-FUN 500 SC on propagation material – cereal seed and rape seeds.

### **Summary and conclusion**

No adverse effects on treated plants such as phytotoxicity symptoms, negative impact on yield quality/ quantity and transformation processes were observed in efficacy trials of BSK-FUN 500 SC.

#### **ZRMs comments:**

Pesticide residues on seeds could potentially impact their viability. While Boscalid is typically designed to minimize phytotoxicity, excessive residue levels may still interfere with seed germination. Seeds exposed to high levels of fungicide can sometimes show reduced germination rates. Ensuring that Boscalid residue levels are within safe limits is crucial for maintaining healthy germination. In summary, while Boscalid is valuable for diseases management in winter oilseed rape and cereals, its use for propagating purposes requires careful consideration. Paying attention to residue levels, compliance with regulations and potential impacts on soil ecosystems will help ensure successful and safe use of these treated seeds for future crops.

No phytotoxicity symptoms occurring during the field trials suggested that product application in accordance to label recommendation has no negative impact on parts of plant used for propagating purposes. Also, the fungicides containing boscalid have been allowed to use for many years. Through the application of the fungicide with boscalid, in the mean no negative effects on the process and on treated plants or plant products used for propagation were detected. Based on this knowledge, it can be concluded that no adverse effects on treated plants such as phytotoxicity symptoms, negative impact on yield quality/ quantity and transformation processes were observed in efficacy trials of BSK-FUN 500 SC. According to the above statement additional research are not required in this range, in the opinion of ZRMs.

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

#### 3.5.1 Impact on succeeding crops (KCP 6.5.1)

Boscalid (BSK-FUN 500 SC active substance) according to PPDB by University of Hertfordshire<sup>1</sup>, is not readily biodegradable since its active substance decomposes in slow pace. Soil degradation DT<sub>90</sub> ranges 1000 days in field studies. In JMPR Boscalid evaluation published on FAO site<sup>2</sup> states that “The Meeting noted that most of the GAPs globally reported involve an annual application rate of 1.2 kg ai/ha or less. Even under assumption of the most critical DT<sub>50</sub> value of 746 days the level of boscalid available for an uptake into plants is at, or below, the dose range of the field trial data submitted for succeeding crops. Under the assumption of the DT<sub>50</sub> value of 208 days or the DT<sub>50</sub> value of 365 days, the next higher GAP from the US on bulb vegetables using 1.9 kg ai/ha still results in a plateau within the treatment range of the field studies on succeeding crops. The national GAPs involving up to 4.5 kg ai/ha per year may lead to a predicted plateau of at least 50% above the application rate of the field trial on succeeding crops submitted. The Meeting decided that the field trial data submitted on succeeding crops represents the maximum residues in soil available for an uptake via the roots for all GAPs submitted, except for GAPs using more than 1.9 kg ai/ha per year. These results are also confirmed by field accumulation studies over eleven years, leading to plateau residue levels equivalent to an application rate to bare soil between 2 and 3 kg ai/ha. For the estimation of boscalid residues in commodities obtained from follow crops, the results from the field trial data on succeeding crops may be taken into account without further adjustment.”

In applicant's opinion the risks of negative impact on succeeding and adjacent crops are considered negligible. Considering raised arguments and the fact that the literature does not say much about damage the adverse impact on succeeding crops, mostly about residues in them after application of fungicides containing this active substance in recommended doses, no specific plant-back restrictions related to BSK-FUN 500 SC are required. In case of the need to sift the treated plantation (as a result of crop damage by frost, disease or pest), every crop can be grown after performing 25cm ploughing.

#### **ZRMs comments:**

Boscalid has a relatively long half-life in soil, meaning it can persist for several months after application. The residual presence of Boscalid in the soil can potentially affect subsequent crops, particularly those sensitive to fungicides. Different crops exhibit varying levels of sensitivity to residual Boscalid. While Boscalid is an effective tool against various fungal diseases, its prolonged soil persistence necessitates careful planning for subsequent crops. By testing soil, choosing appropriate rotations and managing field conditions to accelerate fungicide degradation, farmers can mitigate adverse impacts on succeeding crops and maintain soil health.

Impact on the succeeding crops should be assessed in line to EPPO 1/207. However, Applicant did not provide any data about impact of tested PPP on the succeeding crops. What is important, Boscalix 500 SC is a fungicide without any herbicidal action and therefore not expected to be harmful for any succeeding crop. In conclusion, BSK-FUN 500 SC is considered to be safe for succeeding crops when applied according to label recommendations. Only, in case of the need to sift the treated plantation (as a result of crop damage by frost, disease or pest), every crop can be grown after performing 25cm ploughing.

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

None of the efficacy trials reported any effects on adjacent crops or plants. Application of BSK-FUN 500

<sup>1</sup> <http://sitem.herts.ac.uk/aeru/ppdb/en/Reports/559.htm>

<sup>2</sup> [https://www.fao.org/fileadmin/templates/agphome/documents/Pests\\_Pesticides/JMPR/Evaluation09/Boscalid.pdf](https://www.fao.org/fileadmin/templates/agphome/documents/Pests_Pesticides/JMPR/Evaluation09/Boscalid.pdf)

SC when done according to the requirements of “Good Agricultural Practice” excludes lapses, e.g. over-spray of boundary stripes, overdose or applications in other than the registered crops or at other application times. Furthermore, GAP rules say that to avoid spray drift to adjacent crops the wind speed (maximum allowed wind speed during application of PPP in Poland 4 m/s), the droplet size and positioning of the spray boom have to be taken into account.

Therefore, it is not expected that appropriate applications of BSK-FUN 500 SC will lead to adverse effects on adjacent crops.

**ZRMs comments:**

Spray drift during application can lead to inadvertent contamination of adjacent crops. This can occur due to wind, incorrect sprayer settings or application methods. Some crops may be sensitive to even small amounts of Boscalid, showing symptoms like leaf discoloration, stunted growth or necrosis.

Boscalid can move through the soil or via runoff, potentially reaching the root zones or nearby unsprayed crops. Adjacent crops may absorb Boscalid residues through their roots, which could inhibit nutrient uptake and overall growth. Runoff can introduce Boscalid to nearby water sources used for irrigation. Under certain conditions, Boscalid can volatilize and later deposit onto nearby crops.

While Boscalid is an effective fungicide, careful attention to application methods and environmental conditions is vital to minimize its impact on adjacent crops. Implementing buffer zones, precise application, and regular monitoring can substantially reduce the risk of contamination and ensure healthy crop production. It is not expected that appropriate applications of BSK-FUN 500 SC will lead to adverse effects on adjacent crops. No negative effects of applications of boscalid containing products on adjacent crops are known, neither from field trials nor from long term agricultural use when the products were applied according to the use instructions. According to the above statement additional research are not required in this range, in the opinion of Evaluator.

**Tank cleaning**

There are no special requirements for cleaning application equipment and protective clothing. Normal procedures should be followed for the cleaning and use of protective clothing and equipment.

**ZRMs comments:**

Applicant did not present any tank cleaning procedure. However, in the opinion of Evaluator the standard tank cleaning procedure as specified on the label is considered to be sufficient.

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

In efficacy trials no adverse effects of BSK-FUN 500 SC on beneficial organisms were observed. Detailed studies on the possible adverse effects to beneficial organisms are submitted and summarised in Part B, Section 9 (Ecotoxicology).

**ZRMs comments:**

In summary, boscalid's impact on non-target organisms can vary. While it is relatively safe for bees and many soil microorganisms when used correctly, its potential to cause disruptions in aquatic environments and soil ecosystems highlights the importance of prudent application and integrated pest management practices.

### 3.5.4 Compatibility with current management practices including IPM

This is not an EC data requirement/not required by Regulation 1107/2009.

#### Summary and conclusion

Products which are containing boscalid, has been used for many years, not only in Poland where efficacy trials were done but also in other European countries. According to current knowledge, the active substance present in the product BSK-FUN 500 SC does not pose any unacceptable risk to other plants also there was no adverse impact on beneficial organisms.

#### ZRMs comments:

Statement accepted.

### 3.6 Other/special studies

Not relevant.

#### ZRMs comments:

Statement accepted.

### 3.7 List of test facilities including the corresponding certificates

Table 3.7-1: List of test facilities

Test facility	Address	Certificate (Yes or No)
Eurofins Agrosience Services Sp. z o.o.	ul. Parkowa 6 64-530 Kaźmierz, Poland	Yes
Green & Property Consulting Anna Huszcza-Podgórska	ul. Na stoku 6/6 26-601 Radom, Poland	Yes

Ponadto Eurofins Agrosience Services Sp. z o.o. może prowadzić badania skuteczności działania środka ochrony roślin z grupy herbicydów, repelentów, fungicydów, insektycydów i regulatorów wzrostu w uprawach i drzewostanach leśnych iglastych i liściastych w leśnictwie oraz w produkcjach szkółkarskich.

Uzasadnienie

Eurofins Agrosience Services Sp. z o.o. (Kaźmierz, ul. Parkowa 6; 64-530 Kaźmierz), pismem z dnia 29 czerwca 2015 r., uzupełnionym pismem z dnia 29 lipca br., zwróciła się do Głównego Inspektora Ochrony Roślin i Nasiennictwa o rozszerzenie zakresu decyzji Nr 28/2005 (z 20.12.2005 r.), zmienionej decyzjami Nr 6/2009 (z 16.09.2009 r.) oraz Nr 4/2010 (z 14.05.2010 r.), upoważniającej do prowadzenia badań skuteczności działania środka ochrony roślin o możliwości prowadzenia takich badań z użyciem herbicydów, repelentów, fungicydów, insektycydów i regulatorów wzrostu w uprawach i drzewostanach leśnych iglastych i liściastych w leśnictwie oraz w produkcjach szkółkarskich.

Eurofins Agrosience Services Sp. z o.o. spełnia wymagania dobrej praktyki doświadczalnej w rozumieniu art. 3 pkt 20 rozporządzenia Parlamentu Europejskiego i Rady (WE) Nr 1107/2009 z dnia 21 października 2009 r. dotyczącego wprowadzania do obrotu środków ochrony roślin i uchylającego dyrektywy Rady 79/117/EWG i 91/414/EWG (Dz.Urz. UE L 309 z 24.11.2009 str. 1 z późn.zm.), co zapewnia prawidłowe przeprowadzanie badań skuteczności działania środka ochrony roślin.

Rozpatrując prośbę dotyczącą zmiany zakresu upoważnienia do prowadzenia badań skuteczności działania środka ochrony roślin Główny Inspektor uwzględnił również informację (pismo znak: L.dz. 68/w/2015 z 23.06.2015 r.) o zmianie siedziby Spółki z miejscowości Galowo (ul. Wierzbowa 12; 64-500 Szamotuły) do miejscowości Kaźmierz (ul. Parkowa 6; 64-530 Kaźmierz).

Mając na uwadze powyższe, postanowiono jak w rozstrzygnięciu decyzji.

Pouczenie

Oi niniejszej decyzji odwołanie nie przysługuje. Jednakże strona niezadowolona z decyzji może zwrócić się do Głównego Inspektora Ochrony Roślin i Nasiennictwa z wnioskiem o ponowne rozpatrzenie sprawy w terminie 14 dni od dnia doręczenia decyzji, zgodnie z art. 127 § 3 Kodeksu postępowania administracyjnego.

Pozorno opłata skarbową zgodnie z częścią I ust. 36c załącznika do ustawy z dnia 16 listopada 2006 r. o opłacie skarbowej (Dz.U. z 2015 r. poz. 753) w wysokości 1000 zł.

Majorska Kukuła – gł. specjalista w Głównym Inspektoracie Ochrony Roślin i Nasiennictwa



GLÓWNY INSPEKTOR  
OCHRONY ROŚLIN I NASIENICTWA

Tadeusz Kłos

WO-505-11/15

Warszawa, dnia 08.08.2015 r.

DECYZJA Nr 8/2015

Na podstawie art. 17 ust. 2 i ust. 8 pkt 2 w związku z art. 79 ust. 3 ustawy z dnia 8 marca 2013 r. o środkach ochrony roślin (Dz.U. z 2015 r. poz. 547) oraz art. 104 ustawy z dnia 14 czerwca 1960 r. Kodeks postępowania administracyjnego (Dz.U. z 2013 r. poz. 267 z późn.zm.), po rozpatrzeniu wniosku z dnia 29 czerwca 2015 r., uzupełnionego pismem z dnia 29 lipca 2015 r., rozszerzam zakres upoważnienia do prowadzenia badań skuteczności działania środka ochrony roślin wydanego w drodze decyzji Nr 28/2005 (z 20.12.2005 r.), zmienioną decyzjami Nr 6/2009 (z 16.09.2009 r.) oraz Nr 4/2010 (z 14.05.2010 r.), w zakresie prowadzenia badań skuteczności działania środka ochrony roślin z użyciem herbicydów, repelentów, fungicydów, insektycydów i regulatorów wzrostu w uprawach i drzewostanach leśnych iglastych i liściastych w leśnictwie oraz w produkcjach szkółkarskich.

Rozstrzygnięciu decyzji nadaje następujące brzmienie:

Upoważniam

Eurofins Agrosience Services Sp. z o.o.  
(Kaźmierz, ul. Parkowa 6; 64-530 Kaźmierz)

do prowadzenia badań skuteczności działania środka ochrony roślin

z grupy akarycydów, fungicydów, herbicydów, insektycydów, moluskocydów, nematocydów, regulatorów wzrostu, repelentów, rodentycydów oraz adiuwantów w uprawach polowych, pod osłonami, w uprawach sadowniczych, w pomieszczeniach magazynowych oraz w pomieszczeniach przeznaczonych do uprawy grzybów jadalnych. Badania prowadzone będą w uprawach roślin zbożowych, rzepaku i innych roślin oleistych, kukurydzy, buraków, ziemniaków, roślin pastewnych i włókniстых, warzyw (kapustne, cebulowe, liściowe, korzeniowe, dyniowate, psiankowate, strączkowe), drzew i krzewów owocowych, roślin jagodowych, ziół, roślin ozdobnych, a także na terenach nieużytkowanych (odłogi, ugory) oraz na ścieżkach.





niedziela, 11 grudnia 2016  
Arkadiusz Kaczorowski - Tłumacz przysięgły języka angielskiego TP/619/05  
Tłumaczenie uwierzytelnione z języka angielskiego

[Początek tłumaczenia]  
MAIN INSECTORATE OF PLANT HEALTH AND SEED INSPECTION

Tadeusz Klos  
WO-505-11/15

Warsaw, August 10, 2015

**Decision no 8/2015**

Pursuant to art. 17 (2) and (8) 2 and in relation to art. 79 (3) of the act of March 8, 2013 on plant protection agents (Journal of Laws of 2015, item 547) and in relation to art. 104 of the act of June 14, 1960 - Code of administrative procedure (Journal of Laws of 2013, item 267 with amendments), having examined the application of June 29, 2015 supplemented with the letter of July 29, 2015 please be advised that this authority has extended the permit to conduct efficacy studies of a plant protection agent granted by the decision no 28/2005 (of December 20, 2005) amended with decision 6/2009 (of September 16, 2009) and decision 4/2010 (of May 14, 2010) within the scope of efficacy studies of a plant protection agent with the use of herbicides, repellents, fungicides, insecticides and growth regulators in cultivation of deciduous and coniferous trees in plant nurseries.

This is to authorize Eurofins Agrosience Services Sp. z o.o. Kazmierz, ul. Parkowa 6; 64-530 Kazmierz to conduct studies on the efficacy of a plant protection product

from the subgroup of acaricides, fungicides, herbicides, insecticides, molluscicides, nematocides, plant growth regulators, repellents, rodenticides, adjuvants in field, indoors, orchards, warehouses and in edible mushroom facilities cultivation. The research shall be conducted in the cultivation of crops, rape and other oil plants, corn, beet, potatoes, plants used for animal feed production, fiber plants, vegetables (brassicaceae, bulbous vegetables, pothebs, root vegetables, cucurbitaceae, solanaceae, leguminous), fruit trees and shrubs, berries, herbs, ornamental plants and in wastelands such as idle lands, fallows and stubble fields.

Moreover, Eurofins Agrosience Services Sp. z o.o. Kazmierz, ul. Parkowa 6; 64-530 Kazmierz is authorized to conduct said studies with a plant protection agent from the group of herbicides, repellents, fungicides, insecticides and growth regulators in the cultivation of deciduous and coniferous trees in plant nurseries.

**Grounds**

Eurofins Agrosience Services Sp. z o.o. Kazmierz, ul. Parkowa 6; 64-530 Kazmierz, in its application of June 29, 2015 supplemented with the letter of July 29, 2015 requested that this



niedziela, 11 grudnia 2016  
Arkadiusz Kaczorowski - Tłumacz przysięgły języka angielskiego TP/619/05  
Tłumaczenie uwierzytelnione z języka angielskiego

authority had extended the permit to conduct efficacy studies of a plant protection agent granted by the decision no 28/2005 (of December 20, 2005) amended with decision 6/2009 (of September 16, 2009) and decision 4/2010 (of May 14, 2010) authorizing it to conduct efficacy studies of a plant protection agent with the use of herbicides, repellents, fungicides, insecticides and growth regulators in cultivation of deciduous and coniferous trees in plant nurseries.

Eurofins Agrosience Services Sp. z o.o. meets the technical and organizational criteria as provided for in the Principles of Good Experimental Practice as laid down in art. 3 (20) of the Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC, therefore it is capable of conducting the efficacy studies on the plant protection product in the appropriate manner.

When evaluating the application for the extension of the permit to conduct studies with a plant protection product, this authority has also considered the information of the change of the applicant's headquarter (ref# L.dz. 68/W/2015 of June 23, 2015). Former headquarter of Eurofins Agrosience Services Sp. z o.o. , Galowia, ul. Wierzbowa 12, 64-500 Szamotuły moved to a new address: Eurofins Agrosience Services Sp. z o.o. Kazmierz, ul. Parkowa 6; 64-530 Kazmierz.

Having regard to the above, it has been decided as stated hereinabove.

You cannot appeal against this decision. However, if you are not satisfied with it, you may reapply to the Main Inspectorate of Plant Health and Seed Inspection within 14 day of the service hereof as prescribed in art. 127 (3) of the Code of Administrative Procedure.

Treasury fee collected in the amount of PLN 1000 as prescribed in Part I, paragraph 36c of the act of November 16, 2006 on treasury fees (Journal of Laws of 2015, item 783).

Małgorzata Kukula – a principal specialist with the Main Inspectorate of Plant Health and Seed Inspection.

[Round seal of the Main Inspectorate of Plant Health and Seed Inspection with the national emblem of Poland]

[Illegible signature]

[Koniec tłumaczenia]

Ja, Arkadiusz Kaczorowski, tłumacz przysięgły języka angielskiego zaświadczam, że niniejszy dokument jest pełnym i wiernym tłumaczeniem oryginału okazanego mi w dniu 11 December 2016 r. Sporządzono, odczytano i opatrzono pieczęcią w Poznaniu w dniu 11 December 2016 r. Poz. rep.: F:2016/189\_7215\_2016



**GŁÓWNY INSPEKTOR  
OCHRONY ROŚLIN I NASIENICTWA**

*Andrzej Chodkowski*

BORIN.510.7.2022

Warszawa, *12* maja 2022 r.

**DECYZJA Nr 7/2022**

Na podstawie art. 155 ustawy z dnia 14 czerwca 1960 r. – Kodeks postępowania administracyjnego (Dz. U. z 2021 r. poz. 735, z późn. zm.) w związku z art. 17 ust. 8 pkt 2 ustawy z dnia 8 marca 2013 r. o środkach ochrony roślin (Dz. U. z 2020 r. poz. 2097), po rozpatrzeniu wniosku Pani Anny Huszcza-Podgórskiej prowadzącej działalność gospodarczą pod firmą Green & Property Consulting Anna Huszcza-Podgórska (ul. Na stoku 6/6; 26-601 Radom) z dnia 19 kwietnia 2022 r., uzupełnionego pismem z dnia 9 maja 2022 r., zmieniam decyzję Nr 14/2021 z dnia 12 sierpnia 2021 r. w ten sposób, że rozstrzygnięciu decyzji nadaję następujące brzmienie:

**Upoważniam Panią Annę Huszcza-Podgórską prowadzącą działalność gospodarczą pod firmą Green & Property Consulting Anna Huszcza-Podgórska do prowadzenia badań skuteczności działania środków ochrony roślin z grupy fungicydów, herbicydów, insektycydów, regulatorów wzrostu oraz bakteriocydów w uprawach polowych zbóż (*pszenica jara i ozima, jęczmień jary i ozimy, pszenżyto jare i ozime, żyto ozime, owies*), kukurydzy, rzepaku ozimego, roślin okopowych (*ziemniak, burak cukrowy*), warzyw (*kapusta głowiasta*), uprawach sadowniczych (*jabłoni, grusza, śliwa, wiśnia, czereśnia, truskawka, malina*) oraz na terenach nieużytkowanych rolniczo.**

**Uzasadnienie**

Wnioskiem z dnia 19 kwietnia 2022 r., uzupełnionym pismem z dnia 9 maja 2022 r. Pani Anna Huszcza-Podgórska prowadząca działalność gospodarczą pod firmą Green & Property Consulting Anna Huszcza-Podgórska (ul. Na stoku 6/6; 26-601 Radom) zwróciła się do Głównego Inspektora Ochrony Roślin i Nasiennictwa z prośbą o zmianę zakresu upoważnienia do prowadzenia badań skuteczności działania środków ochrony roślin Nr 14/2021 z dnia 12 sierpnia 2021 r. Wnioskowane zmiany dotyczą możliwości prowadzenia takich badań w uprawach polowych ziemniaka i buraka cukrowego, w uprawach warzywnych - kapusta głowiasta oraz w uprawach sadowniczych - śliwa, wiśnia, czereśnia, malina.

Mając na uwadze przepis art. 15zzzzz ust. 1 ustawy z dnia 2 marca 2020 r. o szczególnych rozwiązaniach związanych z zapobieganiem, przeciwdziałaniem i zwalczaniem COVID-19, innych chorób zakaźnych oraz wywołanych nimi sytuacji kryzysowych (Dz. U. z 2021 r. poz. 2095, z późn. zm.), która czasowo wyłącza niektóre obowiązki wynikające z ustawy z dnia 8 marca 2013 r. o środkach ochrony roślin, Główny Inspektor Ochrony Roślin i Nasiennictwa przed dokonaniem zmiany zakresu upoważnienia do prowadzenia badań skuteczności działania środków ochrony roślin



odstąpił od przeprowadzenia kontroli, o której mowa w art. 17 ust. 6 ustawy o środkach ochrony roślin.

Stwierdzenie spełnienia wymagań dobrej praktyki doświadczalnej przez Panią Annę Huszcza-Podgórską prowadzącą działalność gospodarczą pod firmą Green & Property Consulting Anna Huszcza-Podgórska dokonano na podstawie dokumentów dołączonych do wniosku.

Mając powyższe na uwadze postanowiono jak w rozstrzygnięciu decyzji.

### **Pouczenie**

Od niniejszej decyzji odwołanie nie przysługuje. Strona niezadowolona z decyzji może zwrócić się do Głównego Inspektora Ochrony Roślin i Nasiennictwa z wnioskiem o ponowne rozpatrzenie sprawy, w terminie 14 dni od dnia doręczenia decyzji, zgodnie z art. 127 § 3 kpa.

W trakcie biegu terminu do złożenia wniosku ponowne rozpatrzenie sprawy strona może żądać się tego prawa wobec organu administracji publicznej, który wydał decyzję. Z dniem doręczenia Głównemu Inspektorowi Ochrony Roślin i Nasiennictwa oświadczenia o zrzeczeniu się prawa do złożenia wniosku o ponowne rozpatrzenie sprawy, decyzja staje się ostateczna i prawomocna, co oznacza, iż decyzja podlega natychmiastowemu wykonaniu i brak jest możliwości zaskarżenia decyzji do Wojewódzkiego Sądu Administracyjnego.

Jeżeli strona nie uważa, że decyzja jest zgodna z jej wnioskiem, a nie chce skorzystać z prawa zwracania się z wnioskiem o ponowne rozpatrzenie sprawy, może wnieść do Wojewódzkiego Sądu Administracyjnego w Warszawie skargę na decyzję w terminie 30 dni od dnia doręczenia decyzji stronie. Skargę wnosi się za pośrednictwem Głównego Inspektora Ochrony Roślin i Nasiennictwa.

Zgodnie z § 2 ust. 1 pkt 2 rozporządzenia Rady Ministrów z dnia 16 grudnia 2003 r. w sprawie wysokości oraz szczegółowych zasad pobierania wpisu w postępowaniu przed sądami administracyjnymi (Dz. U. z 2021 r. poz. 535) wpis stały bez względu na przedmiot zaskarżonego aktu lub czynności w sprawach skarg na akty lub czynności z zakresu administracji publicznej dotyczące uprawnień lub obowiązków wynikających z przepisów prawa wynosi 200 zł.

Na wniosek strony złożony przed wszczęciem lub w toku postępowania sądowego może być stronie przyznane prawo pomocy, w zakresie całkowitego lub częściowego zwolnienia od kosztów sądowych oraz ustanowienia adwokata lub radcy prawnego, gdy strona wykaze, że nie jest w stanie ponieść jakichkolwiek lub pełnych kosztów postępowania.

Została pobrana opłata skarbową w wysokości 1 000 zł.

#### Otrzymują:

1. Pani Anna Huszcza-Podgórska  
ul. Na stoku 6/6  
26-601 Radom
2. a/a



Z upoważnienia  
GŁÓWNEGO INSPEKTORA  
*Tadeusz Łęczyński*

**Certified Translation from the Polish Language**

*[Polish National Emblem]*

**Chief Inspector of Plant Protection and Seed Inspection**

Andrzej Chodkowski

Our ref.: BORiN.510.7.2022

Warszawa, 12 May 2022

**DECISION No. 7/2022**

On the basis of Article 155 of the Act of 14 June 1960 – the Administrative Procedure Code (Journal of Laws of 2021, item 735, as amended) in conjunction with Article 17 section 8 point 2 of the Act of 8 March 2013 on plant protection products (Journal of Laws of 2020, item 2097), after considering an application submitted by Mrs Anna Huszcza-Podgórska running a business activity under the name *Green & Property Consulting Anna Huszcza-Podgórska* (address: ul. Na Stoku 6/6, 26-601 Radom) of 19 April 2022 completed by a letter of 9 May 2022, I change my decision No. 14/2021 of 12 August 2021 in such a way that the operative part of the decision reads as follows:

**“I authorize Mrs Anna Huszcza-Podgórska running a business activity under the name *Green & Property Consulting Anna Huszcza-Podgórska* to carry out efficacy tests of plant protection products in the following categories: fungicides, herbicides, insecticides, plant growth regulators and bactericides in the field crops (*spring and winter wheat, spring and winter barley, spring and winter triticale, winter rye and oat*), corn, winter rape, root crops (*potato, sugar beet*), vegetables (*head cabbage*), orchard cultivation (*apple tree, pear tree, plum tree, sour cherry tree, cherry tree, strawberry, raspberry*) and non-agricultural land”.**

**Justification**

In her application of 19 April 2022, completed by a letter of 9 May 2022, Mrs Anna Huszcza-Podgórska running a business activity under the name *Green & Property Consulting Anna Huszcza-Podgórska* (address: Na Stoku 6/6) asked the Chief Inspector of Plant Protection and Seed Inspection to change the scope of authorization to carry out efficacy tests of plant protection products No. 14/2021 of 12 August 2021. The requested changes concern a possibility of carrying out such tests in field crops of potato and sugar beet, vegetable crops of head cabbage and orchard cultivation of plum, sour cherry, cherry and raspberry.

Taking into account the regulation of Article 15zzzzz section 1 of the Act of 2 March 2020 on special solutions related to preventing, counteracting and combating COVID-19, other infectious diseases and the resulting crisis (Journal of Laws of 2021, item 2095, as amended), which temporarily relieves some obligations arising from the Act of 8 March 2013 on plant protection products, the Chief Inspector of Plant Protection and Seed Inspection, before changing the scope of authorization to carry out efficacy tests of plant protection products, refrained from the inspection, referred to in Article 17 section 6 of the Act on plant protection products.

TŁUMACZ PRZYSIĘGLY  
JĘZYKA ANGIELSKIEGO  
mgr Danuta Gocławska  
26-600 Radom, ul. Zwirki i Wigury 38 m. 46  
NIP 796-103-76-92, REGON: 670573944

*D. Gocławska*



On the basis of the documents attached to the application it was found that Mrs Anna Huszcza-Podgórska running a business activity under the name *Green & Property Consulting Anna Huszcza-Podgórska* meets the requirements of good experimental practice.

In view of the above said it has been decided like in the operative part of the decision.

#### Instructions

The party has no right to appeal from this decision. In accordance with Article 127 § 3 of the Administrative Procedure Code, the Party that is not satisfied with the decision can apply to the Chief Inspector of Plant Protection and Seed Inspection to re-consider the case within 14 days from following its receipt.

Within the time limit for submitting the application for re-consideration of the case, the Party can waive this right. On the day the Chief Inspector of Plant Protection and Seed Inspection is served the waiver, the decision becomes final and valid which means that it cannot be contested before the Provincial Administrative Court.

If the Party does not think that the decision is in line with the application but does not want to exercise the right to apply for re-consideration of the case, it can file a complaint with the Provincial Administrative Court in Warszawa within 30 days following its receipt. The complaint shall be filed via the Chief Inspector of Plant Protection and Seed Inspection.

Pursuant to §2 section 1 point 2 of the Regulation of the Council of Ministers of 16 December 2003 on the amount and detailed rules of collecting a fee for an entry in the register in the proceedings before the administrative courts (Journal of Laws of 2021, item 535), the court fee, regardless of the subject of the contested act (...), amounts to PLN 200.

At the request of the party concerned made prior to the initiation of the proceedings or during the proceedings, the party may be granted assistance in the form of full or partial exemption from a court fee and appointment of a lawyer or legal advisor, if the party proves that it is not able to incur any or full costs of the proceedings.

Stamp duty of PLN 1 000 was collected.

Signed and stamped by: /-/ Tadeusz Łączyński  
p p the Chief Inspector

(round official seal with the Polish National Emblem and inscription in the rim: Główny Inspektor Ochrony Roślin i Nasiennictwa (Chief Inspector of Plant Protection and Seed Inspection))

Copies to:

1. Anna Huszcza-Podgórska  
ul. Na Stoku 6/6  
26-601 Radom
2. To files

XX  
Entry No. 655/2022 in the Sworn Translator's Register

TŁUMACZ PRZYSIĘGŁY  
JĘZYKA ANGIELSKIEGO  
mgr Dżeneta Goctawska  
26-600 Radom, ul. Żwirki i Wigury 38 m. 46  
NIP 796-103-76-92, Regon: 670075944

*D. Goctawska*





I, the undersigned, Danuta Gocławska, Sworn Translator for English, registered with the Ministry of Justice of the Republic of Poland (Entry No TP/6127/05), do hereby certify that the foregoing is a true and exact translation of the original document in Polish presented to me. In witness whereof I have hereunto set my hand and seal of office this 1<sup>st</sup> day of December 2022.

**TŁUMACZ PRZYSIĘGŁY**  
**JĘZYKA ANGIELSKIEGO**  
*mgr Danuta Gocławska*  
26-600 Radom, ul. Żwirki i Wigury 38 m. 46  
NIP 796-103-76-92, Regon: 670075944

*D. Gocławska*



## Appendix 1 Lists of data considered in support of the evaluation

Tables considered not relevant can be deleted as appropriate.

MS to blacken authors of vertebrate studies in the version made available to third parties/public.

### 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	Vertebrate study Y/N	Owner
KCP 3.2/01	Huszcza-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202301 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/02	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202302 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/03	Figurski R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202303 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/04	Figurski R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202304 GEP: Yes Published: No	N	Pestila* ProAgri**

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/05	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against stem diseases on cereals (winter wheat). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-01 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/06	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against stem diseases on cereals (winter wheat). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-02 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/07	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter wheat). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-03 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/08	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter wheat). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-04 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/09	Huszczka-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202305 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/10	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (spring wheat). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-05 GEP: Yes Published: No	N	Pestila* ProAgri**

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/11	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202306 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/12	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter triticale). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-06 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/13	Huszcza-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202307 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/14	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (spring triticale). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-07 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/15	Huszcza-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202308 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/16	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202309 GEP: Yes Published: No	N	Pestila* ProAgri**

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/17	Figurski R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202310 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/18	Figurski R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023 Green & Property Poland; Report No.: 018GPSE202311 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/19	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter rye). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-08 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/20	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter rye). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-09 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/21	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter rye). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-10 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/22	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter rye). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-11 GEP: Yes Published: No	N	Pestila* ProAgri**



Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/23	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (spring barley). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-12 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/24	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023. Green & Property Poland; Report No.: 018GPSE202312 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/25	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023. Green & Property Poland; Report No.: 018GPSE202313 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/26	Huszczka-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases in cereals in Poland 2023. Green & Property Poland; Report No.: 018GPSE202314 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/27	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter barley). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-13 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/28	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter barley). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-14 GEP: Yes Published: No	N	Pestila* ProAgri**

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/29	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter barley). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-15 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/30	Głowacki G.	2023	Determination of the efficacy of BSK-FUN 500 SC (boscalid 500 g/l) against foliar diseases on cereals (winter barley). Poland 2023. Eurofins Agroscience Services Sp. z o.o., Poland; Report No.: S23-103648-16 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/31	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202301 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/32	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202302 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/33	Huszcza-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202303 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/34	Huszcza-Podgórska A.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202304 GEP: Yes Published: No	N	Pestila* ProAgri**

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 3.2/35	Ptaszek R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202305 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/36	Ptaszek R.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202306 GEP: Yes Published: No	N	Pestila* ProAgri**
KCP 3.2/37	Springer M.	2023	Efficacy evaluation of BSK-FUN 500 SC against diseases oilseed rape in Poland 2023. Green & Property Poland; Report No.: 019GPSE202307 GEP: Yes Published: No	N	Pestila* ProAgri**

\*Pestila Spółka z ograniczoną odpowiedzialnością (short name Pestila Sp. z o. o.)

\*\*ProAgri International Sp. z o. o. or ProAgri Sp. z o. o.

Please note that Pestila Sp. z o. o. and ProAgri International Sp. z o.o. are co-sponsors of the studies for Prothioconaole 500 SC and have the same rights for using data in registration processes without Letter of access issuing.

The following tables are to be completed by MS

#### List of data submitted by the applicant and not relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner

List of data relied on not submitted by the applicant but necessary for evaluation

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner