FINAL REGISTRATION REPORT

Part B

Section 3

Efficacy Data and Information

Concise summary

Product code: **SNS-F-11**

Product names: **DISFERA 90 EC/LIPOSTAR 90 EC**

Chemical active substance:

Difenoconazole 90 g/L

Central Zone

Zonal Rapporteur Member State: **Poland**

CORE ASSESSMENT Poland

(authorization)

Applicant: **Synthos Agro Sp. z o.o.**

Submission date: 01/2024

MS Finalisation date: 06/2024; 10/2024; 11/2024

Version history

When	What
01/2024	Initial dRR
06/2024	ZRMs evaluated initial dRR submitted by Applicant.
10/2024	The Final Registration Report
11/2024	The final RR after the second round of commenting

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

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

Comments of zRMS:	Comments of ZRMs are 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 market by grey).

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. In generally, all uses claimed in GAP table were accepted by ZRMs on the basis on submitted documentation.

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

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use-No. *	**Member state(s)**	**Crop and/ or situation** (crop destination / purpose of crop)	**F, Fn, Fnp G, Gn, Gnp or I ****	**Pests or Group of pests controlled** (additionally: devel-opmental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	**zRMS Conclusion (efficacy)**
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. inter-val between applications (days)	kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
Zonal uses (field or outdoor uses, certain types of protected crops)														
1	PL	Winter wheat	F	*Zymoseptoria tritici* *Blumeria graminis tritici/ Blumeria graminis* *Puccinia triticina/ Puccinia recondite* *Pyrenophora tritici-repentis* *Parastagonospora nodorum*	Foliar spray	BBCH 33-55 (spring)	2	14-21 days	a) 1.0 L/ha b) 2.0 L/ha	a) Difenoconazole 90 g b) Difenoconazole 180 g	200 – 300	NR*		Acceptable
2	PL	Winter triticale		*Zymoseptoria tritici* *Blumeria graminis tritici/ Blumeria graminis* *Puccinia triticina/ Puccinia recondite* *Parastagonospora nodorum*	Foliar spray	BBCH 33-55 (spring)	2	14-21 days	a) 1.0 L/ha b) 2.0 L/ha	a) Difenoconazole 90 g b) Difenoconazole 180 g	200 – 300	NR*		Acceptable
3	PL	Winter rape	F	*Leptospharia maculans*	Foliar spray	BBCH 32-39 (spring)	1	-	a) 1.0 L/ha b) 1.0 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g	200-300	NR*		Acceptable

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use-No. *	**Member state(s)**	**Crop and/ or situation** (crop destination / purpose of crop)	**F, Fn, Fnp G, Gn, Gnp or I ****	**Pests or Group of pests controlled** (additionally: 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 applications (days)	kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
				Sclerotinia sclerotiorum	Foliar spray	BBCH 60-65 (spring)	1	-	a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300			Acceptable
Minor uses according to Article 51 (field uses)														
4	PL	Spring oilseed rape	F	*Leptospharia maculans* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32-39 BBCH 60-65	1	-	a) 1.0 L/ha b) 1.0 L/ha a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Acceptable
5	PL	Linseed (common flax)	F	*Leptospharia maculans* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32-39 BBCH 60-65	1	-	a) 1.0 L/ha b) 1.0 L/ha a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Acceptable
6	PL	Poppy seeds	F	*Leptospharia maculans* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32-39 BBCH 60-65	1	-	a) 1.0 L/ha b) 1.0 L/ha a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Acceptable
7	PL	Mustard seeds	F	*Leptospharia maculans* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32-39 BBCH 60-65	1	-	a) 1.0 L/ha b) 1.0 L/ha a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Acceptable
8	PL	Gold of pleasure seeds	F	*Leptospharia maculans*	Foliar spray	BBCH 32-39	1	-	a) 1.0 L/ha b) 1.0 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g	200-300	NR*		Acceptable

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use-No. *	**Member state(s)**	**Crop and/ or situation** (crop destination / purpose of crop)	**F, Fn, Fnp G, Gn, Gnp or I ****	**Pests or Group of pests controlled** (additionally: devel-opmental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/ synergist per ha, other dose rate expression, dose range (min-max)	**zRMS Conclusion (efficacy)**
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. inter-val between applications (days)	kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
				Sclerotinia sclerotiorum		BBCH 60-65			a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g				
9	PL	Sunflower seeds	F	*Alternaria spp.* *Leptosphaeria lindquistii* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32-39 BBCH 60-65	1	-	a) 1.0 L/ha b) 1.0 L/ha a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 90 g b) Difenoconazole 90 g a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Acceptable
10	PL	Soyabeans	F	*Cercospora sojina* *Cercospora Kikuchi* *Sclerotinia sclerotiorum*	Foliar spray	BBCH 32 - 65	1	-	a) 1.15 L/ha b) 1.15 L/ha	a) Difenoconazole 103.5 g b) Difenoconazole 103.5 g	200-300	NR*		Aceptable

* 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

Applicant applies for authorization for the marketing of plant protection product SNS-F-11 pursuant to article 33 of the Regulation of the European Parliament and the Council in a number 1107/2009 of 21 October 2009.

DRR this core assessment. The applicant shall be in Poland. The Applicant points out Poland as a country rapporteur Requested. The formulation of this product is a emulsifiable concentrate (EC).

This document describes the acceptable use conditions required for the registration of SNS-F-11 containing as a.i. difenoconazole (90 g/L).

This document shows the efficacy of new plant protection product SNS-F-11 containing difenoconazole which was included into Annex I of Directive 91/414; COMMISSION DIRECTIVE 2008/69/EC of 1 July 2008 amending Council Directive 91/414/ECC to include clofentezine, dicamba, difenoconazole, diflubenzuron, imazaquin, Lenacil, oxadizon, picloram and pyriproxyfen as active substances and is now deemed approved under Reg. 1107/2011 (via Reg. 540/2011). The SANCO report for difenoconazole (SANCO/830/08-rev.3-13/12/2013) is considered to provide the relevant review information or a reference to where such information can be found.

COMMISSION IMPLEMENTING REGULATION (EU) 2023/2592 of 21 November 2023 amending Implementing Regulation (EU) No 540/2011 as regards the extension of the approval periods of the active substances 1-naphthylacetamide, 1-naphthylacetic acid, 2-phenylphenol (incl. its salts such as sodium salt), 8-hydroxyquinoline, amidosulfuron, bifenox, dicamba, difenoconazole, diflufenican, dimethachlor, esfenvalerate, etofenprox, fenoxaprop-P, fenpropidin, fenpyrazamine, fluazifop P, lenacil, napropamide, nicosulfuron, paraffin oils, paraffin oil, penconazole, picloram, prohexadione, spiroxamine, sulphur, tetraconazole and triallate.

Difenoconazole is a systemic triazole fungicide used for the treatment of crops (particularly cereals, fruits and vegetables, and ornamental plants; often with combination with another fungicide). It is a fungicide that interferes with glucose transport across fungal membrane.

Information on the detailed composition of SNS-F-11 can be found in the confidential dossier of this submission (Registration Report – Part C).
General information such as active substance, chemical group, mode of action, other biological properties (e.g. mobility, persistence) there are in Part B section: 1, 2, 3, 4, 5, 6, 7.

Description of active substances

Difenoconazole is not a new substance. Difenoconazole is the ISO common name for 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-1,2,4-triazole (IUPAC).

Mode of action

Difenoconazole is a systemic fungicide with preventive and curative action. Absorbed by the leaves, with acropetal and strong translaminar translocation. Difenoconazole is a broad – spectrum triazole fungicide. As a systemic sterol demethylation inhibitor, difenoconazole is highly effective against the diseases

caused by various fungi infecting cereals targeting ergosterol biosynthesis by inhibiting the fungal enzyme sterol-1-4-a-demethylase. Given its ability to control various fungal diseases, difenoconazole has been extensively used in a wide range of crops in many countries.

Table 3.2-1: Details of the active substances

Active substance	Difenoconazole
Concentration (g/L)	90 g/L
Chemical group	triazole
Mode of action	Sterol biosynthesis in membranes
Biological action	Preventive and intervention
Type	Fungicide

Description of the plant protection product

SNS-F-11 is an emulsifiable concentrate (EC) containing 90 g/L difenoconazole.

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

Uses		Member State	Requested rate(s)	Comments / Other relevant details on GAPs
Crop(s)	Target(s)			
Winter wheat	*Zymoseptoria tritici*	PL	1.0 L/ha	
	Blumeria graminis tritici/ Blumeria graminis	PL	1.0 L/ha	
	Puccinia triticina/ Puccinia recondita	PL	1.0 L/ha	
	Pyrenophora tritici-repentis	PL	1.0 L/ha	
	Parastagonospora nodorum	PL	1.0 L/ha	
Winter oilseed rape	*Leptospharia maculans*	PL	1.0 L/ha	
	Sclerotinia sclerotiorum	PL	1.15 L/ha	
Winter triticale	*Zymoseptoria tritici*	PL	1.0 L/ha	
	Blumeria graminis tritici/ Blumeria graminis	PL	1.0 L/ha	
	Puccinia triticina/ Puccinia recondita	PL	1.0 L/ha	
	Parastagonospora nodorum	PL	1.0 L/ha	

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*	Polish name
SEPTTR	*Zymoseptoria tritici*	Septoria leaf blotch	Septorioza paskowana liści

EPPO code	Scientific name	Common name*	Polish name
ERYSGT/ ERYSGR	*Blumeria graminis tritici/ Blumeria graminis*	Powdery mildew of wheat/ powdery mildew	Mączniak prawdziwy zbóż i traw
PUCCRT/ PUCCRE	*Puccinia triticina/ Puccinia recondita*	Brown rust of wheat/ brown rust	Rdza brunatna
PYRNTR	*Pyrenophora tritici-repentis*	Tan spot of cereals	Brunatna plamistość liści zbóż
LEPTNO	*Parastagonospora nodorum*	Glume blotch of wheat	Septorioza plew
LEPTMA	*Leptospharia maculans*	Phoma leaf spot/black leg of cabbage	Sucha zgnilizna kapustnych
SCLESC	*Sclerotinia sclerotiorum*	Cottony rot	Zgnilizna twardzikowa

* optional

Septoria leaf blotch caused by *Zymoseptoria tritici (*synonyms *Septoria tritici, Mycosphaerella graminicola)* is one of the most important and damaging foliar disease on winter wheat and winter triticale. This is a species of filamentous fungus, an ascomycete in family *Mycosphaerellaceae*. The pathogen reduces green leaf area for photosynthesis. This pest causes significant yield loss every year as well as affects grain quality. Losses of 50% may occur in severely affected crops. The main source of infection is spores from infected crop debris with first infections taking place from March to May. Following infection the fungus develops within the leaf until sporulating lesions appear. The key identification feature during winter is the presence of black pycnidia. Later in the year the lesions also tent to become stripe like. The disease undergoes multiple cycles within a crop.

Powdery mildew of wheat/ powdery mildew caused by *Blumeria graminis tritici/Blumeria graminis* is one of the most destructive wheat diseases, and may cause yield losses of 10 – 40% and, in extreme cases, even up to 50%. The rapid spread and adaptation of the pathogen is enhanced by its short life cycle, the ease with which airborne spores may be spread over long distance and the possibility of sexual recombination leading to the generation of new virulent races. *Blumeria graminis* is a fungus that causes powdery mildew on grasses, including cereals. *Blumeria graminis tritici* is the fungus caused powdery mildew only in winter wheat, whereas *Blumeria graminis* caused powdery mildew in grasses or winter triticale. Both fungus belongs to the same species and it is very difficult to differentiate both without specialistic molecular biology technique. For this reason, in accordance with information presented in reports, both fungus *Blumeria graminis* and *Blumeria graminis tritici* were included in one group of fungus caused powdery mildew.

***Puccinia triticina/Puccinia recondita* caused brown rust of wheat** (in the case of *Puccinia triticina*) or brow rust of cereals (in the case of *Puccinia recondita*) is a fungal disease, which can lead up to 20% yield loss, which is exacerbated by dying leaves, which fertilize the fungus. As it was mention, *Puccinia triticina* fungus is a funtal leaf disease specific to wheat that can pose a significant threat to yield and quality. This fungi rust are obligate parasites and only survive on ~~on~~ living plants. The rusts spread rapidly and reduce the yield and quality of the wheat. Significant factors for the infection are the susceptibility of the cultivar, the race of the pathogen, the timing of the infection, and the weather. Damage to wheat depends on the stage of plant development at the time of infection and the severity of the disease. High levels of disease before or during heading usually have the greatest effect on yield. The main methods of wheat rust control are breeding-resistant cultivars and chemical control. In some cases, information appears in scientific literature *Puccinia triticina* is formerly known as *Puccinia recondita*. For this reason, *Puccinia triticina* and *Puccinia recondita* are summarised in one section as brown rust of

cereals.

Tan spot of cereals caused by *Pyrenophora tritici-repentis* is a necrotrophic plant pathogen of fungal origin, phylum *Ascomycota*. The pathogen causes a disease originally named yellow spot but now commonly called tan spot, yellow leaf spot, yellow leaf blotch or helminothosporisis. Tan spot is found primarily on wheat, but is also found to infect other cereals and grasses including triticale, barley and rye. Initially seen as light brown flecks which are difficult to positively identify and these develop into the more characteristic symptoms of diamond or oval shaped lesions which are tan coloured with a surrounding yellow halo and a dark spot in the centre. Tan spot of cereals is one of the main foliar diseases of wheat, responsible for significant yield loss worldwide. Tan spot is typically a polycyclic disease that develops during the whole plant growth period. This pathogen survives mainly as dormant mycelium on stubble and crop debris. *Pseudothecia* produce ascospores that spread large distances by wind; under warm, wet conditions, lesions produce dark asexual conidia that are rain-splashed up the plant. Severe infections, and when conditions during flowering are conducive to the disease, tan spot can infect the ear, discolour the glumes and grain, and infect seed. The disease develops over a wide range of temperatures, but optimum temperatures are 20–28°C. It is also favoured by long periods (≥18 h) of dew or rain.

Glume blotch of wheat caused by the fungus *Parastagonospora nodorum*, which is a major fungal pathogen of wheat. Glume blotch of wheat develops in humid and warm weather conditions, causing yield losses of up to 60%. Infected glumes develop gray-brown blotches usually starting at the tips of the glumes. Aged blotches develop dark pin-point structures called pycnidia. Pycnidia are the source of infectious spores. Infected heads develop low test weight due to shriveled grain.

Phoma leaf spot/black leg of cabbage *Leptospharia maculans* can affect all above-ground parts of the plant. On leaves, it causes numerous, small dark brown to black spots, which may develop concentric rings as they enlarge. Older leaves can be infected first, however all leaves are susceptible and defoliation can result when disease is severe. The leaf spot looks very similar to that caused by early blight except that the Phoma lesions contain numerous minute black fungal fruiting bodies (pycnidia). Dark brown lesions with concentric rings form on the stems, and both the green and ripe fruit can be infected.

Cottony rot caused by the fungi *Sclerotinia sclerotiorum* is one of the major disease of oilseed rape (*Brassica napus*). During infection, large, white/grey lesions form on the stems of the host plant, perturbing seed development and decreasing yield. It causes white mould of rape,thus significantly reducing yield. White mould of rape is observedin all areas where oilseed rape is grown. The fungus produces on average 1.5-3 cm large sclerotia, whichcan survive in the soil ≥10 years. The germination of sclerotia depends on soil moisture and temperature. Sclerotia can germinate carpogenically at temperatures of 7-24°C andhigh soil humidity persisting for at least 10 days without drying. Sclerotia germinate only on the surface of the soilor within a depth of a maximum of 5 cm. Small, light brownmushrooms called apothecia grow from sclerotia, which containasci that release ascospores. Under optimal conditions (e.g. fallenpetals on the leaves), these spores germinate and infect the plant. Petals play a significant role in the infection of rapeplants, because the infection sites are located under the petals,through which the mycelium of the pathogen penetrates into theleaf tissues. Ascospores lying directly on the leaf surface do notgerminate. The first visible symptoms of white mould on oilseed rapeappear at the end of and after flowering. Elongated and wateryspots are found on the stem, which quickly turn grey often with asilvery tint causing the plant epidermis to tear and peel. Theinfection site is often inside the stem padded with white mycelium,which forms the sclerotia. After these sclerotiadrop to the surface of the soil, the fungal life cycle is completed. Apart from infection via spores, *S. sclerotiorum* can primarily infectthe host plant through mycelium as well, which grows directly intothe base of plants

from the soil

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	PL	-	SEPTTR	PL	-
			ERYSGT/ ERYSGR	PL	-
			PUCCRT/ PUCCRE	PL	-
			PYRNTR	PL	-
			LEPTNO	PL	-
Winter rape	PL	-	LEPTMA	PL	-
			SCLESC	PL	-
Winter triticale	PL	-	SEPTTR	-	PL
			ERYSGT/ ERYSGR	PL	-
			PUCCRT/ PUCCRE	PL	-
			LEPTNO	PL	-

Compliance with the Uniform Principles

Assessment was performed according to EPPO guidelines.

Information on trials submitted (3.1 Efficacy data)

Table 3.2-5: Presentation of trials (efficacy 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)
					Central zone		
Winter wheat	*Zymoseptoria tritici* (SEPTTR)	Poland	2022,2023	MED + E	16	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter wheat
	TOTAL	**-**	**2022-2023**	**-**	**16**	**-**	
	Blumeria graminis tritici/ Blumeria graminis (ERYSGT/ ERYSGR)	Poland	2022,2023	MED + E	12	GEP	The study was conducted in Poland under different climate and soil for

							different varieties of winter wheat
	TOTAL	**-**	**2022-2023**	**-**	**12**	-	
	Puccinia triticina/ Puccinia recondita (PUCCRT/ PUCCRE)	Poland	2022,2023	MED + E	5	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter wheat
	TOTAL	**-**	**2022-2023**	**-**	**5**	-	
	Pyrenophora tritici-repentis (PYRNTR)	Poland	2022,2023	MED + E	5	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter wheat
	TOTAL	**-**	**2022-2023**	**-**	**5**	-	
	Parastagonospora nodorum (LEPTNO)	Poland	2022,2023	MED + E	5	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter wheat
	TOTAL				**5**		
TOTAL	**-**	**-**	**2022,2023**	**-**	**43**	**-**	
Winter rape	*Leptospharia maculans* (LEPTMA)	Poland	2022,2023	MED + E	7	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter rape
	TOTAL	**-**	**2022-2023**	**-**	**7**	-	
	Sclerotinia sclerotiorum (SCLESC)	Poland	2022,2023	MED + E	8	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter rape

	TOTAL	**-**	**2022-2023**	**-**	**8**	**-**	
TOTAL	**-**	**-**	**2022, 2023**	**-**	**15**	**-**	
Winter triticale	*Zymoseptoria tritici* (SEPTTR)	Poland	2023	MED + E	5	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter triticale
	TOTAL	**-**	**2023**	**-**	**5**	**-**	
	Blumeria graminis tritici/ Blumeria graminis (ERYSGT/ ERYSGR)	Poland	2023	MED + E	5	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter triticale
	TOTAL	**-**	**2023**	**-**	**5**	**-**	
	Puccinia triticina/ Puccinia recondita (PUCCRT/ PUCCRE)	Poland	2023	MED + E	3	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter triticale
	TOTAL	**-**	**2023**	**-**	**3**	**-**	
	Parastagonospora nodorum (LEPTNO)	Poland	2023	MED + E	2	GEP	The study was conducted in Poland under different climate and soil for different varieties of winter triticale
	TOTAL	**-**	**2023**	**-**	**2**		
TOTAL	**-**	**-**	**2023**	**-**	**15**		

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

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

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

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

Crop(s)	Reference standard	Country(ies) where the product is registered (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treatment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter wheat, winter rape, winter triticale	TORES 250 EC	Poland	Zezwolenie MRiRW nr R-215/2016 z dnia 16.11.2016 r. ostatnio zmienione decyzją MRiRW nr R 472/2023d z dnia 15.06.2023 r.	Difenoconazole	EC	250 g/L	0.5 L/ha	0.5 L/ha – 0.6 L/ha	
Winter wheat, winter rape, winter triticale	PORTER 250 EC	Poland	Zezwolenie MRiRW nr R - 44/2016 z dnia 26.02.2016 r. ostatnio zmienione decyzją MRiRW nr R – 120/2023d z dnia 03.03.2023 r	Difenoconazole	EC	250 g/L	0.6 L/ha	0.5 L/ha – 0.6 L/ha	
Winter rape	DIFO 250 EC	Poland	Zezwolenie MRiRW nr R - 140/2014 z dnia 20.08.2014 r. ostatnio zmienione decyzją MRiRW nr R - 851/2021d z dnia 17.12.2021 r	Difenoconazole	EC	250 g/L	0.5 L/ha	0.5 L/ha	
Winter rape	DIFCOR 250 EC	Poland	Zezwolenie MRiRW nr R - 40/2015 z dnia 23.02.2015 r. ostatnio zmienione decyzją MRiRW nr R - 851/2021d z dnia 17.12.2021 r.	Difenoconazole	EC	250 g/L	0.5 L/ha	0.5 L/ha	

(1) only on use(s) applied for (with the test product).
(2) e.g. WP (wettable powder), EC (emulsifiable concentrate), etc.
(3) dose(s) / dose range authorized on that use in the country.
(4) Other relevant information (e.g. uses, number of applications, spray volume, method of application, etc.).

Comments of ZRMs	This document was prepared by Applicant for registration DISFERA 90 EC / LIPOSTAR 90 EC (product code: SNS-F-11) containing difenoconazole (90 g/L). The formulation of this product is an emulsifable concentrate (EC). Difenoconazole is a broad-spectrum fungicide commonly used in agriculture to control a wide range of fungal diseases affecting crops. It belongs to the triazoles class of fungicides and functions primarily by inhibiting the synthesis of ergosterol. This inhibition disrupts the formation of the cell membrane, leading to the death of the fungal cells. Difenoconazole is effective against a wide range of fungal pathogens, including those causing diseases like: powdery mildew, rusts, leaf spots and blights. It can be used on various crops, such as cereals, fruits, vegetables and ornamental plants. Difenoconazole have many benefits. It provides long-lasting protection against fungal

	diseases. Helps in improving crop yield and quality by controlling fungal infections. Can be used in integrated pest management (IPM) programs due to its effectiveness and relatively low toxicity to non-target organisms. Continuous use of any single fungicide can lead to the development of resistant strains of fungi. Therefore, it is recommended to use difenoconazole in rotation with fungicides of different modes of action to reduce the risk of resistance development. While difenoconazole is an effective fungicide with many benefits, it also has several disadvantages. Prolonged and repeated use of difenoconazole can lead to the development of resistant fungal strains. This reduces its effectiveness over time and can make disease management more challenging. Difenoconazole is toxic to aquatic organisms, including fish and invertebrates. Runoff or drift from treated areas into water bodies can harm aquatic ecosystem. It has moderate persistence in the environment, which can lead to accumulation and potential long-term effects on non-target species. DISFERA 90 EC/ LIPOSTAR 90 EC containing 90 g/L of difenoconazole by Synthos Agro Sp. z o.o. has not been previously evaluated in any country according to Uniform Principles. Poland is a ZRMs. Lack of mentioned cMS. In Poland 92 plant protection products containing difenoconazole are already registered, according to the register of plant protection products date 31.05.2024. No product containing 90 g/L of difenoconazole is registered in Poland yet. DISFERA 90 EC/ LIPOSTAR 90 EC will be the first on Polish market. Containing less active compound is important due to environment and impact on the treated and non-target organisms. All necessary information's about tested plant protection product, active substances, studied fungal diseases, reference products, etc. are correctly presented in this dRR by Applicant.

3.2.1 Preliminary tests (KCP 6.1)

Preliminary studies have not been conducted because the active substance difenoconazole is known and has long been used in the protection of plants. The effect of the active substances is well known and sufficient large scale efficacy trials are available to evaluate the effectiveness of SNS-F-11. Therefore preliminary tests are not described and not required.

Comments of ZRMs	Difenoconazole was developed as part of ongoing research into triazoles fungicides, which are known for their broad-spectrum activity and ability to inhibit ergosterol biosynthesis in fungi. It was introduced to the market in the late 1980s. Since its introduction, difenoconazole has been registered and approved for use in many countries worldwide. Regulatory approvals are based on extensive testing for efficacy, safety and environmental impact. Over the decades, difenoconazole has been widely adopted by farmers and growers due to its effectiveness in controlling a broad range of fungal diseases across various crops, including cereals, fruits, vegetables and ornamentals. Initially available as a solo active ingredient, difenoconazole has also been formulated in combination with other fungicides to enhance its spectrum of activity and resistance management capabilities. As integrated pest management (IPM) practices have become more prevalent, difenoconazole has been incorporated into these programs to provide a balanced approach to disease control, combining chemical, biological and cultural methods. So, it can be concluded that DISFERA 90 EC/ LIPOSTAR 90 EC formulations are already registered and currently used in Europe. Therefore, no preliminary range-findings have been performed. **Difenoconazole is a well-known as an active ingredient, therefore it is justified to drop preliminary range findings tests in the opinion of ZRMs.**

3.2.2 Minimum effective dose tests (KCP 6.2)

No results of preliminary screening tests are here. The efficacy of reduced rated of SNS-F-11 for diseases control in winter wheat (SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, PYRNTR, LEPTNO), winter triticale (SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, LEPTNO), winter rape (LEPTMA, SCLESC) was investigated in field tests carried out in 2022 and 2023. In the appropriate researches of efficacy were tested several doses and to register was chosen the lowest effective. All researches were conducted according to EPPO standard PP 1/225 '*Minimum effective dose*'.

Winter wheat/SEPTTR

16 field trials were established in order to determine the minimum effective dose for the control of the winter wheat/ SEPTTR. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter wheat for the control of SEPTTR. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a.

Winter wheat/ ERYSGT/ERYSGR

12 field trials were established in order to determine the minimum effective dose for the control of the winter wheat/ ERYSGT/ERYSGR. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter wheat for the control of ERYSGT/ERYSGR. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*. A summary of the dose response results is provided in Table 3.2-7a.

Winter wheat/ PUCCRT/PUCCRE

5 field trials were established in order to determine the minimum effective dose for the control of the winter wheat/ PUCCRT/PUCCRE SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter wheat for the control of PUCCRT/PUCCRE The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a.

Winter wheat/PYRNTR

5 field trials were established in order to determine the minimum effective dose for the control of the winter wheat/ PYRNTR SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter wheat for the control of PYRNTR. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a.

Winter wheat/LEPTNO

5 field trials were established in order to determine the minimum effective dose for the control of the winter wheat/ LEPTNO SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter wheat for the control of LEPTNO. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a.

Winter triticale/ ERYSGT/ERYSGR

5 field trial was established in order to determine the minimum effective dose for the control of the winter triticale/ ERYSGT/ERYSGR. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter triticale for the control of ERYSGT/ERYSGR. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a

Winter triticale/ SEPTTR

5 field trial was established in order to determine the minimum effective dose for the control of the winter triticale/ SEPTTR. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter triticale for the control of SEPTTR. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a

Winter triticale/ PUCCRE/PUCCRT

3 field trial was established in order to determine the minimum effective dose for the control of the winter triticale/ PUCCRT. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter triticale for the control of PUCCRT. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a

Winter triticale/ LEPTNO

2 field trial was established in order to determine the minimum effective dose for the control of the winter triticale/ LEPTNO. SNS-F-11 was tested at 0.8 L/ha to 1.3 L/ha in winter triticale for the control of LEPTNO. The rates reflect the proposed label rate and 80% and 130% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7a.

Winter rape/ LEPTMA

7 field trials was established in order to determine the minimum effective dose for the control of the winter rape/ LEPTNO. SNS-F-11 was tested at 0.7 L/ha to 1.12 L/ha in winter rape for the control of LEPTMA in 2022 (3 trials). In 2023 SNS-F-11 was tested at 0.7 L/ha to 1.15 L/ha in winter rape for the control of LEPTMA (4 trials). The rates reflect the proposed label rate and 60% and 115% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7b.

Winter rape/ SCLESC

8 field trials was established in order to determine the minimum effective dose for the control of the winter rape/ SCLESC. SNS-F-11 was tested at 0.7 L/ha to 1.12 L/ha in winter rape for the control of SCLESC in 2022 (4 trials). In 2023 SNS-F-11 was tested at 0.7 L/ha to 1.15 L/ha in winter rape for the control of SCLESC (4 trials). The rates reflect the proposed label rate and 60% and 90% of the full recommended rate of SNS-F-11, in accordance with the EPPO standard PP 1/225 '*Minimum effective dose'*.
A summary of the dose response results is provided in Table 3.2-7c.

As it was already mentioned, in the Table 3.2.7a to 3.2.7c are presented the summary of all efficacy assessment results for trials where the pest infestation threshold was met. In the case of min and max as well as mean, these values are given as the lowest and highest values (and mean value) that occurred in the assessments among all experiments in which appropriate level of the pest occurred. The comparison of the average disease infection in the control and the average effectiveness results for all tested rates used in individual experiments is presented in the table 3.2-11, 3.2-21:

Table 3.2-7a: Minimum effective dose. Efficacy of SNS-F-11 at proposed label rate, at 80% and 130% dose rates in winter wheat, winter triticale.

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with SNS-F-11					
				0.8 L/ha (80% of full rate)		1.0 L/ha (full rate)		1.3 L/ha (130% of full rate)	
		Mean	Min - Max	Mean	Min - Max	Mean	Min - Max	Mean	Min - Max
Winter wheat/ SEPTTR	16	18.0	1.0 – 92.5 5.0-34.5	64.1	10.0 – 100.0 45.7-78.6	83.1 82.7	50.0 – 100.0 62.2-92.3	88.5 87.1	47.0 – 100.0 69.2-94.9
Winter wheat/ ERYSGR/ERYSGT	12	14.0 13.7	1.0 – 40.0 7.8-23.3	67.0 66.9	22.1 – 100.0 57.7-77.5	86.5	55.0 – 100.0 61.7-95.2	94.2 92.4	86.0 – 100.0 75.7-98.4
Winter wheat/ PUCCRT/PUCCRE	5	9.2 9.2	5.0 – 12.5 6.5-11.3	65.2	51.7 – 85.0 58.9-74.0	90.8	79.0 – 100.0 79.0-97.5	92.3	82.5 – 100.0 87.0-97.8
Winter wheat/ PYRNTR	5	12.1 11.8	5.0 – 21.8 9.4-20.1	67.7	30.0 – 86.7 45.0-75.3	81.4	62.0 – 94.0 70.0-85.3	85.1	75.0 – 94.7 80.0-89.5
Winter wheat/ LEPTNO	5	15.5	10.0 - 27.5	71.8	41.7 - 95.0	90.0	80.0 - 97.5	92.4	80.0 - 100.0
Winter triticale/ SEPTTR	5	16.7	2.0 – 70.0 8.6-33.5	57.5	50.0 – 90.0 39.1-71.4	84.3	41.7 – 100.0 68.9-91.3	94.0	80.4 – 100.0 93.1-96.7
Winter triticale/ ERYSGR/ERYSGT	5	21.3 18.5	1.0 – 65.0 5.8-30.2	63.6 65.9	16.7 – 100.0 47.2-81.0	82.9 83.2	43.3 – 100.0 74.3-93.8	95.5	88.2 – 100.0 93.6-100
Winter triticale/ PUCCRT/PUCCRE	3	12.9	1.8 – 25.0 6.1-20.0	83.1	51.7 – 100.0 58.4-92.2	96.6	86.7 – 100.0 88.4-100	98.8	93.3 – 100.0 94.2-100
Winter triticale/ LEPTNO	2	10.7	10.0 - 11.3	67.1	64.2 - 70.0	83.8	77.5 - 90.0	90.4	90.0 - 90.8

Table 3.2-8b: Minimum effective dose. Efficacy of SNS-F-11 at proposed label rate, at 60% and 115% dose rates in winter rape (LEPTMA).

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with SNS-F-11					
				0.7 L/ha (60% of full rate)		0.98+1.0 L/ha (full rate)		1.12+1.15 L/ha (115% of full rate)	
		Mean	Min - Max	Mean	Min - Max	Mean	Min - Max	Mean	Min - Max
Winter rape/ LEPTMA	7	29.4 29.9	9.1 – 70.0 9.1-68.8	57.8	23.2 – 83.8 32.0-81.5	84.0	59.0 – 94.6 59.0-90.6	87.5	65.0 – 95.0 65.0-93.8

Table 3.2-9c: Minimum effective dose. Efficacy of SNS-F-11 at proposed label rate, at 60% and 115% dose rates in winter rape (SCLESC).

Grouping *	Number of trials	Infestation of the untreated control (unit)		% control with SNS-F-11					
				0.7 L/ha (60% of full rate)		0.98+1.0 L/ha (90% of full rate)		1.12+1.15 L/ha (full rate)	
		Mean	Min - Max	Mean	Min - Max	Mean	Min - Max	Mean	Min - Max
Winter rape/ SCLESC	8	22.6 21.8	10.0 – 51.3 10.0-35.0	56.5	30.4 – 72.7 30.4-70.1	73.5	60.6 - 85.2	82.7	76.0 – 86.7 79.7-86.7

Summary and conclusions on the MED (minimum effective dose) trials

Winter wheat/SEPTTR

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.

As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of SEPTTR under a wide range of environmental conditions.

Winter wheat/ERYSGR

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.

As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of ERYSGR under a wide range of environmental conditions.

Winter wheat/PUCCRT/PUCCRE

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.

As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of PUCCRT/PUCCRE under a wide range of environmental conditions.

Winter wheat/PYRNTR

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.

As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of PYRNTR under a wide range of environmental conditions.

Winter wheat/LEPTNO

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.

As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of LEPTNO under a wide range of environmental conditions.

Winter triticale/ERYSGR

According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall con-

trol and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of ERYSGR under a wide range of environmental conditions.

Winter triticale/SEPTTR
According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of SEPTTR under a wide range of environmental conditions.

Winter triticale/PUCCRT/PUCCRE
According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of PUCCRT/PUCCRE under a wide range of environmental conditions.

Winter triticale/LEPTNO
According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of LEPTNO under a wide range of environmental conditions.

Winter rape/LEPTMA
According to the presented results, the dose of 1.0 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.0 L/ha should be considered the minimum effective dose to deliver broad spectrum control of LEPTMA under a wide range of environmental conditions.

Winter rape/SCLESC
According to the presented results, the dose of 1.15 L/ha of SNS-F-11 provided the optimum overall control and should be considered as effective against these 1 major pest, for which activity of SNS-F-11 is claimed.
As a result, the proposed rate of 1.15 L/ha should be considered the minimum effective dose to deliver broad spectrum control of SCLESC under a wide range of environmental conditions.

Comments of ZRMs	The minimum effective dose (MED) of difenoconazole for winter wheat, winter triticale and winter oilseed rape can vary depending on the specific product and local guidelines. However, general application rates for these crops are typically within the following ranges: 125-250 grams of active ingredient per hectare (g a/i./ha). Product should be applied at the first signs of disease or as a preventive measure based on disease forecasting models. However, submitted trials prove that 90 grams of difenoconazole per hectare against fungal disease in winter wheat and winter triticale and against LEPTMA in winter oilseed rape is efficacy and dose of 103.5 grams of difenoconazole against SCLESC in winter oilseed rape. In order 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. During field trials Applicant used different doses of fungicide DISFERA 90 EC / LIPOSTAR 90 EC (product code: SNS-F-11) containing difenoconazole (90 g/L) as an active compound. So, 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). All trials were carried out under GEP conditions by officially recognized testing organisations. Tested product was applied at intended dose rate and lower and higher rate.

On winter oilseed rape following doses were studied: 0.7 L/ha; 0.98 L/ha/1.0 L/ha and 1.12 L/ha / 1.15 L/ha against SCLESC and LEPTMA. Those doses were applied once a season. The most effective against SCLESC was dose 1.12 /1.15 L/ha and against LEPTMA – dose 0.98 L/ha /1.0 L/ha.

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11		
			0.7 L/ha	0.98 L/ha / 1.0 L/ha	1.12 L/ha / 1.15 L/ha
SCLESC	8	21.8 (10.0-35.0)	56.5	73.5	82.7
LEPTMA	7	29.9 (9.1-68.8)	57.8	84.0	87.5

Dose 0.7 L/ha; 0.98 L/ha and 1.12 L/ha was studied in trials carried out in 2022 against LEPTMA (3 trials) and SCLESC (4 trials). Dose 0.7 L/ha; 1.0 L/ha and 1.15 L/ha was studied in trials performed in 2023 against LEPTMA (4 trials) and SCLESC (4 trials). In the opinion of ZRMs trials against LEPTMA with studied dose 0.98 and 1.0 L/ha can be used for assessment the efficacy of dose 1.0 L/ha. The difference in the active dose per hectare was only 2%. Also, no difference in effectiveness was found between the two doses (0.98 L/ha and 1.0 L/ha). All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control LEPTMA at dose 1.0 L/ha. In the opinion of ZRMs, trials with studied dose 1.12 and 1.15 L/ha can be used for assessment the efficacy of dose 1.15 L/ha against SCLESC. The difference in the active dose per hectare was only 2.6%. Also, no difference in effectiveness was found between the two doses (1.12 L/ha and 1.15 L/ha). All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control SCLESC at dose 1.15 L/ha.

On winter wheat against SEPTTR, ERYSGT/ERYSYGR, PUCCRT/PUCCRE, PYRNTR, LEPTNO and winter triticale against SEPTTR, ERYSYGT/ERYSGR, PUCCRT/PUCCRE and LEPTNO following doses were studied: 0.8 L/ha (0.8N), 1.0 L/ha (N recommended) and 1.3 L/ha (1.3N). The most effective against studied fungal diseases was dose 1.0 L/ha applied twice a season.

winter wheat:

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11		
			0.8 L/ha	1.0 L/ha	1.3 L/ha
SEPTTR	16	18.0 (5.0-34.5)	64.1	82.7	87.1
ERYSGT/ERYSGR	12	13.7 (7.8-23.3)	66.9	86.5	92.4
PUCCRT/PUCCRE	5	9.2 (6.5-11.3)	65.2	90.8	92.3
PYRNTR	5	11.8 (9.4-20.1)	67.7	81.4	85.1
LEPTNO	5	15.5 (10.0 - 27.5)	71.8	90.0	92.4

All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, PYRNTR and LEPTMA at dose 1.0 L/ha.

winter triticale:

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11		
			0.8 L/ha	1.0 L/ha	1.3 L/ha

SEPTTR	5	16.7 (8.6-33.5)	57.5	84.3	94.0
ERYSYGT/ERYSGR	5	18.5 (5.8-30.2)	65.9	83.2	95.5
PUCCRE/PUCCRT	3	12.9 (6.1-20.0)	83.1	96.6	98.8
LEPTNO	2	10.7 (10.0 - 11.3)	67.1	83.8	90.4

All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE and LEPTMA at dose 1.0 L/ha.

Based on the results from 36 valid efficacy trials (16-winter wheat, 5-winter triticale, 15 – winter oilseed rape), a dose response was shown. Supported by the trials and by the knowledge of difenoconazole – which is already registered and in common use – a minimum effective rate of 1.0 L/ha for winter wheat against SEPTTR, ERYSGR/ERYSGT, PUCCRT/PUCCRE, PYRNTR and LEPTNO and winter triticale against SEPTTR, PUCCRE/PUCCRT, LEPTNO, ERYSYGR/ERYSGT applied max. twice a season and winter oilseed rape against LEPTMA applied once a season. For winter oilseed rape against SCLESC a dose 1.15 L/ha applied once a season is recommended.

3.2.3 Efficacy tests (KCP 6.2)

The applicant submitted 36 reports (in total) showing the results in research into product efficacy carried out in 2022 and 2023 in winter wheat (16), winter rape (15) and winter triticale (5).

List of these reports is contained in **Appendix 1.**
Trials were randomized block design and conducted in different regions in Poland.
The efficacy trials were designed, conducted and reported according to the following EPPO guidelines:
PP 1/152(4) Design and analysis of efficacy evaluation trials
PP 1/181(4) Conduct and reporting of efficacy evaluation trials including good experimental practice
PP 1/135(4) Phytotoxicity assessment
PP 1/225(2) Minimum effective dose

Winter wheat

Zymoseptoria tritici (SEPTTR)

A total 16 trials were carried out to evaluated the efficacy of SNS-F-11 for the control of SEPTTR in winter wheat.
Efficacy data of SEPTTR are presented in ~~15~~ 16 trials. All the trials were conducted in 2022 and 2023 in Poland.

Table 3.2-10: Details on trial methodology

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Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia

	Sowing period	14.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37 17.05.2022 B BBCH 55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: Efficacy evaluation: 31.05.2022 (BBCH 55), 20.06.2022 (BBCH 77), 28.06.2022 (BBCH 85) Phytotoxicity evaluation: 31.05.2022 (BBCH 55), 14.06.2022 (BBCH 75), 28.06.2022 (BBCH 85) Harvest: 21.07.2022 (BBCH 89) Assesment of weight of 1000 grains, hectoliter weight, moisture: 29.07.2022
Other relevant information	Soil type, pH	Sandy clay, pH 5.5
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland
The level of infection of the Arkadia winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of septoria leaf blotch wheat was at high level in the control and reached 25.0%.
The level of *Zymoseptoria tritici* infection present on the present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no adverse effect on adjacent crops and naturally occurring insects.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Arkadia winter wheat crop. All tested fungicides significantly increased the yield of winter wheat compared to the control object. Moreover, all tested fungicides used in the experiment did significantly affect the weight of 1000 grain, grain moisture, hectoliter mass increase them compared to the control. Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on winter wheat cv Arkadia has been stated.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 85 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.06.2022 in BBCH 85 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 72.7-85.3%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (85.3%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (80.2%) as well as TORES 250 EC (81.6%).

TRIAL 333/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental	Plot design	Randomized block

design	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	14.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37 17.05.2022 B BBCH 55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 31.05.2022 (BBCH 55), 20.06.2022 (BBCH 77), 28.06.2022 (BBCH 85) Phytotoxicity evaluation: 31.05.2022 (BBCH 55), 14.06.2022 (BBCH 75), 28.06.2022 (BBCH 85) Harvest: 21.07.2022 (BBCH 89) Assesment of weight of 1000 grains, hectoliter weight, moisture: 29.07.2022
Other relevant information	Soil type, pH	Sandy clay, pH 5.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland
The level of infection of the Euforia winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 15.8%.
The level of *Zymoseptoria tritici* infection present on the present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no adverse effect on adjacent crops and naturally occurring insects.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Euforia winter wheat crop. All tested fungicides significantly increased the yield of winter wheat compared to the control object. Moreover, all tested fungicides used in the experiment did significantly affect the weight of 1000 grain, grain moisture, hectoliter mass increase them compared to the control. Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on winter wheat cv Euforia has been stated.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 85 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.06.2022 in BBCH 85 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 77.4 – 84.8%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (84.8%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (83.0%) as well as TORES 250 EC (83.5%).

TRIAL 119 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Randomized block
	Plot size	15 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Tobak
	Sowing period	29.09.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 33-37 Application B: BBCH 53-55
	Number of applications Intervals between applications	2 applications: A BBCH 33-37 13.05.2022 B BBCH 53-55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, green leaf area, yield evaluation, MTN evaluation.
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 53-55), 14.06.2022 (BBCH 71), 14.06.2022 (BBCH 71), 24.06.2022 (BBCH 75), Phytotoxicity evaluation: 20.05.2022 (BBCH 39), 31.05.2022 (BBCH 53-55), 07.06.2022 (BBCH 61), 14.06.2022 (BBCH 71) Green leaf area: 24.06.2022 (BBCH 75) Yield evaluation: 25.07.2022 (BBCH 99) Assesment of MTN: 10.08.2022
Other relevant information	Soil type, pH	Loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Sośnicowice, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tobak winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 5.0%.
The level of *Zymoseptoria tritici* infection present on the present on the Tobak winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2021 were favourable for proper emergence and development of winter crops. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Tobak cultivar overwintered very well. The spring of 2022 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Tobak, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC. A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 (90 EC) at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots. On the plots treated with the SNS-F-11 fungicide, regardless of the dose applied and the standard products, a significant increase in yield

and an increase in the weight of one thousand seeds was observed in relation to the control plots. Percentage protein content were at the same level of statistical significance in all tested experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 24.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 64.0 – 80.0%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (80.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (94.0%) as well as TORES 250 EC (78.0%).

TRIAL SGS/2022/069/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Lavantus
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 12.05.2022 B BBCH 39-41 01.06.2022 Interwal between applications: 20 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63), 08.07.2022 (BBCH 75-77) Phytotoxicity evaluation: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63) Vigour of plant: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63). Green leaf area: 08.07.2022 (BBCH 75-77) Yield evaluation: 01.08.2022 (BBCH 99) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 01.08.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 4.8
	Natural / artificial innoculation…	natural
	Field / Greenhouse	Fields, Chojnice, prov. Pomorskie

The trial was set up in the north-central part of Poland
The level of infection of the Lavantus winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 15.7%.

The level of *Zymoseptoria tritici* infection present on the Lavantus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Lavantus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.07.2022 in BBCH 75-77 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 47.1-93.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (88.7-93.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (89.8%) and TORES 250 EC (89.2%).

TRIAL SGS/2022/069/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Opoka
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 30-31 Application B: BBCH 55-56
	Number of applications Intervals between applications	2 applications: A BBCH 30-31 27.04.2022 B BBCH 55-56 31.05.2022 Interwal between applications: 34 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67), 27.06.2022 (BBCH 75), 07.07.2022 (BBCH 77-83) Phytotoxicity evaluation: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Vigour of plant: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Green leaf area: 07.07.2022 (BBCH 75-85) Yield evaluation: 27.07.2022 (BBCH 89) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 27.07.2022 (BBCH 99)
Other rele-	Soil type, pH	Sandy loam, pH 7.1

vant information	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Opoka winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 28.8%.
The level of *Zymoseptoria tritici* infection present on the Opoka winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Opoka winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure. The second application was performed after more than 21 days after firs application (30 days later) due to weather conditions.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 77-83 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 07.07.2022 in BBCH 77-83 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 66.7-85.8% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (85.0-85.8%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (86.2%) and TORES 250 EC (84.3%).

TRIAL SGS/2022/069/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	24.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Findus
	Sowing period	05.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 28.04.2022 B BBCH 39-41 18.05.2022 Interwal between applications: 20 days
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-

		65), 23.06.2022 (BBCH 75). Phytotoxicity evaluation: 12.05.2022 (BBCH 37-39), 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-65) Vigour of plant: 12.05.2022 (BBCH 37-39), 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-65) Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89) Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Silt loam, pH 5.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Findus winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 34.5%.
The level of *Zymoseptoria tritici* infection present on the Findus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 62.8-94.9% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (89.9-94.9%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (85.0%) and TORES 250 EC (91.9%).

TRIAL SGS/2022/069/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41

	Number of applications Intervals between applications	2 applications: A BBCH 32-33 13.05.2022 B BBCH 39-41 03.06.2022 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61, 08.07.2022 (BBCH 75) Phytotoxicity evaluation: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Vigour of plant: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89) Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields,Kamien Krajenski, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Joker winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 31.8%.
The level of *Zymoseptoria tritici* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.07.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 54.4-94.7%% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (89.1-94.7%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (92.8%) and TORES 250 EC (94.3%).

TRIAL SGS/2023/041/PL05

Guidelines	General guidelines	EPPO PP 1/181(4), PP 1/135(4), PP 1/225(2), PP 1/152(4)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	22.5 m²

	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	24.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 25.04.2023 B BBCH 37, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), 23.06.2023 (BBCH 75) Phytotoxicity evaluation: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), Vigour of plant: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), Green leaf area: 28.06.2023 (BBCH 75-77) Yield evaluation: 15.08.2023 (BBCH 89) Assesment of TGW: 18.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 89)
Other relevant information	Soil type, pH	Sandy loam, pH 7.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Euforia winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 11.4%.
The level of *Zymoseptoria tritici* infection present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Euforia winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were also statistical differences between tested product and reference standard and control field in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 76.4-94.6% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (92.3-94.6%) efficacy against disease, which matched the efficacy of the standard product PORTER

250 EC (93.1%) and TORES 250 EC (92.7%).

TRIAL SGS/2023/041/PL06

Guidelines	General guidelines	EPPO PP 1/181(4), PP 1/135(4), PP 1/225(2), PP 1/152(4)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	36.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia
	Sowing period	06.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32 -33 Application B: BBCH 47-51
	Number of applications Intervals between applications	2 applications: A BBCH 32- 33, 08.05.2023 B BBCH 47-51, 29.05.2023 Interwal between applications: 21 days
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61), 03.07.2023 (BBCH 75) Phytotoxicity evaluation: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Vigour of plant: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Green leaf area: 14.07.2023 (BBCH 77-85) Yield evaluation: 11.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 11.08.2023(BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamień Krajeński, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Arkadia winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 7.8%.
The level of *Zymoseptoria tritici* infection present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protec-

tion against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 71.7-94.6% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (89.8-94.6%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (91.2%) and TORES 250 EC (92.4%).

TRIAL SGS/2023/041/PL01

Guidelines	General guidelines	EPPO PP 1/181(4), PP 1/135(4), PP 1/225(2), PP 1/152(4)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	27.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Yukon
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 09.05.2023 Interwal between applications: 19 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53), 03.07.2023 (BBCH 75). Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Vigour of plant: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Green leaf area: 13.07.2023 (BBCH 77-83) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7,1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Nidzica, prov. Warmińsko-mazurskie

The trial was set up in the north-east part of Poland.
The level of infection of the Yukon winter wheat caused by *Zymoseptoria tritici*, type of fungi, which

are the agents of speckled leaf blotch of wheat was at high level in the control and reached 15.4%.
The level of *Zymoseptoria tritici* infection present on the Yukon winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 58.0-92.2% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (81.3-92.2%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (84.8%) and TORES 250 EC (85.7%).

TRIAL SGS/2023/041/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	27.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Findus
	Sowing period	12.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 33 17.04.2023 B BBCH 39-41 22.05.2023 Interwal between applications: 35 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 17.04.2023 (BBCH 33), 12.06.2023 (BBCH 61-63), 26.06.2023 (BBCH 75). Phytotoxicity evaluation: 28.04.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 12.06.2023 (BBCH 61-63). Vigour of plant: 28.04.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 12.06.2023 (BBCH 61-63). Green leaf area: 04.07.2023 (BBCH 77-83) Yield evaluation: 19.08.2023 (BBCH 99) Assesment of TGW: 19.08.2023 (BBCH 99) Moisture content: 19.08.2023 (BBCH 99)

Other relevant information	Soil type, pH	Silit loam, pH 6.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Piskorzów, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Findus winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 14.6%.
The level of *Zymoseptoria tritici* infection present on the Findus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content. Minor phytotoxicity symptoms (chlorosis) recorded at the first assessment (11 DAA). Low temperatures during the application period may have contributed to the phytotoxic effect.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 26.06.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 67.4-93.7% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (87.4-93.7%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (85.7%) and TORES 250 EC (95.6%).
The deviation from the assumed interval of 14-21 days were caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.

TRIAL SGS/2023/041/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 21.04.2023 B BBCH 39-41 22.05.2023 Interwal between applications: 31 days

	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59), 26.06.2023 (BBCH 75). Phytotoxicity evaluation: 05.05.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59). Vigour of plant: 05.05.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59). Green leaf area: 05.07.2023 (BBCH 83) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silit loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Brożec, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Joker winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of wheat was at high level in the control and reached 30.3%.
The level of *Zymoseptoria tritici* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Joker winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 26.06.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 78.6-94.9% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (89.8-94.9%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (69.4%) and TORES 250 EC (93.0%).
The deviation from the assumed interval of 14-21 days were caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.

TRIAL 63 F/2023

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	15 m²
	Number of replications	4

Crop	Trials per crop	Winter wheat
	Varieties per crop	Patras
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 33 Application B: BBCH 45
	Number of applications Intervals between applications	2 applications: A BBCH 33 04.05.2023 B BBCH 45 25.05.2023 Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 25.05.2023 (BBCH 45), 09.06.2023 (BBCH 65), 26.06.2023 (BBCH 75), 01.07.2023 (BBCH 75-77) Phytotoxicity evaluation: 18.05.2023 (BBCH 39), 01.06.2023 (BBCH 59), 09.06.2023 (BBCH 65) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of weight of MTN: 06.09.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.5
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was set up in the south-west part of Poland
The level of infection of the Patras winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of septoria leaf blotch wheat was at high level in the control and reached 16.3%.
The level of *Zymoseptoria tritici* infection present on the present on the Patras winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Patras, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC
A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, protein content) of winter wheat cultivar Patras yield.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 01.07.2023 in BBCH 75-77 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3

L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 45.7-69.2%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided medium high (69.2%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (67.8%) as well as TORES 250 EC (68.0%).

TRIAL SF23PZ309Z (Report 323/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(5)
	Specific guidelines	EPPO PP 1/026(4), PP 1/28(4)
Experimental design	Plot design	Randomized block
	Plot size	21 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Bellisa
	Sowing period	30.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32 Application B: BBCH 41
	Number of applications Intervals between applications	2 applications: A BBCH 32, 28.04.2023 B BBCH 41, 18.05.2023 Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77), 10.07.2023 (BBCH 81) Phytotoxicity evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains: 01.09.2023 (BBCH n/a) Hectoliter weight: 01.09.2023 (BBCH n/a)
Other relevant information	Soil type, pH	Clay loam, pH 5.8
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Gać, prov. Podkarpackie

The trial was set up in the south-east part of Poland
The level of infection of the Bellisa winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of septoria leaf blotch wheat was at high level in the control and reached 10.3%.
The level of *Zymoseptoria tritici* infection present on the present on the Bellisa winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Bellisa cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.

There was no phytotoxic effect on winter wheat plants cultivar Bellisa, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 at doses of 1.3 l/ha, 1.0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, protein content) of winter wheat cultivar Bellisa yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 52.0-73.8%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided medium high (73.8%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (72.5%) as well as TORES 250 EC (67.8%).

TRIAL SF23PZ302W (Report 319/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Julius
	Sowing period	29.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37, 22.05.2023 BBCH 55, 05.06.2023 Interwal between applications: 15 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 05.06.2023 (BBCH 55), 20.06.2023 (BBCH 71), 30.06.2023 (BBCH 75), 07.07.2023 (BBCH 78) Phytotoxicity evaluation: 05.06.2023 (BBCH 55), 19.06.2023 (BBCH 71), 03.07.2023 (BBCH 75/78) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains and hectoliter weight: 01.09.2023 (BBCH n/a)
Other relevant information	Soil type, pH	Sandy clay, pH 6.0
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.

The level of infection of the Julius winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of septoria leaf blotch wheat was at high level in the control and reached 17.2%.
The level of *Zymoseptoria tritici* infection present on the present on the Julius winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Julius cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Julius, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand grains weight, protein content) of winter wheat cultivar Julius yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 63.3-81%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided medium high (81%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (77.8%) as well as TORES 250 EC (72.0%).

TRIAL SF23PZ310Z (Report 324/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	21 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	30.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32 Application B: BBCH 41
	Number of applications Intervals between applications	2 applications: A BBCH 32, 28.04.2023 B BBCH 41, 18.05.2023 Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77), 10.07.2023 (BBCH 77) Phytotoxicity evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains and hectoliter weight: 01.09.2023 (BBCH n/a)

Other relevant information	Soil type, pH	Clay loam, pH 5.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Gać, prov. Podkarpackie

The trial was set up in the south-east part of Poland.
The level of infection of the Euforia winter wheat caused by *Zymoseptoria tritici*, type of fungi, which are the agents of septoria leaf blotch wheat was at high level in the control and reached 8.1%.
The level of *Zymoseptoria tritici* infection present on the present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Euforia cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves
There was no phytotoxic effect on winter wheat plants cultivar Euforia, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand grains weight, protein content) of winter wheat cultivar Euforia yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 59.5 – 72.0%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided medium high (72.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (75.6%) as well as TORES 250 EC (71.5%).

WINTER WHEAT

***Blumeria graminis tritici* / *Blumeria graminis* (ERYSGT/ERYSGR)**

A total 12 trials were carried out to evaluated of SNS-F-11 for the control of ERYSGR/ERYSGT in winter wheat.
Efficacy data of ERYSGR/ERYSGT are presented in 12 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL 332/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia
	Sowing period	14.10.2021

Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37 17.05.2022 B BBCH 55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: Efficacy evaluation: 31.05.2022 (BBCH 55), 20.06.2022 (BBCH 77), 28.06.2022 (BBCH 85) Phytotoxicity evaluation: 31.05.2022 (BBCH 55), 14.06.2022 (BBCH 75), 28.06.2022 (BBCH 85) Harvest: 21.07.2022 (BBCH 89) Assesment of weight of 1000 grains, hectoliter weight, moisture: 29.07.2022
Other relevant information	Soil type, pH	Sandy clay, pH 5.5
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.
The level of infection of the Arkadia winter wheat caused by *Blumeria graminis/ Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 13.0%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no adverse effect on adjacent crops and naturally occurring insects.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Arkadia winter wheat crop. All tested fungicides significantly increased the yield of winter wheat compared to the control object. Moreover, all tested fungicides used in the experiment did significantly affect the weight of 1000 grain, grain moisture, hectoliter mass increase them compared to the control. Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on winter wheat cv Arkadia has been stated.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 85 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.06.2022 in BBCH 85 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 62.0-77.0%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (77.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (73.0%) as well as TORES 250 EC (77.0%).

TRIAL 119 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/026 (4)

Experimental design	Plot design	Randomized block
	Plot size	15 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Tobak
	Sowing period	29.09.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 33-37 Application B: BBCH 53-55
	Number of applications Intervals between applications	2 applications: A BBCH 33-37 13.05.2022 B BBCH 53-55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, green leaf area, yield evaluation, MTN evaluation.
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 53-55), 14.06.2022 (BBCH 71), 14.06.2022 (BBCH 71), 24.06.2022 (BBCH 75), Phytotoxicity evaluation: 20.05.2022 (BBCH 39), 31.05.2022 (BBCH 53-55), 07.06.2022 (BBCH 61), 14.06.2022 (BBCH 71) Green leaf area: 24.06.2022 (BBCH 75) Yield evaluation: 25.07.2022 (BBCH 99) Assesment of MTN: 10.08.2022
Other relevant information	Soil type, pH	Loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Sośnicowice, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tobak winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 17.8%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the present on the Tobak winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2021 were favourable for proper emergence and development of winter crops. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Tobak cultivar overwintered very well. The spring of 2022 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Tobak, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC. A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 (90 EC) at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots. On the plots treated with the SNS-F-11 fungicide, regardless of the dose applied and the standard products, a significant increase in yield and an increase in the weight of one thousand seeds was observed in relation to the control plots. Percentage protein content were at the same level of statistical significance in all tested experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protec-

tion against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 24.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 57.7 – 75.7%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (75.7%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (67.3%) as well as TORES 250 EC (65.5%).

TRIAL SGS/2022/069/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Lavantus
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 12.05.2022 B BBCH 39-41 01.06.2022 Interwal between applications: 20 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63), 08.07.2022 (BBCH 75-77) Phytotoxicity evaluation: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63) Vigour of plant: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63). Green leaf area: 08.07.2022 (BBCH 75-77) Yield evaluation: 01.08.2022 (BBCH 99) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 01.08.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 4.8
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Chojnice, prov. Pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Lavantus winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 8.6%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Lavantus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.

Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Lavantus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.07.2022 in BBCH 75-77 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 65.0-98.4% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (88.9 – 98.4%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (97.7%) and TORES 250 EC (94.8%).

TRIAL SGS/2022/069/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Opoka
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 30-31 Application B: BBCH 55-56
	Number of applications Intervals between applications	2 applications: A BBCH 30-31 27.04.2022 B BBCH 55-56 31.05.2022 Interwal between applications: 34 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67), 27.06.2022 (BBCH 75), 07.07.2022 (BBCH 77-83) Phytotoxicity evaluation: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Vigour of plant: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Green leaf area: 07.07.2022 (BBCH 75-85) Yield evaluation: 27.07.2022 (BBCH 89) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 27.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawko - pomorskie

The trial was set up in the north-central part of Poland.

The level of infection of the Opoka winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 7.8%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Opoka winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Opoka winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure. The second application was performed after more than 21 days after firs application (30 days later) due to weather conditions.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 77-83 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 07.07.2022 in BBCH 77-83 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 64.2-95.6% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (95.2-95.6%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (95.6%) and TORES 250 EC (95.6%).

TRIAL SGS/2022/069/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	24.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Findus
	Sowing period	05.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 28.04.2022 B BBCH 39-41 18.05.2022 Interwal between applications: 20 days
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-65), 23.06.2022 (BBCH 75). Phytotoxicity evaluation: 12.05.2022 (BBCH 37-39), 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-65) Vigour of plant: 12.05.2022 (BBCH 37-39), 18.05.2022 (BBCH 39-41), 01.06.2022 (BBCH 61-65)

		Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89) Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Silt loam, pH 5.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Findus winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 17.7%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Findus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 67.5-91.4% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (91.6-91.4%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (87.7%) and TORES 250 EC (91.7%).

TRIAL SGS/2022/069/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 13.05.2022 B BBCH 39-41 03.06.2022 Interwal between applications: 21 days

	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61, 08.07.2022 (BBCH 75) Phytotoxicity evaluation: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Vigour of plant: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89) Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, , Kamien Krajenski, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Joker winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 13.9%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Joker winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.07.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 65.0-97.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (93.1-97.3%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (96.4%) and TORES 250 EC (96.7%).

TRIAL SGS/2023/041/PL05

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat

	Varieties per crop	Euforia
	Sowing period	03.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 24.04.2023 B BBCH 37, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), 23.06.2023 (BBCH 75) Phytotoxicity evaluation: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), Vigour of plant: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), Green leaf area: 28.06.2023 (BBCH 75-77) Yield evaluation: 15.08.2023 (BBCH 89) Assesment of TGW: 18.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 89)
Other relevant information	Soil type, pH	Sandy loam, pH 7.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Euforia winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 23.3%
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Euforia winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were also statistical differences between tested product and reference standard and control field in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 77.5-97.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (94.2-97.3%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (96.7%) and TORES 250 EC (96.7%).

TRIAL SGS/2023/041/PL06

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	36.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia
	Sowing period	06.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 47-51
	Number of applications Intervals between applications	2 applications: A BBCH 37, 08.05.2023 B BBCH 47-51, 29.05.2023 Interwal between applications: 21 days
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61), 03.07.2023 (BBCH 75-77) Phytotoxicity evaluation: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Vigour of plant: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Green leaf area: 14.07.2023 (BBCH 77-83) Yield evaluation: 11.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 11.08.2023(BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamień Krajeński, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Arkadia winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 12.8%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Arkadia winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.

Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 75-77 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 68.2-91.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (84.9-91.3%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (89.3%) and TORES 250 EC (88.4%).

TRIAL SGS/2023/041/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	27.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Yukon
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 09.05.2023 Interwal between applications: 19 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53), 03.07.2023 (BBCH 75). Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Vigour of plant: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Green leaf area: 13.07.2023 (BBCH 77-83) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Nidzica, prov. Warmińsko-mazurskie

The trial was set up in the north-east part of Poland.
The level of infection of the Yukon winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 19.7%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Yukon winter wheat

was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Yukon winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 67.3-96.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (87.3-96.3%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (89.9%) and TORES 250 EC (91.4%).

TRIAL SF23PZ309Z (Report 323/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	21 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Belissa
	Sowing period	30.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32 Application B: BBCH 41
	Number of applications Intervals between applications	2 applications: A BBCH 32, 28.04.2023 B BBCH 41, 18.05.2023 Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77), 10.07.2023 (BBCH 81) Phytotoxicity evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains, hectoliter weight: 01.09.2023
Other relevant information	Soil type, pH	Clay loam, pH 5.8
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Gać, prov. Podkarpackie

The trial was set up in the south-east part of Poland.

The level of infection of the Bellisa winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 10.4%.

The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the Bellisa winter wheat was sufficient to perform efficacy assessment for the test treatments.

Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.

There was no phytotoxic effect on winter wheat plants cultivar Bellisa, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.

The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, hectoliter weight) of winter wheat cultivar Bellisa yield.

Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* demonstrated efficacy of 72.7-85.7%. The test treatment SNS-F-11 applied at the rate of 1.0 to 1.3 L/ha provided medium high (81.0-85.7%) efficacy against disease, which is comparable with the efficacy of the standard product PORTER 250 EC (87.0%) as well as TORES 250 EC (85.3%).

TRIAL SF23PZ302W (Report 319/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Julius
	Sowing period	29.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37, 22.05.2023 B BBCH 55, 05.06.2023 Interwal between applications: 15 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 05.06.2023 (BBCH 55), 20.06.2023 (BBCH 71), 30.06.2023 (BBCH 75), 07.07.2023 (BBCH 78) Phytotoxicity evaluation: 05.06.2023 (BBCH 55), 19.06.2023 (BBCH 71), 03.07.2023 (BBCH 75/78)

		Yield evaluation: 04.08.2023 (BBCH 99) Moisture: (BBCH 99) Assesment of weight of 100 grains, hectoliter weight: 01.09.2023
Other relevant information	Soil type, pH	Sandy clay, pH 6.0
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.
The level of infection of the Julius winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 10.3%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the present on the Julius winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Julius, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, hectoliter weight) of winter wheat cultivar Julius yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis tritici* and demonstrated efficacy of 73.3-91.5%. The test treatment SNS-F-11 applied at the rate of 1.0 to 1.3 L/ha provided medium high (82.0 – 91.5%) efficacy against disease, which is comparable with the efficacy of the standard product PORTER 250 EC (86.5%) as well as TORES 250 EC (93.5%).

TRIAL SF23PZ310Z (Report 324/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	21 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	30.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32 Application B: BBCH 41
	Number of applications Intervals between	2 applications: A BBCH 32, 28.04.2023 B BBCH 41, 18.05.2023

	applications	Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 65), 27.06.2023 (BBCH 77), 10.07.2023 (BBCH 81) Phytotoxicity evaluation: 18.05.2023 (BBCH 41), 09.06.2023 (BBCH 59), 27.06.2023 (BBCH 77) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains: 01.09.2023
Other relevant information	Soil type, pH	Clay loam, pH 5.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Gać, prov. Podkarpackie

The trial was set up in the south-east part of Poland.
The level of infection of the Euforia winter wheat caused by *Blumeria graminis/Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew of wheat was at high level in the control and reached 9.2%.
The level of *Blumeria graminis/Blumeria graminis tritici* infection present on the present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Euforia, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, hectolitr weight) of winter wheat cultivar Euforia yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Blumeria graminis/Blumeria graminis, tritici,* and demonstrated efficacy of 69.2 – 77.4%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided medium high (77.4%) efficacy against disease, which is comparable with the efficacy of the standard product PORTER 250 EC (81.1%) as well as TORES 250 EC (78.2%).

WINTER WHEAT

***Pyrenophora tritici-repentis* (PYRNTR)**

A total 5 trials were carried out to evaluated of SNS-F-11 for the control of PYRNTR in winter wheat.
Efficacy data of PYRNTR are presented in 5 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL 332/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia
	Sowing period	14.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37 17.05.2022 B BBCH 55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: Efficacy evaluation: 31.05.2022 (BBCH 55), 20.06.2022 (BBCH 77), 28.06.2022 (BBCH 85) Phytotoxicity evaluation: 31.05.2022 (BBCH 55), 14.06.2022 (BBCH 75), 28.06.2022 (BBCH 85) Harvest: 21.07.2022 (BBCH 89) Assesment of weight of 1000 grains, hectoliter weight, moisture: 29.07.2022
Other relevant information	Soil type, pH	Sandy clay, pH 5.5
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.
The level of infection of the Arkadia winter wheat caused by *Pyrenophora tritici-repentis*, type of fungi, which are the agents of tan spot of cereals was at high level in the control and reached 20.1%.
The level of *Pyrenophora tritici-repentis* infection present on the present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no adverse effect on adjacent crops and naturally occurring insects.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Arkadia winter wheat crop. All tested fungicides significantly increased the yield of winter wheat compared to the control object. Moreover, all tested fungicides used in the experiment did significantly affect the weight of 1000 grain, grain moisture, hectoliter mass increase them compared to the control. Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on winter wheat cv Arkadia has been stated.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 85 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.06.2022 in BBCH 85 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3

L/ha provided significant control against the infection caused by *Pyrenophora tritici-repentis* and demonstrated efficacy of 73.9-85.5%. The test treatment SNS-F-11 applied at the rate of 1.0 L/ha to 1.3 L/ha provided high (83.2 – 85.5%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (88.6%) as well as TORES 250 EC (77.7%).

TRIAL 333/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	14.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37 17.05.2022 B BBCH 55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000 grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 31.05.2022 (BBCH 55), 20.06.2022 (BBCH 77), 28.06.2022 (BBCH 85) Phytotoxicity evaluation: 31.05.2022 (BBCH 55), 14.06.2022 (BBCH 75), 28.06.2022 (BBCH 85) Harvest: 21.07.2022 (BBCH 89) Assesment of weight of 1000 grains, hectoliter weight, moisture: 29.07.2022
Other relevant information	Soil type, pH	Sandy clay, pH 5.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.
The level of infection of the Euforia winter wheat caused by *Pyrenophora tritici-repentis*, type of fungi, which are the agents of tan spot of cereals was at high level in the control and reached 9.4%.
The level of *Pyrenophora tritici-repentis* infection present on the present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no adverse effect on adjacent crops and naturally occurring insects.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Euforia winter wheat crop. All tested fungicides significantly increased the yield of winter wheat compared to the control object. Moreover, all tested fungicides used in the experiment did significantly affect the weight of 1000 grain, grain moisture, hectoliter mass increase them compared to the control. Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on

winter wheat cv Euforia has been stated.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 85 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.06.2022 in BBCH 85 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Pyrenophora tritici-repentis* and demonstrated efficacy of 72.5-89.5%. The test treatment SNS-F-11 applied at the rate of 1.0 L/ha to 1.3 L/ha provided high (80.0-89.5%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (84.3%) as well as TORES 250 EC (87.2%).

TRIAL 119 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Randomized block
	Plot size	15 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Tobak
	Sowing period	29.09.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 33-37 Application B: BBCH 53-55
	Number of applications Intervals between applications	2 applications: A BBCH 33-37 13.05.2022 B BBCH 53-55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, green leaf area, yield evaluation, MTN evaluation.
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 53-55), 14.06.2022 (BBCH 71), 14.06.2022 (BBCH 71), 24.06.2022 (BBCH 75), Phytotoxicity evaluation: 20.05.2022 (BBCH 39), 31.05.2022 (BBCH 53-55), 07.06.2022 (BBCH 61), 14.06.2022 (BBCH 71) Green leaf area: 24.06.2022 (BBCH 75) Yield evaluation: 25.07.2022 (BBCH 99) Assesment of MTN: 10.08.2022
Other relevant information	Soil type, pH	Loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Sośnicowice, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tobak winter wheat caused by *Pyrenophora tritici-repentis*, type of fungi, which are the agents of tan spot of cereals was at high level in the control and reached 10.4%.
The level of *Pyrenophora tritici-repentis* infection present on the present on the Tobak winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2021 were favourable for proper emergence and development of winter

crops. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Tobak cultivar overwintered very well. The spring of 2022 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Tobak, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC. A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 (90 EC) at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots. On the plots treated with the SNS-F-11 fungicide, regardless of the dose applied and the standard products, a significant increase in yield and an increase in the weight of one thousand seeds was observed in relation to the control plots. Percentage protein content were at the same level of statistical significance in all tested experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 24.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Pyrenophora tritici-repentis* and demonstrated efficacy of 61.0-80.0%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (80.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (71.0%) as well as TORES 250 EC (74.0%).

TRIAL SGS/2022/069/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 13.05.2022 B BBCH 39-41 03.06.2022 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61, 08.08.2022 (BBCH 75) Phytotoxicity evaluation: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Vigour of plant: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89)

		Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamien Krajenski, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Joker winter wheat caused by *Pyrenophora tritici-repentis*, type of fungi, which are the agents of tan spot of cereals was at high level in the control and reached 9.4%.
The level of *Pyrenophora tritici-repentis* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Joker winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.08.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Pyrenophora tritici-repentis* and demonstrated efficacy of 45.0-85.9% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (84.2-85.9%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (77.1%) and TORES 250 EC (97.1%).

TRIAL SF23PZ302W (Report 319/2023)

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4)
	Specific guidelines	EPPO PP 1/026 (4), PP 1/28 (4)
Experimental design	Plot design	Randomized block
	Plot size	20 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Julius
	Sowing period	29.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 55
	Number of applications Intervals between applications	2 applications: A BBCH 37, 22.05.2023 B BBCH 55, 05.06.2023 Interwal between applications: 15 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, harvest, weight of 1000

		grains, hectoliter weight, moisture
	Assessment dates	Efficacy evaluation: 05.06.2023 (BBCH 55), 20.06.2023 (BBCH 71), 30.06.2023 (BBCH 75), 07.07.2023 (BBCH 78) Phytotoxicity evaluation: 05.06.2023 (BBCH 55), 19.06.2023 (BBCH 71), 03.07.2023 (BBCH 75/78) Yield evaluation: 04.08.2023 (BBCH 99) Moisture: 04.08.2023 (BBCH 99) Assesment of weight of 1000 grains, hectoliter weight: 01.09.2023
Other relevant information	Soil type, pH	Sandy clay, pH 6.0
	e.g. Natural / artificial innoculation…	natural
	e.g. Field / Greenhouse...	Fields, Winna Góra, prov. Wielkopolskie

The trial was set up in the central part of Poland.
The level of infection of the Julius winter wheat caused by The level of infection of the Joker winter wheat caused by *Pyrenophora tritici-repentis*, type of fungi, which are the agents of tan spot of cereals was at high level in the control and reached 9.7%.
The level of *Pyrenophora tritici-repentis* infection present on the present on the Julius winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Patras, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, hectoliter weight) of winter wheat cultivar Julius yield.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Pyrenophora tritici-repentis* and demonstrated efficacy of 75.3-85.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (85.3-84.5%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (79.8%) and TORES 250 EC (77.0%).

WINTER WHEAT

Puccinia triticina/ Puccinia recondita (PUCCRT/PUCCRE)

A total 5 trials were carried out to evaluated of SNS-F-11 for the control of PUCCRT/PUCCRE in winter wheat.
Efficacy data of PUCCRT/PUCCRE are presented in 5 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL 119 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)

	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Randomized block
	Plot size	15 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Tobak
	Sowing period	29.09.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 33-37 Application B: BBCH 53-55
	Number of applications Intervals between applications	2 applications: A BBCH 33-37 13.05.2022 B BBCH 53-55 31.05.2022 Interwal between applications: 14 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, green leaf area, yield evaluation, MTN evaluation.
	Assessment dates	Efficacy evaluation:31.05.2022 (BBCH 53-55), 14.06.2022 (BBCH 71), 14.06.2022 (BBCH 71), 24.06.2022 (BBCH 75), Phytotoxicity evaluation: 20.05.2022 (BBCH 39), 31.05.2022 (BBCH 53-55), 07.06.2022 (BBCH 61), 14.06.2022 (BBCH 71) Green leaf area: 24.06.2022 (BBCH 75) Yield evaluation: 25.07.2022 (BBCH 99) Assesment of MTN: 10.08.2022
Other relevant information	Soil type, pH	Loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Sośnicowice, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tobak winter wheat caused by *Puccinia triticina/ Puccinia recondita*, type of fungi, which are the agents of brown rust of wheat was at high level in the control and reached 9.5%.
The level of *Puccinia triticina/ Puccinia recondita* infection present on the present on the Tobak winter wheat was sufficient to perform efficacy assessment for the test treatments.
Weather conditions in autumn 2021 were favourable for proper emergence and development of winter crops. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Tobak cultivar overwintered very well. The spring of 2022 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves.
There was no phytotoxic effect on winter wheat plants cultivar Tobak, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC. A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots. On the plots treated with the SNS-F-11 fungicide, regardless of the dose applied and the standard products, a significant increase in yield and an increase in the weight of one thousand seeds was observed in relation to the control plots. Percentage protein content were at the same level of statistical significance in all tested experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protec-

tion against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 24.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.8 L/ha, 1.0 L/ha and 1.3 L/ha provided significant control against the infection caused by *Puccinia triticina/ Puccinia recondita* and demonstrated efficacy of 74.0-88.0%. The test treatment SNS-F-11 applied at the rate of 1.3 L/ha provided high (88.0%) efficacy against disease, which is higher in comparison with the efficacy of the standard product PORTER 250 EC (85.0%) as well as TORES 250 EC (91.0%).

TRIAL SGS/2022/069/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 13.05.2022 B BBCH 39-41 03.06.2022 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61, 08.08.2022 (BBCH 75) Phytotoxicity evaluation: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Vigour of plant: 25.05.2022 (BBCH 33-37), 03.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 58-61) Green leaf area: 23.06.2022 (BBCH 75-85) Yield evaluation: 20.07.2022 (BBCH 89) Assesment of TGW: 20.07.2022 (BBCH 99) Moisture content: 20.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamien Krajenski, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Tobak winter wheat caused by *Puccinia triticina/ Puccinia recondita*, type of fungi, which are the agents of brown rust of wheat was at high level in the control and reached 9.2%.
The level of *Puccinia triticina/ Puccinia recondita* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.

Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Joker winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.08.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina/ Puccinia recondita* and demonstrated efficacy of 58.9-97.8% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (97.5-97.8%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (94.4%) and TORES 250 EC (96.9%).

TRIAL SGS/2023/041/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	27.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Findus
	Sowing period	12.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 33 17.04.2023 B BBCH 39-41 22.05.2023 Interwal between applications: 35 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 17.04.2023 (BBCH 33), 12.06.2023 (BBCH 61-63), 26.06.2023 (BBCH 75). Phytotoxicity evaluation: 28.04.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 12.06.2023 (BBCH 61-63). Vigour of plant: 28.04.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 12.06.2023 (BBCH 61-63). Green leaf area: 04.07.2023 (BBCH 77-83) Yield evaluation: 19.08.2023 (BBCH 99) Assesment of TGW: 19.08.2023 (BBCH 99) Moisture content: 19.08.2023 (BBCH 99)
Other relevant infor-	Soil type, pH	Silit loam, pH 6.3
	Natural / artificial	natural

mation	innoculation	
	Field / Greenhouse	Fields, Piskorzów, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Findus winter wheat caused by *Puccinia triticina/ Puccinia recondita*, type of fungi, which are the agents of brown rust of wheat was at high level in the control and reached 6.5%.
The level of *Puccinia triticina/ Puccinia recondita* infection present on the Findus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Findus winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content. Minor phytotoxicity symptoms (chlorosis) recorded at the first assessment Low temperatures during the application period may have contributed to the phytotoxic effect.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 26.06.2023 in BBCH 75 of development of winter wheat). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina/ Puccinia recondita* and demonstrated efficacy of 67.5-95.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (93.8-95.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (91.9%) and TORES 250 EC (96.9%).

TRIAL SGS/2023/041/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Joker
	Sowing period	07.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-41
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 21.04.2023 B BBCH 39-41, 22.05.2023 Interwal between applications: 31 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)

	Assessment dates	Efficacy evaluation: 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59), 26.06.2023 (BBCH 75-77). Phytotoxicity evaluation: 05.05.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59). Vigour of plant: 05.05.2023 (BBCH 33-37), 22.05.2023 (BBCH 39-41), 06.06.2023 (BBCH 58-59). Green leaf area: 05.07.2023 (BBCH 83) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silit loam, pH 6.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Brożec, prov. Dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Joker winter wheat caused by caused by *Puccinia triticina/ Puccinia recondita*, type of fungi, which are the agents of brown rust of wheat was at high level in the control and reached 9.6%.
The level of *Puccinia triticina/ Puccinia recondita* infection present on the Joker winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Joker winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure. Minor phytotoxicity symptoms (chlorosis) recorded at the first assessment Low temperatures during the application period may have contributed to the phytotoxic effect.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 26.06.2023 in BBCH 75 of development of winter wheat). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina/ Puccinia recondita* and demonstrated efficacy of 66.4-89.2% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (89.2-90.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (72.5%) and TORES 250 EC (89.2%).

TRIAL 63 F/2023

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Randomized bocks
	Plot size	15.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape

	Varieties per crop	Patras
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 33 04.05.2023 Application B: BBCH 45 25.05.2023
	Number of applications Intervals between applications	2 applicatio Application A: 04.05.2023 Application B: 25.05.2023 Interwal between applications: 21 days
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,protein content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 25.05.2023 (BBCH 45), 09.6.2023 (BBCH 65), 20.06.2023 (BBCH 71-73), 26.06.2023 (BBCH 75). Phytotoxicity evaluation: 11.05.2023 (BBCH 33-37), 18.05.2023 (BBCH 39), 01.06.2023(BBCH 59), 09.06.2023 (BBCH 65) Gree leaf area: 01.07.2023 (BBCH 75-85) Yield evaluation: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.5
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tobak winter wheat caused by *Puccinia triticina/ Puccinia recondita*, type of fungi, which are the agents of brown rust of wheat was at high level in the control and reached 11.3.
Weather conditions in autumn 2022 were favourable for proper emergence and development of winter wheat. October and the first decade of November were warm with little rainfall. Active plant growth stopped in the third decade of November. Winter was mild with occasional snowfall. Vegetation started again in the third decade of March. Winter wheat plants of Patras cultivar overwintered very well. The spring of 2023 was dry and cool. The weather course in spring did not favour the development of fungal pathogens on leaves
There was no phytotoxic effect on winter wheat plants cultivar Patras, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC. A significant increase of green leaf area (GLA) was observed after application of test fungicide SNS-F-11 at doses of 1,3 l/ha, 1,0 l/ha and standard products of PORTER 250 EC and TORES 250 EC in relation to the control plots. The application of products SNS-F-11 and PORTER 250 EC, regardless of the applied dose, did not significantly affect the quantity and quality (thousand kernel weight, protein content) of winter wheat cultivar Patras yield.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 26.06.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina/ Puccinia recondita* and demonstrated efficacy of 69.0-87.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (82.0-87.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (85.0%) and TORES 250 EC (75.0%)

WINTER WHEAT

Parastagonospora nodorum (LEPTNO)

A total 5 trials were carried out to evaluated of SNS-F-11 for the control of LEPTNO in winter wheat. Efficacy data of LEPTNO are presented in 5 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL SGS/2022/069/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	30 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Lavantus
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 37 Application B: BBCH 51-55
	Number of applications Intervals between applications	2 applications: A BBCH 32-33 12.05.2022 B BBCH 39-41 01.06.2022 Interwal between applications: 20 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 08.07.2022 (BBCH 75-77) Phytotoxicity evaluation: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63) Vigour of plant: 23.05.2022 (BBCH 37-39), 01.06.2022 (BBCH 39-41), 20.06.2022 (BBCH 59-63). Green leaf area: 08.07.2022 (BBCH 75-77) Yield evaluation: 01.08.2022 (BBCH 99) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 01.08.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 4.8
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Chojnice, prov. Pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Lavantus winter wheat caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of wheat was at high level in the control and reached 27.5%.
The level of *Parastagonospora nodorum* infection present on the Lavantus winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Lavantus winter wheat crop. There were no negative impact of tested product as well

as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 24.06.2022 in BBCH 75 of development of winter wheat).
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 08.07.2022 in BBCH 75-77 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 41.7-88.8% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (85.4-88.8%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (84.6%) and TORES 250 EC (85.4%).

TRIAL SGS/2022/069/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/026 (4)
Experimental design	Plot design	Complete Block
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Opoka
	Sowing period	06.10.2021
Application	Crop stage (BBCH)* at application	Application A: BBCH 30-31 Application B: BBCH 55-56
	Number of applications Intervals between applications	2 applications: A BBCH 30-31 27.04.2022 B BBCH 55-56 31.05.2022 Interwal between applications: 34 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 27.06.2022 (BBCH 75). Phytotoxicity evaluation: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Vigour of plant: 10.05.2022 (BBCH 32-37), 31.06.2022 (BBCH 55-56), 16.06.2022 (BBCH 65-67) Green leaf area: 07.07.2022 (BBCH 75-85) Yield evaluation: 27.07.2022 (BBCH 89) Assesment of TGW: 01.08.2022 (BBCH 99) Moisture content: 27.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Żnin, prov. Kujawko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Opoka winter wheat caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of wheat was at high level in the control and reached 15.0 %.
The level of *Parastagonospora nodorum* infection present on the Opoka winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Opoka winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, moisture content and green leaf area. There were no statistical differences between tested product and reference standard in the case of thousand grain weight measure. The second application was performed after more than 21 days after firs application (34 days later) due to weather conditions.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 27.06.2022 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 50.0-80.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (80.0-80.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (80.0%) and TORES 250 EC (80.0%).

TRIAL SGS/2023/041/PL05

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Euforia
	Sowing period	24.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 25.04.2023 B BBCH 37, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47), 23.06.2023 (BBCH 73-75) Phytotoxicity evaluation: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47),

		Vigour of plant: 05.05.2023 (BBCH 31-32), 16.05.2023 (BBCH 37), 30.05.2023 (BBCH 45-47) Green leaf area: 28.06.2023 (BBCH 75-77) Yield evaluation: 15.08.2023 (BBCH 89) Assesment of TGW: 18.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Euforia winter wheat caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of wheat was at high level in the control and reached 10.0 %.
The level of *Parastagonospora nodorum* infection present on the Euforia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Euforia winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, moisture content and green leaf area. There were also statistical differences between tested product and reference standard and control field in the case of thousand grain weight measure.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 73- 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 95.0-100.0% The test treatment SNS-F-11 applied at the rate between 0.8-1.3 L/ha provided high (95.0-100.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (97.5%) and TORES 250 EC (97.5%).

TRIAL SGS/2023/041/PL06

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	36.0 m²
	Number of replications	4
Crop	Trials per crop	Winter wheat
	Varieties per crop	Arkadia
	Sowing period	06.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 47-51
	Number of applications Intervals between	2 applications: A BBCH 32-33, 08.05.2023 B BBCH 47-51, 29.05.2023

	applications	Interwal between applications: 21 days
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH61), 03.07.2023 (BBCH 75), 14.07.2023 (BBCH 77-83) Phytotoxicity evaluation: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Vigour of plant: 18.05.2023 (BBCH 37), 29.05.2023 (BBCH 47-51), 12.06.2023 (BBCH 61) Green leaf area: 14.07.2023 (BBCH 77-85) Yield evaluation: 11.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 11.08.2023(BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamień Krajeński, prov. Kujawsko - pomorskie

The trial was set up in the north-central part of Poland.
The level of infection of the Arkadia winter wheat caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of wheat was at high level in the control and reached 12.5%.
The level of *Parastagonospora nodorum* infection present on the Arkadia winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Arkadia winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 14.07.2023 in BBCH 77-83 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 85.0-97.5% The test treatment SNS-F-11 applied at the rate between 0.8-1.3 L/ha provided high (85.0-97.5%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (96.3%) and TORES 250 EC (92.5%).

TRIAL SGS/2023/041/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	27.0 m²
	Number of replications	4

Crop	Trials per crop	Winter wheat
	Varieties per crop	Yukon
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 09.05.2023 Interwal between applications: 19 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53), 03.07.2023 (BBCH 75). Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Vigour of plant: 01.05.2023 (BBCH 33-37), 09.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-53) Green leaf area: 13.07.2023 (BBCH 77-83) Yield evaluation: 14.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 14.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Nidzica, prov. Warmińsko-mazurskie

The trial was set up in the north-east part of Poland.
The level of infection of the Yukon winter wheat caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of wheat was at high level in the control and reached 12.5%.
The level of *Parastagonospora nodorum* infection present on the Yukon winter wheat was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Yukon winter wheat crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields between tested product and reference standard in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter wheat (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 75 of development of winter wheat).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 87.5-95.8% The test treatment SNS-F-11 applied at the rate between 0.8-1.3 L/ha provided high (87.5-95.8%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (94.2%) and TORES 250 EC (91.7%).

WINTER RAPE

Leptosphaeria maculans (LEPTMA)

A total 7 trials were carried out to evaluated of SNS-F-11 for the control of LEPTMA in winter rape.
Efficacy data of LEPTMA are presented in 7 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL 100 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	20.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Alibaba
	Sowing period	28.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 31
	Number of applications Intervals between applications	Application BBCH 31: 07.04.2022
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,oil content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 28.04.2022 (BBCH 57-59), 14.06.2022 (BBCH 81-85) Phytotoxicity evaluation: 14.04.2022 (BBCH 33-39), 28.04.2022 (BBCH 57-59), 14.06.2022 (BBCH 81-83), Oil content: 27.07.2022 (BBCH 99) Yield evaluation: 20.07.2022 (BBCH 99) Assesment of TGW: 25.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was set up in the south-west part of Poland.
The level of infection of the Alibaba winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 9.1%.
The level of *Leptosphaeria maculans* infection present on the present on the Alibaba winter rape was sufficient to perform efficacy assessment for the test treatments.
The weather conditions during the trial were not typical for the region. Low rainfall in October and November (below the long-term average) combined with lower temperatures resulted in a low infestation of plants by *Leptosphaeria maculans* in the autumn. Warm winter and sufficient humidity meant that the fungus could develop during this time.
There was no phytotoxic effect, on winter oilseed rape plants cultivar Architekt, observed in the plots

treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC
Tested fungicide SNS-F-11 (90 EC) and the standard products PORTER 250 EC and TORES 250 EC significantly inhibited the development of *Leptosphaeria maculans* on winter oilseed rape leaves and stems regardless of the dose used. An increase in efficacy of the fungicide SNS-F-11 was observed with the increase in the applied dose.
On the plots treated with the fungicide SNS-F-11 (90 EC) in two higher doses, a significant increase in yield and an increase in the weight of one thousand seeds was observed in relation to the untreated plots.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 81-85 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 28.04.2022 in BBCH 81-85 of development of winter rape).

Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 32.0-92.0%. The test treatment SNS-F-11 applied at the rate of 0.98 L/ha to 1.12 L/ha provided high (88.0 – 92.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (86.0%) as well as TORES 250 EC (73.0%).

TRIAL SGS/2022/070/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Complete Block
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Exotter
	Sowing period	21.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 32-33
	Number of applications Intervals between applications	Application BBCH 32-33: 14.04.2022
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 06.06.2022 (BBCH 77-79), 01.07.2022 (BBCH 84-87) Phytotoxicity evaluation: 28.04.2022 (BBCH 55-57), 12.05.2022 (BBCH 65-67) Oil content: 01.08.2022 (BBCH 99) Yield evaluation: 14.07.2022 (BBCH 89) Moisture content: 14.07.2022 (BBCH 89)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Żnin, prov. Kujawsko-pomorskie

The trial was set up in north-central part of Poland.
The level of infection of the Exotter winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 22.8% (17.8% stem and 27.8% leaf).
The level of *Leptosphaeria maculans* infection present on the present on the Exotter winter rape was sufficient to perform efficacy assessment for the test treatments.
All trial treatments had good control of LEPTMA on leaves (83.3-85.3%). Test product SNS-F-11 at 0.98 and 1.12 L/ha had slightly better efficacy results (80.3-83.3%) than both references (74.4-76%) in control LEPTMA on stem before harvest. No phytotoxicity symptoms recorded.
Excluding SNS-F-11 at low rate 0.7 L/ha all treatments has significantly increased a total yield. All treatments increased oil content results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content and oil content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 84-87 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 01.07.2022 in BBCH 84-87 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 59.1 – 84.3%. The test treatment SNS-F-11 applied at the rate of 0.98 L/ha to 1.12 L/ha provided high (82.8-84.3%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (79.9%) as well as TORES 250 EC (80.7%).

TRIAL SGS/2022/070/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Complete Block
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	SY Ilona
	Sowing period	03.09.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 35-50
	Number of applications Intervals between applications	Application BBCH 35-50: 13.04.2022
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 01.06.2022 (BBCH 77-79), 27.06.2022 (BBCH 75) Phytotoxicity evaluation: 27.04.2022 (bbch 53-55), 12.05.2022 (BBCH 53-55) Oil content: 19.07.2022 (BBCH 89) Yield evaluation: 19.07.2022 (BBCH 89)

		Moisture content: 19.07.2022 (BBCH 89)
Other relevant information	Soil type, pH	Silt loam, pH 6.6
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Strzelin, prov. Dolnoslaskie

The trial was set up in the west part of Poland.
The level of infection of the SY Ilona winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 20.4% (15.8% stem and 25.0% leaf).
The level of *Leptosphaeria maculans* infection present on the present on the SY Ilona winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield and oil content results in comparison to untreated. The best yielded treatments was test product SNS-F-11 at 0.98 and 1.12L/ha. All treatments increased oil content results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content. No phytotoxicity symptoms recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 27.06.2022 in BBCH 75 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 49.7% - 89.7%. The test treatment SNS-F-11 applied at the rate of 1.12 L/ha provided high (89.7%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (82.7%) as well as TORES 250 EC (83.3%).

TRIAL 31 F/2023

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Complete Block
	Plot size	20.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Architekt
	Sowing period	30.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 32-33
	Number of applications Intervals between applications	Application BBCH 32-33: 11.04.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, oil content, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 25.04.2023 (BBCH 57), 21.06.2023 (BBCH 83) Phytotoxicity evaluation: 18.04.2023 (BBCH 39), 25.04.2023 (BBCH 57)

		Oil content: 26.07.2023 (BBCH 99) Yield evaluation: 21.07.2023 (BBCH 99) TGW content: 26.07.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 5.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was located in the south-west of Poland.
The level of infection of the Architekt winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 27.75%.
The level of *Leptosphaeria maculans* infection present on the present on the Architekt winter rape was sufficient to perform efficacy assessment for the test treatments.
The weather conditions during the trial were not typical for the region.
The weather conditions in the autumn of 2022 were favourable for proper emergence of plants. During the autumn vegetation period from the second decade of October to the third decade of November, rainfall was clearly lower than the long-term average. At the same time, temperatures exceeded the long-term average. The winter oilseed rape entered dormancy period in good condition. The winter was mild, with weak the snow cover. Plants have been wintering in very good condition. The average temperatures in winter and early spring exceeded the long-term temperatures. The third decade of April and the first decade of May is a period of low temperatures and low rainfall.
There was no phytotoxic effect, on winter oilseed rape plants cultivar Architekt, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products PORTER 250 EC and TORES 250 EC.
In all experimental treatments with fungicide protection, the yield of winter oilseed rape seeds was at a similar level and was significantly higher than in the untreated. In the conditions of the experiment, no effect of the applied fungicide protection on the weight of thousand seed weight was noted.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 83 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 21.06.2023 in BBCH 83 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 53.0-65.0%. The test treatment SNS-F-11 applied at the rate of 0 1.12 L/ha provided medium (65.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (79.0%) as well as TORES 250 EC (79.0%).

TRIAL SGS/2023/042/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), 1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Absolut
	Sowing period	27.08.2022

Application	Crop stage (BBCH)* at application	Application: BBCH 32-33
	Number of applications Intervals between applications	Application BBCH 32-33: 20.04.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 02.05.2023 (BBCH 55-57), 30.05.2023 (BBCH 65-67) Phytotoxicity evaluation: 18.05.2023 (BBCH 65-67), 14.06.2023 (BBCH 76-77) Oil content: 08.08.2023 (BBCH 99) Yield evaluation: 08.08.2023 (BBCH 99) Moisture content: 08.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Nidzica, prov. Warmińsko-mazurskie

The trial was set up in the northern-east part of Poland.
The level of infection of the Absolut winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 32.5% for leaf evaluation.
The level of *Leptosphaeria maculans* infection present on the present on the Absolut winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield and oil content results in comparison to untreated . The best yielded treatments was test product SNS-F-11 at 1.0 and 1.15 L/ha. All treatments increased oil content results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 65-67 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 30.05.2023 in BBCH 65-67 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 73.2 – 90.2%. The test treatment SNS-F-11 applied at the rate of 1.0 to 1.15 L/ha provided high (90.2 – 90.2%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (65.7%) as well as TORES 250 EC (84.0%).

TRIAL SGS/2023/042/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized Complete Block (RBC)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Sienna

	Sowing period	01.09.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 33-35
	Number of applications Intervals between applications	Application BBCH 33-35: 12.04.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, moisture content, oil content, yield evaluation
	Assessment dates	Efficacy evaluation: 26.04.2023 (BBCH 60-61), 16.05.2023 (BBCH 65-67) Phytotoxicity evaluation: 26.04.2023 (BBCH 60-61), 16.05.2023 (BBCH 65-67) Oil content: 25.07.2023 (BBCH 99) Yield evaluation: 25.07.2023 (BBCH 99) Moisture content: 25.07.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silt loam, pH 5.8
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Strzelin, prov. Dolnoslaskie

The trial was set up in the west part of Poland.
The level of infection of the Sienna winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 68.8% for leaf.
The level of *Leptosphaeria maculans* infection present on the present on the Sienna winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content and oil content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 65-67 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 16.05.2023 in BBCH 65-67 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 40.7% - 88.7% The test treatment SNS-F-11 applied at the rate of 1.0 to 1.15 L/ha provided high (81.2-88.7%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (41.7%) as well as TORES 250 EC (89.5%).

TRIAL SGS/2023/042/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape

	Varieties per crop	Derrick
	Sowing period	19.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 32-39
	Number of applications Intervals between applications	Application: 12.04.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, moisture content, oil content, yield evaluation
	Assessment dates	Efficacy evaluation: 26.04.2023 (BBCH 51), 15.05.2023 (BBCH 65) Phytotoxicity evaluation: 26.04.2023 (BBCH 51), 15.05.2023 (BBCH 65) Oil content: 16.08.2023 (BBCH 99) Yield evaluation: 15.08.2023 (BBCH 89) Moisture content: 15.08.2023 (BBCH 89)
Other relevant information	Soil type, pH	Sandy loam, pH 6.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Kamień Krajeński, prov. Kujawsko-pomorskie

The trial was set up in north-central part of Poland.
The level of infection of the Derrick winter rape caused by *Leptosphaeria maculans*, type of fungi, which are the agents of phoma leaf spot was at high level in the control and reached 28.2% for leaf.
The level of *Leptosphaeria maculans* infection present on the present on the Derrick winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content and oil content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 65 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 15.05.2023 in BBCH 65 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Leptosphaeria maculans* and demonstrated efficacy of 81.5-93.8%. The test treatment SNS-F-11 applied at the rate of 1.0-1.15 L/ha provided high (90.6-93.8%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product PORTER 250 EC (72.1%) as well as TORES 250 EC (91.1%).

WINTER RAPE

***Sclerotinia sclerotiorum* (SCLESC)**

A total 8 trials were carried out to evaluated of SNS-F-11 for the control of SCLESC in winter rape.
Efficacy data of SCLESC are presented in 8 trials. All the trials were conducted in 2022 and 2023 in Poland.

TRIAL 334/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(3)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Complete Block
	Plot size	22.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Graf
	Sowing period	25.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 64
	Number of applications Intervals between applications	Application BBCH 64: 06.05.2022
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 31.05.2022 (BBCH 75), 29.06.2022 (BBCH 83-85) Phytotoxicity evaluation: 12.05.2022 (BBCH 67), 19.05.2022 (BBCH 69) Harvest, Moisture: 15.07.2022 (BBCH 89) Assessmet of weight 1000 seeds, hectoliter weight: 29.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy clay, pH 5.4
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Winna Góra, prov. Wielkopolskie

The trial was located in the south-west of Poland.
The plot was inoculated with *Sclerotinia sclerotiorum* in 21.04.2022. The level of infection of the Graf winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 35.0% (18.8% for leaf and 51.3% for stem).
The level of *Sclerotinia sclerotiorum* infection present on the present on the Graf winter rape was sufficient to perform efficacy assessment for the test treatments.
Based on the visual evaluation of the plants, no phytotoxic effects of the tested fungicides on oilseed winter cv Graf has been stated. All fungicides used in the experiment did not significantly affect the weight of 1000 seed, seed moisture, oil content increase them compared to the control. All tested fungicides significantly increased the yield of oilseed rape compared to the control object. No effect of tested product on adjacent crops and naturally occurring insects has been observed.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 83-85 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 29.06.2022 in BBCH 83-85 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 70.1-79.7%. The test treatment SNS-F-11 applied at the rate of 1.12 L/ha provided medium (79.7%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (81.1%) as well as DIFO 250 EC (77.7%).

TRIAL 101 F/2022

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(3)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Complete Block
	Plot size	20.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Architekt
	Sowing period	28.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 63-65
	Number of applications Intervals between applications	Application BBCH 63-65: 07.05.2022
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, oil content, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 21.05.2022 (BBCH 69-71), 20.06.2022 (BBCH 50-85) Phytotoxicity evaluation: 14.05.2022 (BBCH 65-67), 21.05.2022 (BBCH 69-71), 20.06.2022 (BBCH 81-83) Yield evaluation 10.07.2022 (BBCH 99) MTN evaluation 25.07.2022 (BBCH 99) Oil content 26.07.2022 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was located in the south-west of Poland.
The level of infection of the Architekt winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 33.6% for leaf.
The weather conditions during the trial were not typical for the region. Spring 2022 was very cold with little rainfall. In the second decade of May and the first decade of June, rainfall was much higher than the long-term average, which, in combination with the inoculum accumulated in the soil, caused the development of *S. sclerotiorum*. During the assessment carried out within 2-4 weeks after application, the symptoms of *L. maculans* and *Alternaria* sp. were recorded on the leaves of winter oilseed rape. This infestation did not exceed 5% of the infected area. Infection by this pathogens was insufficient to assess the effectiveness of the fungicides tested. There was no phytotoxic effect, on winter oilseed rape plants cultivar Architekt, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products Difo 250 EC and Tores 250 EC. Tested fungicide SNS-F-11 and the standard products Difo 250 EC and Tores 250 EC significantly inhibited the development of *Sclerotinia sclerotiorum* on winter oilseed rape plants regardless of the dose used. An increase in efficacy of the fungicide SNS-F-11 was observed with the increase in the applied dose. On the plots treated with the SNS-F-11 fungicide, regardless of the dose applied, a significant increase in yield and an increase in the weight of one thousand seeds was observed in relation to the control plots. The oil

content in winter oilseed rape seeds variety Architekt was at the same level of statistical significance in all experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 50-85 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 20.06.2022 in BBCH 50-85 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 57.0-81.0%. The test treatment SNS-F-11 applied at the rate of 1.12 L/ha provided medium (81.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (63.0%) as well as DIFO 250 EC (62.0%).

TRIAL SGS/2022/070/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Galileus
	Sowing period	24.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 61-63
	Number of applications Intervals between applications	Application BBCH 61-63: 13.05.2022
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, oil content
	Assessment dates	Efficacy evaluation: 25.07.2022 (BBCH 87-88) Phytotoxicity evaluation: 23.05.2022 (BBCH 65), 06.06.2022 (BBCH 69-71). Oil content: 08.08.2023 (BBCH 99) Yield evaluation: 08.08.2023 (BBCH 99) Moisture content: 08.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Chojnice, prov. Pomorskie

The trial was set up in the north of Poland.
The level of infection of the Galileus winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 25.0% for stem evaluation.
The level of *Sclerotinia sclerotiorum* infection present on the present on the Galileus winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield and oil content results in comparison to untreated. All treatments

increased oil content results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of moisture content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 87-88 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 25.07.2022 in BBCH 87-88 of development of winter rape).

Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 55.0-84.0%. The test treatment SNS-F-11 applied at the rate of 0.98 to 1.12 L/ha provided high (81.0-84.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (77.0%) as well as DIFO 250 EC (77.0%).

TRIAL SGS/2022/070/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Complete block
	Plot size	25.5 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Artemis
	Sowing period	25.08.2021
Application	Crop stage (BBCH)* at application	Application: BBCH 63-65
	Number of applications Intervals between applications	Application BBCH 63-65: 06.05.2022
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, oil content
	Assessment dates	Efficacy evaluation: 01.07.2022 (BBCH 83-85) Phytotoxicity evaluation: 16.05.2022 (BBCH 69-74), 07.06.2022 (BBCH 78-79) Oil content: 21.07.2022 (BBCH 89) Yield evaluation: 21.07.2022 (BBCH 89) Moisture content: 21.07.2022 (BBCH 89)
Other relevant information	Soil type, pH	Silt loam, pH 5.9
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Grodków, prov. Opolskie

The trial was set up in the north of Poland.
The level of infection of the Galileus winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 17.0% for stem evaluation.
The level of *Sclerotinia sclerotiorum* infection present on the present on the Galileus winter rape was

sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield and moisture content results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of oil content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 78-79 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 07.06.2023 in BBCH 78-79 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 0.98 L/ha and 1.12 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 64.6-86.7%. The test treatment SNS-F-11 applied at the rate of 0.98 to 1.12 L/ha provided high (85.2-86.7%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (76.3%) as well as DIFO 250 EC (80.7%).

TRIAL SGS/2023/043/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	27.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Bonanza
	Sowing period	24.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 63-65
	Number of applications Intervals between applications	Application: 04.05.2023
	Spray volumes	250 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, moisture content, yield evaluation, oil content
	Assessment dates	Efficacy evaluation: 15.06.2023 (BBCH 77-78), 30.06.2023 (BBCH 81-82), 10.07.2022 (BBCH 84-85) Phytotoxicity evaluation: 18.05.2023 (BBCH 67-69), 15.06.2023 (BBCH 77-78) Oil content: 25.07.2023 (BBCH 99) Yield evaluation: 25.07.2023 (BBCH 99) Moisture content: 25.07.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silt loam, pH 6.1
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov. Dolnośląskie

The trial was set up in the north of Poland.
The level of infection of the Bonanza winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 10.0% for pod evaluation.

The level of *Sclerotinia sclerotiorum* infection present on the present on the Bonanza winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of oil content and moisture content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 84-85 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 10.07.2022 in BBCH 84-85 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 55.0-80.6%. The test treatment SNS-F-11 applied at the rate of 1.15 L/ha provided high (80.6%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (89.9%) as well as DIFCOR 250 EC (83.8%).

TRIAL SGS/2023/043/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized complete block (RBC)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Memori CS
	Sowing period	29.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 63-64
	Number of applications Intervals between applications	Application: 04.05.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, moisture content, yield evaluation, oil content
	Assessment dates	Efficacy evaluation: 14.06.2023 (BBCH 76-77), 05.07.2023 (BBCH 83-85) Phytotoxicity evaluation: 18.05.2023 (BBCH 65-67), 14.06.2023 (BBCH 76-77) Oil content: 25.07.2023 (BBCH 99) Yield evaluation: 25.07.2023 (BBCH 99) Moisture content: 25.07.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silt loam, pH 7.1
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Wiazów, prov. dolnośląskie

The trial was set up in the north of Poland.
The level of infection of the Memori CS winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 12.8% for pod evaluation.
The level of *Sclerotinia sclerotiorum* infection present on the present on the Memori CS winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of oil content and moisture content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 83-85 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 05.07.2023 in BBCH 83-85 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 30.4-86.3%. The test treatment SNS-F-11 applied at the rate of 1.15 L/ha provided high (86.3%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (78.3%) as well as DIFCOR 250 EC (84.2%).

TRIAL SGS/2023/043/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/78 (3)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Alabama
	Sowing period	23.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 60-61
	Number of applications Intervals between applications	Application: 27.04.2023
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, moisture content, yield evaluation, oil content
	Assessment dates	Efficacy evaluation: 03.07.2023 (BBCH 83-87) Phytotoxicity evaluation: 03.05.2023 (BBCH 63-65), 25.05.2023 (BBCH 71-73) Oil content: 25.07.2023 (BBCH 99) Yield evaluation: 18.07.2023 (BBCH 83-87) Moisture content: 18.07.2023 (BBCH 83-87)
Other relevant information	Soil type, pH	Sandy loam, pH 7.4
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Żnin, prov. Kujawsko-pomorskie

The trial was set up in the north-central of Poland.
The level of infection of the Memori CS winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 14.3% for pod evaluation.
The level of *Sclerotinia sclerotiorum* infection present on the present on the Memori CS winter rape was sufficient to perform efficacy assessment for the test treatments.
All treatments has increased a total yield results in comparison to untreated. There were no statistical differences between treated plots as well as control field in the case of oil content and moisture content. No phytotoxicity symptoms was recorded.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 83-87 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 03.07.2023 in BBCH 83-87 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 43.5-80.3%. The test treatment SNS-F-11 applied at the rate of 1.15 L/ha provided high (80.3%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (71.6%) as well as DIFCOR 250 EC (71.5%).

TRIAL 32 F/2023

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(3)
	Specific guidelines	EPPO PP 1/78 (4)
Experimental design	Plot design	Complete Block
	Plot size	20.0 m²
	Number of replications	4
Crop	Trials per crop	Winter rape
	Varieties per crop	Hevelius
	Sowing period	30.08.2022
Application	Crop stage (BBCH)* at application	Application: BBCH 63
	Number of applications Intervals between applications	Application BBCH 63: 01.05.2023
	Spray volumes	300 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation, .moisture content, yield evaluation, oil content, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 22.06.2023 (BBCH 83) Phytotoxicity evaluation: 08.05.2023 (BBCH 65), 15.05.2023 (BBCH 67) Yield evaluation 20.07.2023 (BBCH 99) MTN evaluation 25.07.2023 (BBCH 99) Oil content 28.08.2023(BBCH 99)
Other relevant information	Soil type, pH	Loam, pH 6.0
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Łany Wielkie, prov. Śląskie

The trial was located in the south-west of Poland.
The level of infection of the Architekt winter rape caused by *Sclerotinia sclerotiorum*, type of fungi, which are the agents of cottony rot was at high level in the control and reached 26.3%.
The weather conditions during the trial were not typical for the region. The weather conditions in the autumn of 2022 were favourable for proper emergence of plants. During the autumn vegetation period from the second decade of October to the third decade of November, rainfall was clearly lower than the long-term average. At the same time, temperatures exceeded the long-term average. The winter oilseed rape entered dormancy period in good condition. The winter was mild, with weak the snow cover. Plants have been wintering in very good condition. The average temperatures in winter and early spring exceeded the long-term temperatures. The third decade of April and the first decade of May is a period of low temperatures and low rainfall.
There was no phytotoxic effect, on winter oilseed rape plants cultivar Hevelius, observed in the plots treated with the tested fungicide SNS-F-11, regardless of the applied dose nor the plots treated with standard products DIFCOR 250 EC and TORES 250 EC. In all treatments with the use of fungicide protection, a significant increase in yield and an increase in the weight of a thousand seeds was observed in relation to the untreated. Both yields and 1000 seed weights increased with the dose of the tested fungicide, and these values for the treatment using the highest dose of the tested fungicide SNS-F-11 were significantly higher than for the two lower doses. The oil content in winter oilseed rape seeds variety Hevelius was at the same level of statistical significance in all experimental treatments.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 83 of development of winter rape (last assessment of efficacy of SNS-F-11 and standard products was performed in 22.06.2023 in BBCH 83 of development of winter rape).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 0.7 L/ha, 1.0 L/ha and 1.15 L/ha provided significant control against the infection caused by *Sclerotinia sclerotiorum* and demonstrated efficacy of 63.0-86.0%. The test treatment SNS-F-11 applied at the rate of 1.12 L/ha provided medium (86.0%) efficacy against disease, which is significantly higher in comparison with the efficacy of the standard product TORES 250 EC (80.0%) as well as DIFCOR 250 EC (90.0%).

WINTER TRITICALE

Zymoseptoria tritici (SEPTTR)

A total 5 trials were carried out to evaluated of SNS-F-11 for the control of SEPTTR in winter triticale.
Efficacy data of SEPTTR are presented in 5 trials. All the trials were conducted in 2023 in Poland.

TRIAL SGS/2023/089/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete Block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Liborius
	Sowing period	10.10.2022

Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 19.04.2023 (BBCH 32-33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 30.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 18.07.2023 (BBCH 83-85) Yield evaluation: 24.08.2023 (BBCH 89) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.6
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.
The level of infection of the Liborius winter triticale caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of triticale was at high level in the control and reached 33.5%.
The level of *Zymoseptoria tritici* infection present on the Liborius winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Liborius winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75 -77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 40.4-93.1% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (86.0-93.1%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (76.6%) and TORES 250 EC (90.1.6%).

TRIAL SGS/2023/089/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Tadeus
	Sowing period	08.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 23.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 04.07.2023 (BBCH 75-83) Yield evaluation: 25.08.2023 (BBCH 99) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tadeus winter triticale caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of triticale was at high level in the control and reached 8.6%.
The level of *Zymoseptoria tritici* infection present on the Tadeus winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Tadeus winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy

of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 72.1-96.7% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (91.3-96.7%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (93.2%) and TORES 250 EC (95.6%).

TRIAL SGS2/023/089/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Rotondo
	Sowing period	27.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-51
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 21.04.2023 B BBCH 39-51, 16.05.2023 Interwal between applications: 25 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65), 21.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 05.05.2023(BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Vigour of plant: 05.05.2023 (BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Green leaf area: 30.06.2023 (BBCH 77-83) Yield evaluation: 15.08.2023 (BBCH 99) Assesment of TGW: 15.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silit loam, pH 6.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov.dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Rotondo winter triticale caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of triticale was at high level in the control and reached 16.4%.
The level of *Zymoseptoria tritici* infection present on the Rotondo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.

Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Rotondo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 21.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 63.6-93.3% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (85.6-93.3%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (86.5%) and TORES 250 EC (94.9%).

TRIAL SGS/2023/089/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RBC)
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Twingo
	Sowing period	20.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 25.04.2023 B BBCH 37-39, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023(BBCH 37-39), 30.05.2023 (BBCH 43-45), 27.06.2023 (BBCH 73-75) Phytotoxicity evaluation: 05.05.2023 (BBCH 32-37), 16.05.2023 (BBCH 37-39), 30.05.2023 (BBCH 43-45) Vigour of plant: 05.05.2023 (BBCH 32-37), 16.05.2023 (BBCH 37-39), 30.05.2023 (BBCH 43-45) Green leaf area: 07.07.2023 (BBCH 77-83) Yield evaluation: 12.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 12.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.8
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Gogółkowo, prov. Kujawsko-pomorskie

The trial was set up in the west part of Poland.
The level of infection of the Twingo winter triticale caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of triticale was at high level in the control and reached 12.9%.
The level of *Zymoseptoria tritici* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 73-75 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 27.06.2023 in BBCH 73-75 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 71.4-93.2% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (93.2-93.2%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (92.6%) and TORES 250 EC (93.2%).

TRIAL SGS/2023/089/PL05

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Medalion
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 08.05.2023 Interwal between applications: 18 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, .moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55), 04.07.2023 (BBCH 75-77) Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55) Vigour of plant: 01.05.2023 (BBCH 33-3), 08.05.2023 (BBCH 37-39),

		26.05.2023 (BBCH 51-55) Green leaf area: 04.07.2023 (BBCH 75-77) Yield evaluation: 03.08.2023 (BBCH 99) Assesment of TGW: 03.08.2023 (BBCH 99) Moisture content: 03.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy clay, pH 6.4
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Pielgrzymowo, prov. Warmińsko-Mazurskie

The trial was set up in the northern part of Poland.
The level of infection of the Twingo winter triticale caused by *Zymoseptoria tritici*, type of fungi, which are the agents of speckled leaf blotch of triticale was at high level in the control and reached 12.0%.
The level of *Zymoseptoria tritici* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content and yield.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 04.07.2023 in BBCH 75-77 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Zymoseptoria tritici* and demonstrated efficacy of 39.1-94.6% The test treatment SNS-F-11 applied at the rate 1.3 L/ha provided high (94.6%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (91.6%) and TORES 250 EC (91.9%).

WINTER TRITICALE

***Blumeria graminis tritici* (ERYSGT)**

A total 5 trials were carried out to evaluated of SNS-F-11 for the control of ERYSGT in winter triticale. Efficacy data of ERYSGT are presented in 5 trials. All the trials were conducted in 2023 in Poland.

TRIAL SGS/2023/089/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Liborius

	Sowing period	10.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 07.06.2023 (BBCH 65-67), 30.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 18.07.2023 (BBCH 83-85) Yield evaluation: 25.08.2023 (BBCH 99) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.6
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.
The level of infection of the Liborius winter triticale caused by *Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew was at high level in the control and reached 29.5%.
The level of *Blumeria graminis tritici* infection present on the Liborius winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Liborius winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis tritici* and demonstrated efficacy of 47.2-95.0% The test treatment SNS-F-11 applied at the rate 1.3 L/ha provided high (95.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (87.2%) and TORES 250 EC (93.3%).

TRIAL SGS/2023/089/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Tadeus
	Sowing period	08.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 23.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 04.07.2023 (BBCH 75-83) Yield evaluation: 25.08.2023 (BBCH 99) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tadeus winter triticale caused by *Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew was at high level in the control and reached 7.5%.
The level of *Blumeria graminis tritici* infection present on the Tadeus winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Tadeus winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy

of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis tritici* and demonstrated efficacy of 60.0-100.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (80.0-100.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (100.0%) and TORES 250 EC (100.0%).

TRIAL SGS/2023/089/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Rotondo
	Sowing period	27.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-51
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 21.04.2023 B BBCH 39-51, 16.05.2023 Interwal between applications: 25 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65), 21.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 05.05.2023 (BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Vigour of plant: 05.05.2023 (BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Green leaf area: 30.06.2023 (BBCH 77-83) Yield evaluation: 15.08.2023 (BBCH 99) Assesment of TGW: 15.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silit loam, pH 6.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov.dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Rotondo winter triticale caused by *Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew was at high level in the control and reached 5.8%.
The level of *Blumeria graminis tritici* infection present on the Rotondo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.

Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Rotondo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 21.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis tritici* and demonstrated efficacy of 79.6-97.9% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (93.8-97.9%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (93.7%) and TORES 250 EC (99.0%).

TRIAL SGS/2023/089/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Twingo
	Sowing period	20.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 25.04.2023 B BBCH 37-39, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023(BBCH 37-39), 30.05.2023 (BBCH 43-45), 27.06.2023 (BBCH 73-75), 07.07.2023 (BBCH 77-83) Phytotoxicity evaluation: 05.05.2023(BBCH 32-37), 16.05.2023 (BBCH 37-39), 30.05.2023 (BBCH 43-45) Vigour of plant: 05.05.2023 (BBCH 32-37), 16.05.2023 (BBCH 37-39), 06.06.2023 (BBCH 43-45) Green leaf area: 07.07.2023 (BBCH 77-83) Yield evaluation: 12.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 12.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.8
	Natural / artificial innoculation	natural

	Field / Greenhouse	Fields, Gogółkowo, prov. Kujawsko-pomorskie

The trial was set up in the west part of Poland.
The level of infection of the Twingo winter triticale caused by *Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew was at high level in the control and reached 30.2%.
The level of *Blumeria graminis tritici* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 77-83 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 07.07.2023 in BBCH 77-83 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis tritici* and demonstrated efficacy of 81.0-93.6%. The test treatment SNS-F-11 applied at the rate between 0.8-1.3 L/ha provided high (81.0-93.6%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (91.5%) and TORES 250 EC (91.2%).

TRIAL SGS/2023/089/PL05

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Medalion
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 08.05.2023 Interwal between applications: 18 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55), 04.07.2023 (BBCH 75-77) Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55)

		Vigour of plant: 01.05.2023 (BBCH 33-3), 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55) Green leaf area: 04.07.2023 (BBCH 75-77) Yield evaluation: 03.08.2023 (BBCH 99) Assesment of TGW: 03.08.2023 (BBCH 99) Moisture content: 03.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy clay, pH 6.4
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Pielgrzymowo, prov. Kujawsko-pomorskie

The trial was set up in the north part of Poland.
The level of infection of the Twingo winter triticale caused by *Blumeria graminis tritici*, type of fungi, which are the agents of powdery mildew was at high level in the control and reached 19.4%.
The level of *Blumeria graminis tritici* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content and yield.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 04.07.2023 in BBCH 75-77 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Blumeria graminis tritici* and demonstrated efficacy of 55.9-94.9% The test treatment SNS-F-11 applied at the rate 1.3 L/ha provided high (94.9%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (95.0%) and TORES 250 EC (94.8%).

WINTER TRITICALE

***Puccinia triticina/Puccinia recondita* (PUCCRT/PUCCRE)**

A total 3 trials were carried out to evaluated of SNS-F-11 for the control of PUCCRT/PUCCRE in winter triticale.
Efficacy data of PUCCRT/PUCCRE are presented in 3 trials. All the trials were conducted in 2023 in Poland.

TRIAL SGS/2023/089/PL01

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	30.0 m²
	Number of replications	4

Crop	Trials per crop	Winter triticale
	Varieties per crop	Liborius
	Sowing period	10.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 07.06.2023 (BBCH 65-67), 30.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 18.07.2023 (BBCH 83-85) Yield evaluation: 25.08.2023 (BBCH 99) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.6
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.

The level of infection of the Liborius winter triticale caused by *Puccinia triticina,* type of fungi, which are the agents of brown rust was at high level in the control and reached 20.0%.

The level of *Puccinia triticina* infection present on the Liborius winter triticale was sufficient to perform efficacy assessment for the test treatments.

The experiment found that the tested product had no effect on other harmful organisms.

Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Liborius winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.

Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 30.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.

Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina* and demonstrated efficacy of 92.2-100.0% The test treatment SNS-F-11 applied at the rate 0.8 to 1.3 L/ha provided high (92.2-100.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (97.1%) and TORES 250 EC (99.1%).

TRIAL SGS/2023/089/PL02

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized complete block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Tadeus
	Sowing period	08.10.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 19.04.2023 B BBCH 37-39, 18.05.2023 Interwal between applications: 29 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67), 23.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Vigour of plant: 02.05.2023 (BBCH 33), 18.05.2023 (BBCH 37-39), 07.06.2023 (BBCH 65-67) Green leaf area: 04.07.2023 (BBCH 75-83) Yield evaluation: 25.08.2023 (BBCH 99) Assesment of TGW: 25.08.2023 (BBCH 99) Moisture content: 25.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 7.2
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Rzymiany, prov.opolskie

The trial was set up in the south-west part of Poland.
The level of infection of the Tadeus winter triticale caused by *Puccinia triticina,* type of fungi, which are the agents of brown rust was at high level in the control and reached 6.1%
The level of *Puccinia triticina* infection present on the Tadeus winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Tadeus winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 23.06.2023 in BBCH 75-77 of development of win-

ter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina* and demonstrated efficacy of 86.3-100.0% The test treatment SNS-F-11 applied at the rate between 0.8-1.3 L/ha provided high (86.3-100.0%) efficacy against disease, which matched the efficacy of the standard product POR-TER 250 EC (100.0%) and TORES 250 EC (100.0%).

TRIAL SGS/2023/089/PL03

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	21.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Rotondo
	Sowing period	27.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 39-51
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 21.04.2023 B BBCH 39-51, 16.05.2023 Interwal between applications: 25 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65), 21.06.2023 (BBCH 75-77) Phytotoxicity evaluation: 05.05.2023 (BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Vigour of plant: 05.05.2023 (BBCH 37-39), 16.05.2023 (BBCH 39-51), 06.06.2023 (BBCH 63-65) Green leaf area: 30.06.2023 (BBCH 77-83) Yield evaluation: 15.08.2023 (BBCH 99) Assesment of TGW: 15.08.2023 (BBCH 99) Moisture content: 15.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Silit loam, pH 6.3
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Oława, prov.dolnośląskie

The trial was set up in the west part of Poland.
The level of infection of the Rotondo winter triticale caused by *Puccinia triticina*, type of fungi, which are the agents of brown rust was at high level in the control and reached 12.5%
The level of *Puccinia triticina* infection present on the Rotondo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any ad-

verse effect on the Rotondo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 21.06.2023 in BBCH 75-77 of development of winter triticale). The deviation from the assumed interval of 14-21 days was caused by weather conditions and the later date of the plant entering the appropriate BBCH phase.
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Puccinia triticina* and demonstrated efficacy of 58.4-94.2% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (88.4-94.2%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (90.4%) and TORES 250 EC (97.1%).

WINTER TRITICALE

***Parastagonospora nodorum* (LEPTNO)**

A total 2 trials were carried out to evaluated of SNS-F-11 for the control of LEPTNO in winter triticale. Efficacy data of LEPTNO are presented in 2 trials. All the trials were conducted in 2023 in Poland.

TRIAL SGS/2023/089/PL04

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	22.5 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Twingo
	Sowing period	20.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 31-32 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 31-32, 25.04.2023 B BBCH 37-39, 16.05.2023 Interwal between applications: 21 days
	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 16.05.2023(BBCH 37-39), 30.05.2023 (BBCH 43-45), 27.06.2023 (BBCH 73-75), 07.07.2023 (BBCH 77-83) Phytotoxicity evaluation: 05.05.2023(BBCH 32-37), 16.05.2023 (BBCH 37-39), 30.05.2023 (BBCH 43-45) Vigour of plant: 05.05.2023 (BBCH 32-37), 16.05.2023 (BBCH 37-39),

		06.06.2023 (BBCH 43-45) Green leaf area: 07.07.2023 (BBCH 77-83) Yield evaluation: 12.08.2023 (BBCH 99) Assesment of TGW: 14.08.2023 (BBCH 99) Moisture content: 12.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy loam, pH 6.8
	Natural / artificial innoculatio	natural
	Field / Greenhouse	Fields, Gogółkowo, prov. Kujawsko-pomorskie

The trial was set up in the west part of Poland.
The level of infection of the Twingo winter triticale caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of triticale was at high level in the control and reached 10.0%.
The level of *Parastagonospora nodorum* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case of yield, TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 77-83 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 07.07.2023 in BBCH 77-83 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 70.0-90.0% The test treatment SNS-F-11 applied at the rate between 1.0-1.3 L/ha provided high (90.0-90.0%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (90.0%) and TORES 250 EC (80.0%).

TRIAL SGS/2023/089/PL05

Guidelines	General guidelines	EPPO PP 1/152(4), PP 1/181(4), PP 1/135(4), PP 1/225(2)
	Specific guidelines	EPPO PP 1/26 (4)
Experimental design	Plot design	Randomized Complete Block (RCB)
	Plot size	30.0 m²
	Number of replications	4
Crop	Trials per crop	Winter triticale
	Varieties per crop	Medalion
	Sowing period	26.09.2022
Application	Crop stage (BBCH)* at application	Application A: BBCH 32-33 Application B: BBCH 37-39
	Number of applications Intervals between applications	2 applications: A BBCH 32-33, 20.04.2023 B BBCH 37-39, 08.05.2023 Interwal between applications: 18 days

	Spray volumes	200 L/ha
Assessment	Assessment types	Efficacy evaluation, phytotoxicity evaluation,vigour of plant, moisture content, yield evaluation, thousand grain weight (TGW)
	Assessment dates	Efficacy evaluation: 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55), 04.07.2023 (BBCH 75-77) Phytotoxicity evaluation: 01.05.2023 (BBCH 33-37), 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55) Vigour of plant: 01.05.2023 (BBCH 33-3), 08.05.2023 (BBCH 37-39), 26.05.2023 (BBCH 51-55) Green leaf area: 04.07.2023 (BBCH 75-77) Yield evaluation: 03.08.2023 (BBCH 99) Assesment of TGW: 03.08.2023 (BBCH 99) Moisture content: 03.08.2023 (BBCH 99)
Other relevant information	Soil type, pH	Sandy clay, pH 6.4
	Natural / artificial innoculation	natural
	Field / Greenhouse	Fields, Pielgrzymowo, prov. Kujawsko-pomorskie

The trial was set up in the north part of Poland.
The level of infection of the Twingo winter triticale caused by *Parastagonospora nodorum*, type of fungi, which are the agents of glume blotch of triticale was at high level in the control and reached 11.3%.
The level of *Parastagonospora nodorum* infection present on the Twingo winter triticale was sufficient to perform efficacy assessment for the test treatments.
The experiment found that the tested product had no effect on other harmful organisms.
Neither the test treatment SNS-F-11 applied at any of the test rates nor the reference product had any adverse effect on the Twingo winter triticale crop. There were no negative impact of tested product as well as reference standards in the case of vegetative vigour. The significant statistical difference was demonstrated between the control field and the fields where tested product and reference standard were applied in the case TGW and green leaf area. There were no statistical differences between tested product and reference standard and control field in the case of moisture content and yield.
Application of tested product and standards were performed in spring. The experiment confirmed protection against the pest until the BBCH 75-77 of development of winter triticale (last assessment of efficacy of SNS-F-11 and standard products was performed in 04.07.2023 in BBCH 75-77 of development of winter triticale).
Under the condition of the trial, the test treatment SNS-F-11 applied at rates of 1.3 L/ha, 1.0 L/ha and 0.8 L/ha provided significant control against the infection caused by *Parastagonospora nodorum* and demonstrated efficacy of 64.2-90.8% The test treatment SNS-F-11 applied at the rate 1.3 L/ha provided high (90.8%) efficacy against disease, which matched the efficacy of the standard product PORTER 250 EC (90.8%) and TORES 250 EC (87.5%).

The summarize of all results (efficacy) in each trials, as well as, the average efficacy calculate based on available results for each doses for all pests as well as crop are presented in the table 3.2-11, 3.2-21.

Winter wheat/SEPTTR

Table 3.2-11: Efficacy of SNS-F-11 in efficacy trials on SEPTTR in winter wheat.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)					
			SNS-F-11			PORTER 250 EC	TORES 250 EC	
			Dose (L/ha)					
			1.3	1	0.8	0.6	0.6	0.5
332/2022	infected plant (efficacy %)	25.0	3.7 (85.5)	5.6 (77.3)	6.8 (72.7)	4.9 (80.2)	4.9 (81.6)	
333/2022	infected plant (efficacy %)	15.8	2.7 (84.8)	3.4 (81.1)	4.0 (77.4)	2.9 (83.0)	2.7 (83.5)	
119 F/2022	infected plant (efficacy %)	5.0	1.0 (80.0)	1.1 (78.0)	1.8 (64.0)	0.3 (94.0)	1.1 (78.0)	
SGS/2022/069/PL01	infected plant (efficacy %)	15.7	1.8 (93.0)	2.7 (88.7)	9.0 (47.1)	2.5 (89.8)	2.5 (89.2)	
SGS/2022/069/PL02	infected plant (efficacy %)	28.8	4.5 (85.8)	4.6 (85.0)	10.2 (66.7)	4.3 (86.2)	4.5 (84.3)	
SGS/2022/069/PL03	infected plant (efficacy %)	34.5	3.2 (94.9)	5.5 (89.9)	14.3 (62.8)	3.3 (85.0)	3.6 (94.3)	
SGS/2022/069/PL04	infected plant (efficacy %)	31.8	2.6 (94.7)	5.8 (89.1)	16.7 (54.4)	3.2 (92.8)	2.4 (94.3)	
319/2023 (SF23PZ302W)	infected plant (efficacy %)	17.2	3.1 (81.0)	4.1 (75.8)	6.3 (63.3)	3.9 (77.8)		4.9 (72.0)
SGS/2023/041/PL05	infected plant (efficacy %)	11.4	1.0 (94.6)	1.3 (92.3)	3.7 (76.4)	1.5 (93.1)		1.5 (92.7)
323/2023 (SF23PZ309Z)	infected plant (efficacy %)	10.3	2.8 (73.8)	4.0 (62.3)	4.9 (52.0)	2.9 (72.5)		3.4 (67.8)
SGS//2023/041/PL06	infected plant (efficacy %)	7.8	0.6 (94.6)	1.0 (89.8)	2.1 (71.7)	0.8 (91.2)		0.7 (92.4)
63 F/2023	infected plant (efficacy %)	16.3	5.0 (69.2)	6.3 (62.2)	8.9 (45.7)	5.1 (67.8)		5.3 (68.0)
SGS/2023/041/PL01	infected plant (efficacy %)	15.4	1.2 (92.2)	2.9 (81.3)	5.4 (58.0)	2.4 (84.8)		2.3 (85.7)
SGS/2023/041/PL02	infected plant (efficacy %)	14.6	1.1 (93.7)	2.2 (87.4)	4.9 (67.4)	2.2 (85.7)		0.8 (95.6)
SGS/2023/041/PL04	infected plant (efficacy %)	30.3	2.3 (94.9)	3.6 (89.8)	8.4 (78.6)	10.6 (69.4)		3.3 (93.0)

324/2023 (SF23PZ310Z)	infected plant (efficacy %)	8.1	2.4 (72.0)	2.6 (68.5)	3.3 (58.4)	1.6 (76.3)		1.7 (74.4)
Average efficacy			**87.1**	**82.7**	**64.1**	**83.3**	**85.5**	**86.8**

A total of 16 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Zymoseptoria tritici* on winter wheat. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.6 L/ha and with registered rate – 0.5 L/ha was used as standard. In trials performed in 2022, TORES 250 EC was applied at the rate 0.6 L/ha, in 2023 the rate of TORES 250 EC was lower, in accordance with label – 0.5 L/ha. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.
Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control SEPTTR in winter wheat is 1.0 L/ha.

Winter wheat/ERYSGR/ERYSGT

Table 3.2-12: Efficacy of SNS-F-11 in efficacy trials on ERYSGR/ERYSGT in winter wheat.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)					
			SNS-F-11			PORTER 250 EC	TORES 250 EC	
			Dose (L/ha)					
			1.3	1	0.8	0.6	0.6	0.5
332/2022	infected plant (efficacy %)	13.0	3.0 (77.0)	5.0 (62.0)	5.0 (62.0)	3.5 (73.0)	3.0 (77.0)	
119 F/2022	infected plant (efficacy %)	17.8	4.5 (75.7)	6.9 (61.7)	7.6 (57.7)	6.2 (67.3)	5.0 (74.0)	
SGS/2022/069/PL01	infected plant (efficacy %)	8.6	0.1 (98.4)	0.9 (88.9)	3.3 (65.0)	0.3 (97.7)	0.6 (94.8)	
SGS/2022/069/PL02	infected plant (efficacy %)	7.8	0.5 (95.6)	0.5 (95.2)	2.6 (64.2)	0.5 (95.6)	0.5 (95.6)	
SGS/2022/069/PL03	infected plant (efficacy %)	17.7	1.8 (91.4)	1.7 (91.6)	5.6 (67.5)	2.6 (87.7)	1.7 (91.7)	
SGS/2022/069/PL04	infected plant (efficacy %)	13.9	0.4 (97.3)	1.1 (93.1)	5.8 (65.0)	0.6 (96.4)	0.6 (96.7)	
SF23PZ302W (Report 319/2023)	infected plant (efficacy %)	10.3	0.9 (91.5)	1.9 (82.0)	2.8 (73.3)	1.4 (86.5)		0.7 (93.5)
SGS/2023/041/PL05	infected plant (efficacy %)	23.3	1.3 (97.3)	1.9 (94.2)	5.9 (77.5)	1.7 (96.7)		1.7 (96.7)
SF23PZ309Z (Report 323/2023)	infected plant (efficacy %)	10.4	1.5 (85.7)	1.9 (81.0)	2.8 (72.7)	1.4 (87.0)		1.5 (85.3)
SGS/2023/041/PL06	infected plant (efficacy %)	12.8	1.1 (91.3)	1.7 (84.9)	3.3 (68.2)	1.5 (89.3)		1.4 (88.4)
SGS/2023/041/PL01	infected plant (efficacy %)	19.7	1.0 (96.3)	2.5 (87.3)	6.6 (67.3)	2.4 (89.9)		2.0 (91.4)
SF23PZ310Z (Report 324/2023)	infected plant (efficacy %)	9.2	2.2 (77.4)	2.5 (74.5)	3.0 (69.2)	1.9 (81.1)		2.1 (78.2)
Average efficacy			**92.4**	**86.5**	**66.9**	**90.0**	**92.0**	**89.2**

A total of 12 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Blumeria graminis tritici/ Blumeria graminis* on winter wheat. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.6 L/ha and with registered rate – 0.5 L/ha was used as standard. In trials performed in 2022, TORES 250 EC was applied at the rate 0.6 L/ha, in 2023 the rate of TORES 250 EC was lower, in accordance with label – 0.5 L/ha. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests. Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control ERYSGT/ERYSGR in winter wheat is 1.0 L/ha.

Winter wheat/PUCCRT/PUCCRE

Table 3.2-13: Efficacy of SNS-F-11 in efficacy trials on PUCCRT/PUCCRE in winter wheat.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)					
			SNS-F-11			PORTER 250 EC	TORES 250 EC	
			Dose (L/ha)					
			1.3	1	0.8	0.6	0.6	0.5
119 F/2022	infected plant (efficacy %)	9.5	1.2 (88.0)	2.0 (79.0)	2.5 (74.0)	1.4 (85.0)	0.9 (91.0)	
SGS/2022/069/PL04	infected plant (efficacy %)	9.2	0.3 (97.8)	0.3 (97.5)	3.8 (58.9)	0.7 (94.4)	0.3 (96.9)	
63 F/2023	infected plant (efficacy %)	11.3	1.4 (87.0)	2.1 (82.0)	3.6 (69.0)	1.8 (85.0)		2.8 (75.0)
SGS/2023/041/PL02	infected plant (efficacy %)	6.5	0.3 (95.0)	0.5 (93.8)	2.0 (67.5)	0.5 (91.9)		0.3 (96.9)
SGS/2023/041/PL04	infected plant (efficacy %)	9.6	1.2 (89.2)	1.1 (90.0)	3.4 (66.4)	2.7 (72.5)		1.2 (89.2)
Average efficacy			**92.3**	**90.8**	**65.2**	**84.7**	**95.5**	**87.9**

A total of 5 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Puccinia triticina/ Puccinia recondita* on winter wheat. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.6 L/ha and with registered rate – 0.5 L/ha was used as standard. In trials performed in 2022, TORES 250 EC was applied at the rate 0.6 L/ha, in 2023 the rate of TORES 250 EC was lower, in accordance with label – 0.5 L/ha. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.

Presented trials were performed in two vegetative season – 2022 and 2023. All efficacy results were consistent, clearly indicating high effectiveness of pest control. Trials performed in 2022 and 2023 were located in different parts of Poland, on various soils and varieties of winter wheat. Additionally, the active substance difenoconazole is well known to be highly effective in reducing *Puccinia triticina/ Puccinia recondite* fungi in winter wheat. Moreover, in accordance with Harmonization Meeting about effectiveness, there is the possibility to present reduce number of trials (5), provided perform them in two vegetative season.
Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control PUCCRE/PUCCRT in winter wheat is 1.0 L/ha.

Winter wheat/PYRNTR

Table 3.2-14: Efficacy of SNS-F-11 in efficacy trials on PYRNTR in winter wheat.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)					
			SNS-F-11			PORTER 250 EC	TORES 250 EC	
			Dose (L/ha)					
			1.3	1	0.8	0.6	0.6	0.5
332/2022	infected plant (efficacy %)	20.1	3.0 (85.5)	3.4 (83.2)	5.4 (73.9)	2.3 (88.6)	4.5 (77.7)	
333/2022	infected plant (efficacy %)	9.4	1.1 (89.5)	2.1 (80.0)	2.7 (72.5)	1.4 (84.3)	1.3 (87.2)	
119 F/2022	infected plant (efficacy %)	10.4	2.0 (80.0)	3.0 (70.0)	4.0 (61.0)	2.9 (71.0)	2.6 (74.0)	
SGS/2022/069/PL04	infected plant (efficacy %)	9.4	1.0 (85.9)	1.3 (84.2)	5.7 (45.0)	2.3 (77.1)	0.4 (97.1)	
SF23PZ302W (Report 319/2023)	infected plant (efficacy %)	9.7	1.6 (84.5)	1.8 (85.3)	2.4 (75.3)	2.1 (79.8)		2.4 (77.0)
Average efficacy			**85.1**	**81.4**	**67.7**	**80.7**	**83.3**	**77.0**

A total of 5 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Pyrenophora tritici-repentis* on winter wheat. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.6 L/ha and with registered rate – 0.5 L/ha was used as standard. In trials performed in 2022, TORES 250 EC was applied at the rate 0.6 L/ha, in 2023 the rate of TORES 250 EC was lower, in accordance with label – 0.5 L/ha. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.

Presented trials were performed in two vegetative season – 2022 and 2023. All efficacy results were consistent, clearly indicating high effectiveness of pest control. Trials performed in 2022 and 2023 were located in different parts of Poland, on various soils and varieties of winter wheat. Additionally, the active substance difenoconazole is well known to be highly effective in reducing *Pyrenophora tritici-repentis* fungi in winter wheat. Moreover, in accordance with Harmonization Meeting about effectiveness, there is the possibility to present reduce number of trials (5), provided perform them in two vegetative season.
Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control PYRNTR in winter wheat is 1.0 L/ha.

Winter wheat/LEPTNO

Table 3.2-15: Efficacy of SNS-F-11 in efficacy trials on LEPTNO in winter wheat.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)					
			SNS-F-11			PORTER 250 EC	TORES 250 EC	
			Dose (L/ha)					
			1.3	1	0.8	0.6	0.6	0.5
SGS/2022/069/PL01	infected plant (efficacy %)	27.5	3.0 (88.8)	4.0 (85.4)	15.0 (41.7)	4.0 (84.6)	4.0 (85.4)	
SGS/2022/069/PL02	infected plant (efficacy %)	15.0	3.0 (80.0)	3.0 (80.0)	7.5 (50.0)	3.0 (80.0)	3.0 (80.0)	
SGS/2023/041/PL05	infected plant (efficacy %)	10.0	0.0 (100.0)	0.3 (97.5)	0.5 (95.0)	0.3 (97.5)		0.3 (97.5)
SGS/2023/041/PL01	infected plant (efficacy %)	12.5	0.5 (95.8)	1.3 (90.8)	1.5 (87.5)	0.8 (94.2)		1.0 (91.7)
SGS/2023/041/PL06	infected plant (efficacy %)	12.5	0.3 (97.5)	0.5 (96.3)	1.5 (85.0)	0.5 (96.3)		0.8 (92.5)
Average efficacy			**92.4**	**90.0**	**71.8**	**90.5**	**82.7**	**93.9**

A total of 5 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Parastagonospora nodorum* on winter wheat. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha,

0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.6 L/ha and with registered rate – 0.5 L/ha was used as standard. In trials performed in 2022, TORES 250 EC was applied at the rate 0.6 L/ha, in 2023 the rate of TORES 250 EC was lower, in accordance with label – 0.5 L/ha. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.

Presented trials were performed in two vegetative season – 2022 and 2023. All efficacy results were consistent, clearly indicating high effectiveness of pest control. Trials performed in 2022 and 2023 were located in different parts of Poland, on various soils and varieties of winter wheat. Additionally, the active substance difenoconazole is well known to be highly effective in reducing *Parastagonospora nodorum* fungi in winter wheat. Moreover, in accordance with Harmonization Meeting about effectiveness, there is the possibility to present reduce number of trials (5), provided perform them in two vegetative season.
Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control LEPTNO in winter wheat is 1.0 L/ha.

Winter triticale/ERYSGT/ERYSGR

Table 3.2-16: Efficacy of SNS-F-11 in efficacy trials on ERYSGT/ERYSGR in winter triticale.

Test report	Assessed part and variety-able	Untreated (pest severity. %)	Efficacy treatment (%)				
			SNS-F-11			PORTER 250 EC	TORES 250 EC
			Dose (l/ha)				
			1.3	1	0.8	0.6	0.5
SGS2023089PL03	infected plant (efficacy %)	5.8	0.3 (97.9)	0.5 (93.8)	1.6 (79.6)	0.5 (93.7)	0.1 (99.0)
SGS2023089PL01	infected plant (efficacy %)	29.5	2.1 (95.0)	9.2 (78.0)	21.5 (47.2)	4.8 (87.2)	3.1 (93.3)
SGS2023089PL02	infected plant (efficacy %)	7.5	0.0 (100.0)	1.5 (80.0)	3.0 (60.0)	0.0 (100.0)	0.0 (100.0)
SGS2023089PL05	infected plant (efficacy %)	19.4	1.3 (94.9)	5.5 (74.3)	9.1 (55.9)	1.4 (95.0)	1.2 (95.6)
SGS2023089PL04	infected plant (efficacy %)	30.2	2.6 (93.6)	2.8 (92.8)	6.8 (81.0)	3.3 (91.5)	3.2 (91.2)
Average efficacy			**95.5**	**83.2**	**65.9**	**91.**	**94.1**

A total of 5 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Blumeria graminis tritici/ Blumeria graminis* on winter triticale. Trials

were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.5 L/ha was used as standard. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.
In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control ERYSGR/ERYSGT in winter triticale is 1.0 L/ha.
In the case of winter triticale, carried out 5 trials on winter triticale and support it with 12 trials on winter wheat (according to Harmonization Meeting about effectiveness 'Annex 2- Generic Extrapolation Tables') give possibilities to extend use on winter triticale against *Blumeria graminis tritici/ Blumeria graminis*. Recommended dose to control ERYSGR/ERYSGT in winter triticale is 1.0 L/ha.

Winter triticale/SEPTTR

Table 3.2-17: Efficacy of SNS-F-11 in efficacy trials on SEPTTR in winter triticale.

Test report	Assessed part and variable	Untreated (pest severity. %)	Efficacy treatment (%)				
			SNS-F-11			PORTER 250 EC	TORES 250 EC
			Dose (L/ha)				
			1.3	1	0.8	0.6	0.5
SGS2023089PL03	infected plant (efficacy %)	16.4	1.2 (93.3)	2.5 (85.6)	6.4 (63.6)	2.3 (86.5)	1.0 (94.9)
SGS2023089PL01	infected plant (efficacy %)	33.5	3.5 (93.1)	7.0 (86.0)	19.9 (40.4)	6.1 (76.6)	5.5 (90.1)
SGS2023089PL02	infected plant (efficacy %)	8.6	0.4 (96.7)	0.8 (91.3)	2.1 (72.1)	1.0 (93.2)	0.5 (95.6)
SGS2023089PL05	infected plant (efficacy %)	12.0	0.7 (94.6)	2.6 (68.9)	4.4 (39.1)	1.3 (91.6)	1.2 (91.9)
SGS2023089PL04	infected plant (efficacy %)	12.9	1.1 (93.2)	1.1 (93.2)	3.9 (71.4)	1.3 (92.6)	1.1 (93.2)
Average efficacy			**94.0**	**84.3**	**57.5**	**89.0**	**93.1**

A total of 5 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Zymoseptoria tritici* on winter triticale. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.5 L/ha was used as standard. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.
In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control SEPTTR in winter triticale is 1.0 L/ha.
In the case of winter triticale, carried out 5 trials on winter triticale and support it with 16 trials on winter wheat (according to Harmonization Meeting about effectiveness 'Annex 2- Generic Extrapolation Tables') give possibilities to extend use on winter triticale against *Zymoseptoria tritici*. Recommended dose to control SEPTTR in winter triticale is 1.0 L/ha.

Winter triticale/PUCCRE/PUCCRT

Table 3.2-18: Efficacy of SNS-F-11 in efficacy trials on PUCCRE/PUCCRT in winter triticale.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)				
			SNS-F-11			PORTER 250 EC	TORES 250 EC
			Dose (L/ha)				
			1.3	1	0.8	0.6	0.5
SGS2023089PL03	infected plant (efficacy %)	12.5	0.8 (94.2)	1.5 (88.4)	5.4 (58.4)	1.3 (90.4)	0.4 (97.1)
SGS2023089PL01	infected plant (efficacy %)	20.0	0.0 (100.0)	0.6 (97.4)	1.7 (92.2)	0.7 (97.1)	0.2 (99.1)
SGS2023089PL02	infected plant (efficacy %)	6.1	0.0 (100.0)	0.0 (100.0)	1.0 (86.3)	0.0 (100.0)	0.0 (100.0)
Average efficacy			**98.8**	**96.6**	**83.1**	**96.9**	**99.1**

A total of 3 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Puccinia triticina/ Puccinia recondita* on winter triticale. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.5 L/ha was used as standard. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control SEPTTR in winter triticale is 1.0 L/ha.
In the case of winter triticale, carried out 3 trials on winter triticale and support it with 5 trials on winter wheat (according to Harmonization Meeting about effectiveness 'Annex 2- Generic Extrapolation Tables') give possibilities to extend use on winter triticale against *Puccinia triticina/ Puccinia recondita*. Recommended dose to control PUCCRE/PUCCRT in winter triticale is 1.0 L/ha.

Winter triticale/LEPTNO

Table 3.2-19: Efficacy of SNS-F-11 in efficacy trials on LEPTNO in winter triticale.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Efficacy treatment (%)				
			SNS-F-11			PORTER 250 EC	TORES 250 EC
			Dose (L/ha)				
			1.3	1	0.8	0.6	0.5
SGS2023089PL05	infected plant (efficacy %)	11.3	1.0 (90.8)	2.5 (77.5)	4.0 (64.2)	1.0 (90.8)	1.5 (87.5)
SGS2023089PL04	infected plant (efficacy %)	10.0	1.0 (90.0)	1.0 (90.0)	3.0 (70.0)	1.0 (90.0)	2.0 (80.0)
Average efficacy			**90.4**	**83.8**	**67.1**	**90.4**	**83.8**

A total of 2 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Parastagonospora nodorum* on winter triticale. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.3 L/ha, 1.0 L/ha, 0.8 L/ha. PORTER 250 EC in rates 0.6 L/ha was used as a standard. Additionally, TORES 250 EC in dose 0.5 L/ha was used as standard. The highest rates of SNS-F-11 and reference products: PORTER 250 EC and TORES 250 EC was used to phytotoxicity tests.
In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control LEPTNO in winter triticale is 1.0 L/ha.
In the case of winter triticale, carried out 2 trials on winter triticale and support it with 5 trials on winter wheat (according to Harmonization Meeting about effectiveness 'Annex 2- Generic Extrapolation Tables') give possibilities to extend use on winter triticale against *Parastagonospora nodorum*. Recommended dose to control LEPTNO in winter triticale is 1.0 L/ha.

Winter rape/SCLESC

Table 3.2-20: Efficacy of SNS-F-11 in efficacy trials on SCLESC in winter rape.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Untreated (pest severity leaf + stem. %)	Efficacy treatment (%)														
				SNS-F-11 (dose L/ha)									TORES 250 EC (dose L/ha)			DIFO 250 EC/ DIFCOR 250 EC (dose L/ha)		
				1.12 / 1.15			0.98 / 1.0			0.7			0.5			0.5		
				leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total
334/2022	leaf (efficacy %)	18.8	35.0	4.5 (76.0)	8.5 (83.4)	6.5 (79.7)	5.3 (72.0)	12.1 (76.3)	8.7 (74.2)	6.0 (68.0)	14.3 (72.2)	10.1 (70.1)	4.0 (78.8)	8.5 (83.4)	6.3 (81.1)	5.3(72.0)	8.5(83.4)	6.9 (77.7)
	root/stem (efficacy %)	51.3																
101 F/2022	leaf (efficacy %)	33.6	33.6	6.5 (81.0)		6.5 (81.0)	9.3 (72.0)		9.3 (72.0)	14.6 (57.0)		14.6 (57.0)	11.5 (63.0)		11.5 (63.0)	12.7 (62.0)		12.7 (62.0)
	root/stem (efficacy %)																	
SGS/2022/070/PL01	leaf (efficacy %)		25.0		4.0 (84.0)	4.0 (84.0)		4.8 (81.0)	4.8 (81.0)		11.3 (55.0)	11.3 (55.0)		5.8 (77.0)	5.8 (77.0)		5.8 (77.0)	5.8 (77.0)
	root/stem (efficacy %)	25.0																
SGS/2022/070/PL02	leaf (efficacy %)		17.0		2.3 (86.7)	2.3 (86.7)		2.5 (85.2)	2.5 (85.2)		6.0 (64.6)	6.0 (64.6)		4.0 (76.3)	4.0 (76.3)		3.3 (80.7)	3.3 (80.7)
	root/stem (efficacy %)	17.0																
SGS/2023/043/PL01	leaf (efficacy %)		10.0		2.0 (80.6)	2.0 (80.6)		4.0 (60.6)	4.0 (60.6)		4.5 (55.0)	4.5 (55.0)		1.0 (89.9)	1.0 (89.9)		1.8 (83.8)	1.8 (83.8)
	root/stem (efficacy %)	10.0																
SGS/2023/043/PL02	leaf (efficacy %)		12.8		1.8 (86.3)	1.8 (86.3)		3.3 (74.2)	3.3 (74.2)		8.8 (34.0)	8.8 (34.0)		2.8 (78.3)	2.8 (78.3)		2.0 (84.2)	2.0 (84.2)
	root/stem (efficacy %)	12.8																

Test report	Assessed part and varietable	Untreated (pest severity. %)	Untreated (pest severity leaf + stem. %)	Efficacy treatment (%)														
				SNS-F-11 (dose L/ha)									TORES 250 EC (dose L/ha)			DIFO 250 EC/ DIFCOR 250 EC (dose L/ha)		
				1.12 / 1.15			0.98 / 1.0			0.7			0.5			0.5		
				leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total
SGS/2023/043/PL03	leaf (efficacy %)		14.3		2.8 (80.3)	2.8 (80.3)		3.5 (75.5)	3.5 (75.5)		8.0 (43.5)	8.0 (43.5)		4.0 (71.6)			4.0 (71.5)	
	root/stem (efficacy %)	14.3																
32 F/2023	leaf (efficacy %)	26.3	26.3	3.7 (86.0)		3.7 (86.0)	9.2 (65.0)		9.2 (65.0)	9.8 (63.0)		9.8 (63.0)	5.4 (80.0)		5.4 (80.0)	2.6 (90.0)		2.6 (90.0)
	root/stem (efficacy %)																	
Average efficacy				**82.7**			**73.5**			**56.5**			**77.6**			**78.8**		

A total of 8 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Sclerotinia sclerotiorum* on winter rape. Trials were conducted in different regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.12 L/ha, 0.98 L/ha and 0.7 L/ha in 2022. In 2023 SNS-F-11 was applied at dose rates: 1.15 L/ha, 1.0 L/ha and 0.7 L/ha. In 2023, the doses of SNS-F-11 have varied slightly compared to the 2022 season. The doses have been slightly changed due to easier application by the end user. The content of the active substance in individual doses differed slightly, therefore the effectiveness of pest control is presented as follows: dose 1.12 L/ha (100.8 g difenoconazole/ha) and 1.15 L/ha (103.5 g difenoconazole/ha), 0.98 L/ha (88.2 g difenoconazole/ha) and 1.0 L/ha (90 g difenoconazole/ha) and last dose – 0.7 L/ha was not change during all experiments. TORES 250 EC in rate 0.5 L/ha and DIFO 250 EC (or DIFCOR 250 EC) in rate 0.5 L/ha were used as a standard. The highest rates of SNS-F-11 and reference products: TORES 250 EC and DIFO 250 EC (or DIFCOR 250 EC) was used to phytotoxicity tests.
Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products TORES 250 EC and DIFO 250 EC (or DIFCOR 250 EC). Recommended dose to control SCLESC in winter rape is 1.15 L/ha.

Winter rape/LEPTMA

Table 3.2-21: Efficacy of SNS-F-11 in efficacy trials on LEPTMA in winter rape.

Test report	Assessed part and varietable	Untreated (pest severity. %)	Untreated (pest severity leaf + stem. %)	Efficacy treatment (%)																	
				SNS-F-11 (dose L/ha)									PORTER 250 EC (dose L/ha)			TORES 250 EC (dose L/ha)			TORES 250 EC (dose L/ha)		
				1.12 / 1.15			0.98 / 1.0			0.7			0.6			0.6			0.5		
				leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total	leaf	stem/root	total
100 F/2022	leaf (efficacy %)	0.0	9.1		0.8 (92.0)	0.8 (92.0)		1.1 (88.0)	1.1 (88.0)		6.2 (32.0)	6.2 (32.0)		1.3 (86.0)	1.3 (86.0)		2.5 (73.0)	2.5 (73.0)			
	root/stem (efficacy %)	9.1																			
SGS/2022/070/PL03	leaf (efficacy %)	27.8	22.8	4.0 (85.3)	3.0 (83.3)	3.5 (84.3)	4.0 (85.3)	3.5 (80.3)	3.8 (82.8)	4.5 (83.3)	11.5 (34.8)	8.0 (59.1)	4.0 (85.3)	4.5 (74.4)	4.3 (79.9)	4.0 (85.3)	4.3 (76.0)	4.2 (80.7)			
	root/stem (efficacy %)	17.8																			
SGS/2022/070/PL04	leaf (efficacy %)	25.0	20.4	2.0 (92.3)	2.0 (87.1)	2.0 (89.7)	3.0 (85.6)	2.3 (85.6)	2.7 (85.6)	5.0 (76.0)	12.0 (23.3)	8.5 (49.7)	4.8 (82.9)	2.8 (82.4)	3.8 (82.7)	2.0 (91.9)	4.0 (74.7)	3.0 (83.3)			
	root/stem (efficacy %)	15.8																			
SGS/2023/042/PL01	leaf (efficacy %)	32.5	32.5	5.0 (90.2)		5.0 (90.2)	5.0 (90.2)		5.0 (90.2)	7.5 (73.2)		7.5 (73.2)	5.7 (65.7)		5.7 (65.7)				8.2 (84.0)		8.2 (84.0)
	root/stem (efficacy %)																				
SGS/2023/042/PL02	leaf (efficacy %)	68.8	68.8	8.8 (88.7)		8.8 (88.7)	10.0 (81.2)		10.0 (81.2)	42.5 (40.7)		42.5 (40.7)	45.0 (41.7)		45.0 (41.7)				8.2 (89.5)		8.2 (89.5)
	root/stem (efficacy %)																				
SGS/2023/042/PL03	leaf (efficacy %)	28.2		3.2 (93.8)		3.2 (93.8)	4.9 (90.6)		4.9 (90.6)	8.8 (81.5)		8.8 (81.5)	10.0 (72.1)		10.0 (72.1)				4.4 (91.1)		4.4 (91.1)
	root/stem (efficacy %)																				
31 F/2023	leaf (efficacy %)				9.7 (65.0)	9.7 (65.0)		11.1 (59.0)	11.1 (59.0)		12.8 (53.0)	12.8 (53.0)		5.8 (79.0)	5.8 (79.0)					5.8 (79.0)	5.8 (79.0)
	root/stem (efficacy %)	27.8																			
Average efficacy				87.5			84.0			57.8			70.7			80.2			86.9		

A total of 7 trials were carried out to evaluate the efficacy of SNS-F-11 for the control of *Leptospharia maculans* on winter rape. Trials were conducted in differ-

ent regions in Poland. Trials were of randomized block design with a minimum of four replicates. SNS-F-11 was applied at dose rates: 1.12 L/ha, 0.98 L/ha and 0.7 L/ha in 2022. In 2023 SNS-F-11 was applied at dose rates: 1.15 L/ha, 1.0 L/ha and 0.7 L/ha. In 2023, the doses of SNS-F-11 have varied slightly compared to the 2022 season. The doses have been slightly changed due to easier application by the end user. The content of the active substance in individual doses differed slightly, therefore the effectiveness of pest control is presented as follows: dose 1.12 L/ha (100.8 g difenoconazole/ha) and 1.15 L/ha (103.5 g difenoconazole/ha), 0.98 L/ha (88.2 g difenoconazole/ha) and 1.0 L/ha (90 g difenoconazole/ha) and last dose – 0.7 L/ha was not change during all experiments. PORTER 250 EC in rate 0.6 L/ha was used as standard. Moreover, second standard – TORES 250 EC was used at the rate 0.6 L/ha and 0.5 L/ha. Due to the lack of application of TORES 250 EC in the rapeseed development stage 32-39 (TORES 250 EC has been registered for use in the BBCH 60-65 stage), the reference standard TORES 250 EC was applied in the 2022 season at a dose of 0.6 L/ha for comparison effectiveness with the dose of 0.6 L/ha the reference standard PORTER 250 EC – this product can be applicate in the BBCH 32-39 of winter rape in accordance with the label and in the same growth stage of winter rape as the teste product. In the 2023 season, TORES 250 EC was applied at the registered dose of 0.5 L/ha for winter rape.

Statistical methods and observation dates were applied. The trials included the fungal diseases are common and typical for the crops fields all over Poland. The active substance difenoconazole is well known and has been commonly used all over the world for many years.

In all trials the disease pressure was high. SNS-F-11 showed similar of higher efficacy than standard products PORTER 250 EC and TORES 250 EC. Recommended dose to control LEPTMA in winter rape is 1.0 L/ha.

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

A total of 36 trials (15 in winter rape, 5 in winter triticale (studied only in 2023), 16 in winter wheat) were carried out in 2022 and 2023 in Poland. The objective was to confirm the yield response of SNS-F-11 in the presence of: *Zymoseptoria tritici, Blumeria graminis tritici/ Blumeria graminis, Puccinia triticina/ Puccinia recondite, Pyrenophora tritici-repentis, Parastagonospora nodorum, Leptospharia maculans* and *Sclerotinia sclerotiorum.*
SNS-F-11 in all tested rates did not have a negative effect on the yield of winter wheat, winter triticale and winter rape.

Summary and conclusion

A total of 36 efficacy trials were carried out in 2022 and 2023 in Poland. Tested product SNS-F-11 showed high efficacy reduce the severity of SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, PYRNTR, LEPTNO on winter wheat, SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, LEPTNO on winter triticale and LEPTMA, SCLESC in winter rape.
Recommended dose to control SEPTTR in winter wheat is 1.0 L/ha of product.
Recommended dose to control ERYSGT/ERYSGR in winter wheat is 1.0 L/ha of product.
Recommended dose to control PUCCRT/PUCCRE in winter wheat is 1.0 L/ha of product.
Recommended dose to control PYRNTR in winter wheat is 1.0 L/ha of product.
Recommended dose to control LEPTNO in winter wheat is 1.0 L/ha of product.
Recommended dose to control SEPTTR in winter triticale is 1.0 L/ha of product.
Recommended dose to control ERYSGT/ERYSGR in winter triticale is 1.0 L/ha of product.
Recommended dose to control PUCCRT/PUCCRE in winter triticale is 1.0 L/ha of product.
Recommended dose to control LEPTNO in winter triticale is 1.0 L/ha of product.
Recommended dose to control LEPTMA in winter rape is 1.0 L/ha of product.
Recommended dose to control SCLESC in winter rape is 1.15 L/ha of product.

Comments of ZRMs	Difenoconazole is highly effective against fungal diseases in winter wheat, winter triticale and winter oilseed rape. Fungicides with difenoconazole helps in reducing the incidence and severity of fungal diseases, contributing to improved grain quality and yield. Details of experiment are presented above by Applicant. All used methodology is in accordance with GEP rules. Applicant submitted in total 36 valid trials carried out on winter wheat (16 trials), winter triticale (5 trials) and winter oilseed rape (15 trials) carried out in two growing seasons (2022 and 2023). All trials were carried out in Poland (N-E EPPO zone). We are dealing with the active substances used commonly for many years in many countries. We must emphasize that each pest should been representative by sufficient number of field efficacy trials (at least 6 for major pests and 3 for minor pest). The following efficacy scale was used during trials: - L – limiting the occurrence (0-60-% efficacy) - ME – moderately efficiency (60-80% efficacy) - E – efficiently (>80% efficacy) *Cereals*: Fungal diseases may affect cereals in different ways. Only diseases severity assessments with sufficient disease pressure were averaged in summary tables by Applicant and ZRMs. Trials were conducted in line to EPPO 1/26. During submitted trials, Applicant properly studied effect against *Erysiphe graminins* (ERYSYGR, ERYSGT) on winter wheat and winter triticale, *Puccinia recondita* (PUCCRE, PUCCRT) on win-

ter wheat and winter triticale, *Mycosphaerella graminicola*, anomorfa *Septoria tritici* (SEPTTR) on winter wheat and winter triticale, *Pyrenophora tritici-repentis* (PYRNTR) on winter wheat and *Phaeosphaeria nodorum* (LEPTNO) on winter wheat and winter triticale.

Winter oilseed rape: Fungal infection on oilseed rape can affect different parts of the plants, such as: leaves, bracts, stems, pods and roots. Only disease severity assessments with sufficient disease pressure (set up 5%) were averaged in summary tables presented by Applicant and ZRMs. Trials were conducted in line to EPPO 1/78. Applicant properly studied effect of SNS-F-11 on *Sclerotinia sclerotiorum* (SCLESC) and *Leptosphaeria maculans* (LEPTMA) on winter oilseed rape.

- ***winter oilseed rape***

  ✓ ***against SCLESC***

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11 at 1.12 / 1.15 L/ha	St. ref. product	
				TORES 250 EC at 0.5 L/ha	DIFO 250 EC / DIFCOR 250 EC at 0.5 L/ha
SCLESC	8	21.8 (10.0-35.0)	82.7	77.6	78.8

All trials were characterized by sufficient level of infestation (at least 5%). Number of trials is acceptable. Applicant presented 8 valid trials for this major fungal disease in winter oilseed rape. It can be concluded that SNS-F-11 at recommended dose 1.15 L/ha effectively control SCLESC on winter oilseed rape. Results were better than st. ref. products used during trials. Efficacy assessments were made on leaf (average eff. from 3 trials – 81.0%) and stem/root (average eff. from 6 trials –83.55%). Product is recommended for use in spring at BBCH 60-65 of winter oilseed rape at dose 1.15 L/ha. Preventive application during the early flowering stage provides significant control of the disease, helping to protect crop health and its yield.

✓ ***against LEPTMA***

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11 at 0.98 / 1.0 L/ha	St. ref. product		
				PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES250 EC at 0.5 L/ha
LEPTMA	7	29.9 (9.1-68.8)	84.0	70.7	80.2	86.9

All trials were characterized by sufficient level of infestation (at least 5%). Number of trials is acceptable. Applicant presented 7 valid trials for this major fungal disease in winter oilseed rape. It can be concluded that SNS-F-11 at recommended dose 1.0 L/ha effectively control LEPTMA on winter oilseed rape. Results were slightly better than st. ref. products used during trials. Efficacy assessments were made on leaf (average eff. from 5 trials – 86.58%) and stem/root (average eff. from 4 trials – 78.23%). Efficacy leaves and stem/root was at level: 82.41%. Product is recommended for use in spring at BBCH 32-39 of winter oilseed rape at dose 1.0 L/ha. For optimal control, difenoconazole should be applied when the first signs of the disease are detected. At BBCH 32-39, it helps in controlling early infections and reducing inoculum levels, thereby protecting the plant during critical growth phases.

- ***winter wheat*:**

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11 at 1.0 L/ha	St. ref. product		
				PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
SEPTTR	16	18.0 (5.0-34.5)	82.7	83.3	85.5	86.8
ERYSGT/ERYSGR	12	13.7 (7.8-23.3)	86.5	90.0	92.0	89.2
PUCCRT/PUCCRE	5	9.2 (6.5-11.3)	90.8	84.7	95.5	87.9
PYRNTR	5	11.8 (9.4-20.1)	81.4	80.7	83.3	77.0

LEPTNO	5	15.5 (10.0 - 27.5)	90.0	90.5	82.7	93.9

All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE, PYRNTR and LEPTMA at dose 1.0 L/ha in winter wheat. All studied fungal diseases are major fungal diseases in winter wheat, so at least 6 valid trials are required for each one. Applicant presented enough number of trials against SEPTTR and ERYSGR/ERYSGT. However, in the opinion of ZRMS also PUCCRT/PUCCRE, PYRNTR and LEPTNO should been accepted in the GAP table and label project on the basis on 5 valid trials. In special cases, when the research results are consistent, a reduction to 5 studies conducted over 2 seasons is possible. Applicant carried out trials in two growing seasons (2022 and 2023) and results were consistent, so reduction of number of trials is possible in the opinion of ZRMs. Difenoconazole is highly effective against Brown Rust (*Puccinia recondita*), Stagonospora Nodorum Blotch (*Phaeosphaeria nodorum*), and Tan Spot (*Pyrenophora tritici-repentis*) in winter wheat. Applications during the spring, specifically from growth stages BBCH 33 to BBCH 55, provide significant control of these diseases. The fungicide's preventive and curative properties ensure healthy crop development and improved yield, making it a valuable component of integrated disease management strategies. In Poland 18 PPPs with difenoconazole are registered in Poland against PUCCRE/PUCCRT, 6 PPPs against PYRNTR and 6 PPPS against LEPTNO. So, efficacy of difenoconazole against those fungal diseases is known.

- ***winter triticale***:

PEST	Number of trials	Level of infestation of untreated control (%)	Efficacy of SNS-F-11 at 1.0 L/ha	st. reference product	
				PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
SEPTTR	5	16.7 (8.6-33.5)	84.3	89.0	93.1
ERYSYGT/ERYSGR	5	18.5 (5.8-30.2)	83.2	91.0	94.1
PUCCRE/PUCCRT	3	12.9 (6.1-20.0)	96.6	96.9	99.1
LEPTNO	2	10.7 (10.0 - 11.3)	83.8	90.4	83.8

All trials were characterized by sufficient level of infestation (>5%). It can be concluded that SNS-F-11 effectively control SEPTTR, ERYSGT/ERYSGR, PUCCRT/PUCCRE and LEPTMA at dose 1.0 L/ha. ERYSGT/ERYSGR, LEPTNO and PUCCRE/PUCCRT are major fungal diseases and SEPTTR is a minor disease in winter triticale. At least 6 valid trials are required for major diseases and at least 3 for minor diseases. Applicant submitted 5 trials against SEPTTR and ERYSGT/ERYSGR. Number of trials against SEPTTR is acceptable. In the opinion of ZRMs limited/ reduced number of trials against ERYSGR/ERYSGT can be acceptable. Also, extrapolation results from winter wheat is possible. It can be concluded that SNS-F-11 effectively control SEPTTR and ERYSGR/ERYSGT in winter triticale at recommended dose (1.0 L/ha). Also, limited number of trials against PUCCRE/PUCCRT (3 trials) and LEPTNO (2 trials) should be accepted on the basis on the possibility of extrapolating results from winter wheat. It can be concluded that SNS-F-11 at recommended dose (1.0 L/ha) effectively control PUCCRE/PUCCRT and LEPTNO on winter triticale. Difenoconazole is highly effective against PUCCRE/PUCCRT, LEPTNO and ERYSGR/ERYSGT in winter triticale. Applications during the spring, specifically from growth stages BBCH33 to BBCH 55, provide significant control of these diseases. In Poland, 18 PPPs with difenoconazole against PUCCRE/PUCCRT, 12 PPS against ERYSGR/ERYSGT and 3 PPPs against LEPTNO are registered and commonly used. So, efficacy of difenoconazole against those fungal diseases is already known.

Also, all mentioned in the GAP table and label minor uses can be accepted in line to Article 51 without any trials. Those accepted minor uses are: spring oilseed rape, linseed, poppy seeds, mustard seeds, gold of pleasure seeds against against *Leptospharia*

	maculans and *Sclerotinia sclerotiorum*; sunflower seeds against *Alternaria spp*., *Leptosphaeria lindquistii* and *Sclerotinia sclerotiorum*; soybeans against *Cercospora sojina*, *Cercospora Kikuchi* and *Sclerotinia sclerotiorum*.

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

Difenoconazole is an ergosterol biosynthesis inhibitor from the chemical class of the triazoles (FRAC group 3) blocking the demethylation of eburicol. It is active on a broad range of plant pathogens on many crop plants. Due to the supposed oligo-generic mechanism of resistance the risk is estimated as medium by the Fungicide Resistance Action Committee (FRAC, www.frac.info).

Difenoconazole is a demethylation inhibitor (DMI) fungicide, which shares its mode of action with other sterol biosynthesis inhibitors. It belongs to FRAC MOA Code G1 Group Code 3 which are considered at medium risk to fungicide resistance development. A resistance management strategy is required. SNS-F-11 with the triazole difenoconazole as active ingredient should be used in tank mixes and / or spray programs in alternation with fungicides with different MoA's and azole compounds.

In FRAC general recommendation connected with different genus of pests which may occur in cereals as well as in rape there are some information about sensitivity of them for DMI fungicide.

In accordance with Sterol biosynthesis inhibitor (SBI) working group in the case of septoria leaf blotch caused by *Zymoseptoria tritici / Mycosphaerella graminicola*, the sensitivity of European populations monitored in 2022 stayed in the range observed in previous years. Slight shifts in sensitivity of populations have been observed depending on the individual active ingredient and regions. The field performance of DMI-containing fungicides was good when used according to the manufacturers and FRAC recommendations.

By analyzing the results of observations made in different years, it can observe:

- In 2020, disease pressure was low to moderate with very dry conditions in some countries. DMIs field performance was good when used according to the manufacturers and FRAC recommendations. No general field resistance has been reported,
- In 2020, the sensitivity of populations was overall stable on European level with EC50 sensitivity values in the range of previous years,
- Overall, as already reported in 2019, DMI EC50 sensitivity values were somewhat higher in the UK and Ireland than observed on the European continent where a gradient can be observed from North-West to South-East,
- In Z. *tritic*i, different DMI haplotypes can lead to varying levels of sensitivity depending on the chemical structure. As DMIs are generally cross-resistant, resistance management approaches should be the same for all DMIs,
- In 2019, the sensitivity of the populations was overall stable on European level with EC50 sensitivity values slightly higher compared to 2018 in some geographies but overall, in the range of previous years.
- In 2018, the sensitivity of the populations was overall stable on the European level.
- In 2016 and 2017, the sensitivity of populations was overall stable on a European level with regional differences also based on different disease epidemics. In regions with lower sensitivity in 2015, the sensitivity of the populations was stable and, in some areas, even partially increased.

- In 2015 depending on the individual active ingredient and regions slight shifts of sensitivity of populations have been observed. Highest EC50 values were observed in areas of elevated disease pressure and sub-optimal use of azoles in spray programs (e.g. reduction of rates in comparison to the manufacturer's recommended rate and inappropriate use of effective mixpartners).
- After the slight increase in the frequency of less sensitive isolates from 2002 to 2004, the situation had stabilised between 2005 and 2008. In 2009, a trend to slightly higher EC50 values were observed in important cereal growing areas (France, Germany, Ireland, United Kingdom); this trend has slowed down in 2010 to 2012 and was stable in 2013. 2014 sensitivity was in the same range as 2011.

In the case of powdery mildew (*Blumeria graminis f.sp. tritici / Erysiphe graminis f.sp. tritici*) sensitivity data presented for 2016 to 2022 confirmed that the situation was overall stable within the range of variability detected during the last 20 years. Differences in the sensitivity are significantly a.i. and regionally dependent. Higher resistance factors were observed only for particular DMIs, especially in France, Germany and UK, but also to a lesser extend in Belgium.

For wheat brown rust caused by *Puccinia triticina* sensitivity data from 2022 for wheat brown rust showed that sensitivities were in the range of those of the last 20 years as observed in monitoring from other FRAC member companies.

In the case of tan spot caused by *Pyrenophora tritici-repentis*, monitoring of this pest was performed in different country from 2019 to 2021. In these three years of monitoring, a stable and sensitive situation was observed.

In the case of main pests of winter rape, for phoma leaf spot and stem canker, blackleg (*Plenodomus lingam / Plenodomus biglobosus*) and sclerotinia stem rot, white mould or cottony rot (*Sclerotinia sclerotiorum*) in accordance with FRAC Sterol biosynthesis inhibitor (SBI) working group general recommendations for appropriate use of fungicide should be applied.

Resistance by fungi to the SBI fungicides has been characterized and is generally known to be controlled by the accumulation of several independent mutations, or what is known as 'continuous selection' or 'shifting', in the fungus. Such that, in any given field population the sensitivity to the SBI fungicide by the fungus may range from extremely high (highly sensitive, i.e., will be controlled by fungicide) to moderate (partially sensitive) or low (mostly resistant to fungicide). This type of resistance is also known as quantitative resistance. Reduced sensitivity to triazoles has been detected in a range of countries. This has been due to modification of the target site, such that effectiveness of the triazoles has been reduced rather than completely overcome. For this group resistance is known in various fungus species. Several resistance mechanisms are known including target site mutations in cyp51 (erg 11) gene. The published use pattern for all SBI classes covered by the FRAC SBI Working Group guidelines for management strategy reflects the resistance risk assessment.

Difenoconazole is a systemic active ingredient. It will be absorbed very fast by plant tissue and translocated acropetally in the transpiration stream. The active ingredient inhibits spore germination, mycelial growth, and the development of infection structures are thus prevented. Difenoconazole has a protective as well as an eradicative/curative effect. The active ingredient is selective on a wide range of dicotyledonous and monocotyledonous crop species. Difenoconazole is a candidate for substitution.

Despite of the combined risk for resistance development according to the FRAC classification, it must be noted that there are regional differences in sensitivity across Europe. On the other hand, monitoring re-

sults from recent years indicate that resistance levels are stable. Moreover, trial results in this dossier clearly show that in most cases, sufficient levels of control are given. SNS-F-11 with the Triazole Difenoconazole as active ingredient is therefore regarded to be an important tool of resistance management and should be used in tank mixes and / or spray programs in alternation with fungicides with different MoA's and Azole compounds. As a result, it can be stated that, if SNS-F-11 is used according to the use instructions and under consideration of the proposed anti-resistance modifiers, the resistance risk of the target pathogen to develop resistance to SNS-F-11 is considered medium to high but can be reduced by adherence of the management strategy.

The agronomic risk for active ingredients which include SNS-F-11 is estimated as medium for difenoconazole.

The resistance management is coordinated by FRAC recommendations. Applying the anti-resistance use recommendations, development of resistance can be considerably decreased or avoided. The restriction should be put on the label.

The Fungicide Resistance Action Committee (FRAC) has made the following general recommendations to minimize the risk of resistance occurring to the SBI fungicides (of which the DMI's are one class):

- ✓ repeated application of SBI fungicides alone should not be used on the same crop in one season against a high-risk pathogen in areas of high disease pressure for that particular pathogen.
- ✓ for crop/pathogen situations where repeated spray applications (e.g. orchard crops/Powdery mildew) are made during the season, alternation (block sprays or in sequence) or mixtures with an effective non cross-resistant fungicide are recommended.
- ✓ where alternation or the use of mixtures is not feasible because of lack of effective or compatible non-cross-resistant partner fungicides, then input of SBI's should be reserved for critical parts of the season or crop growth stage.
- ✓ if DMI or amine performance should decline and sensitivity testing has confirmed the presence of less sensitive forms, SBI's should only be used in mixture or alternation with effective non cross resistant partner fungicides.
- ✓ the introduction of the new classes of chemistry offers new opportunities for more effective resistance management. The use of different mode of actions should be maximized for the most effective resistance management strategies.
- ✓ users must adhere to the manufacturers' recommendations. In many cases, reports of "resistance" have, on investigation, been attributed to cutting recommended rates of use, or to poor or mistimed application.
- ✓ fungicide input is only one aspect of crop management. Fungicide use does not replace the need for resistant crop varieties, good agronomic practice, plant hygiene/sanitation.

The lack of proper rotation of active substances and the use of too low doses are associated with the phenomenon of resistance formation. The use of so-called sub-threshold doses at the limit of their effective effectiveness (often repeatedly in crop rotation) and the use of substances that under certain conditions due to the mode of action may have lower effectiveness promotes the phenomenon of resistance formation. A lower dose or intervention use of a substance whose strength is preventive action limits the effectiveness and duration of action of such a product. In practice, resistance of known disease culprits to commonly and readily used groups of substances such as strobilurins or SDHI has been confirmed. Only full doses and properly selected tank mixtures provide the required high efficacy with a sufficiently long duration of action. Because of its specificity and the wide spectrum of pathogens from virtually all groups that it controls, difenoconazole is a good tool for building programs to limit the development of resistance to fungicides from other chemical groups.

Comments of ZRMs	Difenoconazole is a DMI Triazole systemic fungicide. It provides prevention and cure. It is absorbed by the leaves with acropetally and shows strong translaminar translocation. It sops the development of fungi by interfering with the biosynthesis of sterols in cell membranes. Difenoconazole is a demethylation inhibitor (DMI) fungicide, which shares its mode of action with other sterol biosynthesis inhibitors. It belong to FRAC MOA Code G1 Group Code 3 which are considered at medium risk to fungicide resistance development. A resistance management strategy is required. DISFERA 90 EC/ LIPOSTAR 90 EC with the triazoles difenoconazole as active ingredient should be used in tank mixes and / or spray programs in alternation with fungicides with different MoA's and azole compounds. Evidence of resistance to difenoconazole among fungal pathogens has been observed in Europe, particularly in the pathogen *Alternaria alternata*. Studies have shown that populations of *A. alternata* display varying levels of tolerance to difenoconazole, with some isolates exhibiting significant resistance. This resistance is often measured by the relative growth rate (RGR) of fungal colonies in the presence of the fungicide, with higher RGR indicating greater resistance (Frontiers, Meng-Han He et al., 2019). Additionally, resistance to difenoconazole in the fungus *Botrytis cinarea*, which affects tomatoes, has been documented. Research indicates that some field isolates of *B. cinarea* have developed resistance, impacting the efficacy of difenoconazole in controlling this pathogen (BMC Microbiology, Li-Na Yang et al., 2019). The emergence of resistance is attributed to several factors, including the overuse and improper application of fungicides, which impose selection pressure on fungal populations, leading to the proliferation of resistant strains. Resistance management strategies, such as rotating fungicides with different modes of action, mixing fungicides, and integrating non-chemical methods, are crucial to mitigate this issue and sustain the effectiveness of difenoconazole and other fungicides (Front. Microbiol., Meng-Han He et al., 2019). Resistance to fungicides among key fungal pathogens of winter wheat and winter triticale has been documented in Europe. Here is an overview of resistance cases for several significant pathogens: ✓ ***Zymoseptoria tritici*** (Septoria tritici blotch): resistance to fungicides, especially triazoles (DMI fungicides like difenoconazole) and Qols (strobilurins), has been observed in *Zymoseptoria tritici*. This pathogen has shown reduced sensitivity to these fungicides across various European regions, making it challenging to control with chemical treatments alone. Research has documented that this pathogen has developed mutations in the CYP51 gene, which encodes the target enzyme for triazoles fungicides. These mutations reduce the efficacy of difenoconazole, necessitating the use of alternative fungicides and integrated management strategies. ✓ ***Blumeria graminins*** *s. sp. tritici* (Powdery mildew): Resistance to difenoconazole and other triazoles has been reported *in Blumeria graminis f. sp. tritici*. This pathogen has developed mechanisms such as target site modifications and enhanced efflux, which lower the effectiveness of triazole fungicides, including difenoconazole. The resistance challenges have led to the adoption of integrated approaches that combine chemical, biological and cultural practices. ✓ ***Puccinia triticina*** (Leaf rust): While specific cases of difenoconazole resistance in *Puccinia triticina* are less documented compared to other pathogens, there are concerns about potential resistance development due to the extensive use of triazoles fungicides. Monitoring and management practices are crucial to prevent

resistance emergence.

- ✓ ***Pyrenophora tritici-repentis*** (Tan spot): There have been reports of reduced sensitivity to difenoconazole in *Pyrenophora tritici-repentis*. This pathogen has shown variability in response to fungicides, with some isolates exhibiting resistance. The development of resistance management strategies, such as rotating fungicides with different modes of action, is essential to maintain control over this pathogen.
- ✓ ***Parastagonospora nodorum*** (Stagonospora nodorum blotch): Cases of resistance to difenoconazole in *Parastagonospora nodorum* have been reported, although they are less common. Reduced sensitivity in some isolates suggests that continuous monitoring and the implementation of integrated disease management strategies are necessary to manage resistance and ensure effective control.
- ✓ ***Leptosphaeria maculans*** (Phoma stem canker): resistance to difenoconazole in *Leptosphaeria maculans*, the causative agent of phoma stem canker in winter oilseed rape, has been observed. Studies indicate that while difenoconazole remains somewhat effective, the pathogen has shown variable responses to triazoles fungicides due to genetic mutations and diverse pathogen populations. This variability necessitates integrated disease management strategies, including crop rotation and resistant cultivars.
- ✓ ***Sclerotinia sclerotiorum*** (Sclerotinia stem rot): responsible for sclerotinia stem rot, has also shown signs of resistance to difenoconazole. The effectiveness of difenoconazole can be inconsistent due to the pathogen's broad host range and genetic diversity. Research highlights the need for an integrated approach combining chemical treatments with cultural practices such as optimizing planting density and using resistant varieties to manage the disease.

Management strategies:

- ✓ *Fungicide rotation*: use different classes of fungicides to reduce resistant pressure
- ✓ *Integrated pest management* (IPM): combine fungicide applications with cultural practices and resistant varieties
- ✓ *Monitoring and early detection*: regularly scout fields to detect early signs of resistance and adjust management practices accordingly
- ✓ *Combination treatments*: using mixtures of fungicides to delay resistance development

It can be stated that, if DISFERA 90 EC / LIPOSTAR 90 EC is used according to the use instructions and under consideration of the proposed anti-resistant modifiers, the resistance risk of the target pathogens to develop resistance to DISFERA 90 EC / LIPOSTAR 90 EC is considered medium to high but can be reduced by adherence of the management strategy.

The agronomic risk is estimated as medium for difenoconazole.

The resistance management is coordinated by FRAC recommendations. Applying the anti-resistance use recommendations, development of resistance can be considerably decreased or avoided. The restrictions should be put on the label.

3.4 Adverse effects on treated crops (KCP 6.4)

3.4.1 Phytotoxicity to host crop (KCP 6.4.1)

The phytotoxicity trials about tested plant protection product (fungicide) have been carried out in accordance with EPPO Guidelines (1/181 (4). The conduct of the field work is principally compliant with "Good Agricultural Practice" and in accordance with EPPO Guidelines PP 1/135.

The trials were performed with the use of different agricultural practice in Poland. All presented trials were performed with the use of cultivars, differing in growth strength as well as soil and water requirements. The appropriate experimental design was applied. In all trials studied product was compared to the standard reference products. Statistical analysis of the data was performed. Also, quality of yield was evaluated in all submitted trials.

Selectivity trials and studied dose 2N for fungicide were not required, which is in accordance with EPPO 1/135 (3).

A total of 36 efficacy trials in which phytotoxicity assessment was carried out on winter wheat (16 trials), winter triticale (5 trials), and winter rape (15 trials). Trials were performed during two different growing season (2022 and 2023), in exception for winter triticale (trials only from 2023).

The evaluation of phytotoxicity effects was done according to EPPO Standard 1/135 (4) of fungicides applied on crops of winter wheat, winter triticale and winter rape was performed visually by comparing the condition of the plants in the plots treated with fungicide in comparison to untreated plots (no fungicides). The intensity of damage to the plant was expressed as a percentage (0%-no symptoms of phytotoxic effects of fungicide, 100% - total destruction).

Table 3.4-1: Phytotoxicity of SNS-F-11 and reference standard to winter wheat

Number of trials with…		Efficacy trials (16 trials)		
		SNS-F-11	**PORTER 250 EC**	**TORES 250 EC**
		1.3N, 1.0N, 0.8N	**1N**	**1N**
Maximum of phytotoxicity recorded during the trials	0% to 5%	14	14	14
	>5% to 10%	2	2	2
	>10% to 15%	-	-	-
	>15 %	-	-	-
Level of symptoms at the last assessments	0% to 5%	16	16	16
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-

16 efficacy trials were carried out on winter wheat in Poland in 2022 and 2023 on different varieties of winter wheat. In 2 trials were observed phytotoxicity symptoms. This symptoms were classified as chlorosis. All observed phytotoxicity symptoms were classified in the range of 5-10% and were observed after first application of SNS-F-11 and standards products in experiments located in the same voivodeship in Poland. The wheat varieties used in these experiments were Joker and Findus. In experiments carried out in other locations in Poland were performed with use of the same varieties of wheat - no phytotoxicity

symptoms was observed. The first application of SNS-F-11 and the reference products was made at a similar time, i.e. on April 18, 2023 and April 21, 2023. During subsequent phytotoxicity assessments, i.e. during the second application of SNS-F-11 and the standards, no phytotoxic effects were observed, similarly as in the case of last assessment performed up to 3 weeks after the second application of the all products. Observed phytotoxicity effect (chlorosis) was transient and was not caused by the applied products (SNS-F-11 and reference products), but was connected with the weather conditions prevailing after the application (low temperature). SNS-F-11 did not negatively affect the quality of the yield, green leaf area, moisture content, vigour of plant. To eliminate potential phytotoxicity effect for the end user, the registration label will include a warning to not to use SNS-F-11 when the daily air temperature does not exceed 12 °C.
In 14 trials, no adverse effects in regard to phytotoxicity and vigour were observed in any efficacy trials treated with SNS-F-11. Furthermore, harvest results from winter wheat trials demonstrated that the applied treatments did not have any detrimental effects on yield or quality of yield either.

Table 3.4-2: Phytotoxicity of SNS-F-11 and reference standard to winter triticale

Number of trials with…		**Efficacy trials (5 trials)**		
		SNS-F-11	**PORTER 250 EC**	**TORES 250 EC**
		1.3N, 1.0N, 0.8N	**1N**	**1N**
Maximum of phytotoxicity recorded during the trials	0% to 5%	5	5	5
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-
Level of symptoms at the last assessments	0% to 5%	5	5	5
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-

5 trials of efficacy were carried out on winter triticale in Poland in 2023 on different varieties. No phytotoxicity symptoms caused by SNS-F-11 at the highest dose rate of 1.3 L/ha was observed. No adverse effects in regard to phytotoxicity and vigour were observed in any efficacy trials treated with SNS-F-11. Furthermore, harvest results from winter wheat trials demonstrated that the applied treatments did not have any detrimental effects on yield or quality of yield either.

Table 3.4-3: Phytotoxicity of SNS-F-11 and reference standard to winter rape (LEPTMA)

Number of trials with…		**Efficacy trials (7 trials)**		
		SNS-F-11	**PORTER 250 EC**	**TORES 250 EC**
		1.15N, 1.0N, 0.6N	**1N**	**1N, 1.2N**
Maximum of phytotoxicity recorded during the trials	0% to 5%	7	7	7
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-

Number of trials with…		Efficacy trials (7 trials)		
		SNS-F-11	PORTER 250 EC	TORES 250 EC
		1.15N, 1.0N, 0.6N	1N	1N, 1.2N
	>15 %	-	-	-
Level of symptoms at the last assessments	0% to 5%	7	7	7
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-

7 trials of efficacy were carried out on winter rape in Poland in 2022 and 2023 on different varieties. No phytotoxicity symptoms caused by SNS-F-11 at the highest dose rate of 1.15 L/ha was observed. No adverse effects in regard to phytotoxicity and vigour were observed in any efficacy trials treated with SNS-F-11. Furthermore, harvest results from winter rape trials demonstrated that the applied treatments did not have any detrimental effects on yield or quality of yield either.

Table 3.4-4: Phytotoxicity of SNS-F-11 and reference standard to winter rape (SCLESC)

Number of trials with…		Efficacy trials (8 trials)		
		SNS-F-11	DIFO 250 EC/DIFCOR 250 EC	TORES 250 EC
		0.6N, 0.9N, 1N	1N	1N
Maximum of phytotoxicity recorded during the trials	0% to 5%	8	8	8
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-
Level of symptoms at the last assessments	0% to 5%	8	8	8
	>5% to 10%	-	-	-
	>10% to 15%	-	-	-
	>15 %	-	-	-

8 trials of efficacy were carried out on winter rape in Poland in 2022 and 2023 on different varieties. No phytotoxicity symptoms caused by SNS-F-11 at the highest dose rate of 1.15 L/ha was observed. No adverse effects in regard to phytotoxicity and vigour were observed in any efficacy trials treated with SNS-F-11. Furthermore, harvest results from winter rape trials demonstrated that the applied treatments did not have any detrimental effects on yield or quality of yield either.

Comments of ZRMs	Both, EU Directive 91/414 (EU, 1991) and EPPO PP 1/226 – *Number of efficacy* trials requires testing phytotoxicity at normal (N) an double (2N) recommended dose. However, EPPO 1/135 (4) – Phytotoxicity assessment 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 line to EPPO 1/135 (4).

	Difenoconazole is a widely used triazole fungicide known for its broad-spectrum efficacy against various fungal pathogens. For example, yellowing of leaves can occur if difenoconazole is applied at excessively high rates. Stunted growth and delayed development may be observed if the fungicide is applied during sensitive growth stages. Browning or burning of leaf edges and tips may occur, especially under hot and sunny conditions. Applicant submitted in total 36 efficacy trials in which phytotoxicity effect of SNS-F-11 was studied. Applicant submitted 16 trials for winter wheat, 15 trials for winter oilseed rape and 5 trials for winter triticale. In the opinion of ZRMs, number of trials is acceptable. During studies conducted on winter oilseed rape and winter triticale – lack of phytotoxicity symptoms observed. Only in 2 trials carried out on winter wheat some phytotoxicity effect was observed. Those symptoms were classified as chlorosis. All observed phytotoxicity symptoms were classified in the range of 5-10% and were observed after first application of SNS-F-11 and standards products. After second applications of SNS-F-11 on winter wheat – no phytotoxicity effect was observed. Observed phytotoxicity effect (chlorosis) was transient and was not caused by the applied products (SNS-F-11 and reference products), but was connected with the weather conditions prevailing after the application (low temperature). **To eliminate potential phytotoxicity effect for the end user, the registration label will include a warning to not to use SNS-F-11 when the daily air temperature does not exceed 12°C. In conclusion, no negative effects of the product – SNS-F-11 is to be expected when at the intended rate and used according do label's recommendations.**

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

SNS-F-11 at all tested rates did not have a negative effect on the yield of winter wheat in the presence of *Zymoseptoria tritici, Blumeria graminis tritici/ Blumeria graminis, Puccinia triticina/ Puccinia recondite, Pyrenophora tritici-repentis, Parastagonospora nodorum.*
SNS-F-11 at all tested rates did not have a negative effect on the yield of winter triticale in the presence of *Zymoseptoria tritici, Blumeria graminis tritici/ Blumeria graminis, Puccinia triticina/ Puccinia recondite, Parastagonospora nodorum*.
SNS-F-11 at all tested rates did not have a negative effect on the yield of winter rape in the presence of *Leptospharia maculans* and *Sclerotinia sclerotiorum*.

In all trials there was no effect of the test preparations on the quality parameters of yield.

Comments of ZRMs	ZRMs, agree with Applicant. SNS-F-11 containing difenoconazole (90 g/L) applied at recommended dose for winter oilseed rape, winter wheat and winter triticale and even higher than recommended in winter wheat and winter triticale did not significantly affect the crop yield. The data obtained in trials harvested demonstrated that FNS-F-11 containing difenoconazole (90 g/L) is as safe to the treated crops as the reference products used in the trials. Below, ZRMs presented detailed results from field trials about impact of SNS-F-11 on the yield (on the basis on 36 trials). ✓ ***winter wheat***

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha

				Mean	of product per 100 kg seeds				
					% rel.	% rel.	% rel.	% rel.	% rel.
119 F/2022	Tobak	Yield	t/ha	7.00	7.25	7.45	7.24	7.56	n.s.
SF22PZ306W	Arkadia	Yield	t/ha	5.73	6.60	6.66	7.24	6.62	n.s.
SF22PZ307W	Euforia	Yield	t/ha	6.71	6.86	7.06	6.94	7.25	n.s
SGS/2022/069/PL01	Lavantus	Yield	t/ha	8.20	9.89	10.02	9.70	9.86	n.s.
SGS/2022/069/PL02	Opoka	Yield	t/ha	7.45	8.42	8.40	8.43	8.32	n.s.
SGS/2022/069/PL03	Findus	Yield	t/ha	6.97	7.81	7.96	7.80	8.01	n.s.
SGS/2022/069/PL04	Joker	Yield	t/ha	6.27	7.30	7.47	7.31	7.43	n.s.
63 F/2023	Patras	Yield	t/ha	9.59	10.12	10.15	9.88	ns	10.03
SF23PZ302W	Julius	Yield	t/ha	7.29	8.09	7.58	8.27	ns	7.67
SF23PZ309Z	Belissa	Yield	t/ha	7.05	7.80	7.77	8.12	ns	7.85
SF23PZ310Z	Euforia	Yield	t/ha	6.68	7.31	7.22	7.74	ns	7.38
SGS/2023/041/PL01	Yukon	Yield	t/ha	7.35	8.66	9.14	9.13	ns	9.17
SGS/2023?041/PL02	Findus	Yield	t/ha	9.67	10.22	10.40	10.26	ns	10.44
SGS/2023?041/PL04	Joker	Yield	t/ha	6.9	7.9	7.9	7.7	ns	8.0
SGS/2023/041/PL05	Euforia	Yield	t/ha	7.55	8.66	8.67	8.68	ns	8.68
SGS/2023/041/PL06	Arkadia	Yield	t/ha	6.92	8.46	8.58	7.97	ns	8.43
Average from 16 trials		**Yield**	**t/ha**	**7.33**	**8.21**	**8.28**	**8.40**	**7.86**	**8.63**

Submitted trials are sufficient for winter wheat. Impact on yield was assessed during 16 trials carried out on winter wheat in Poland. Yield from untreated plot – 7.33 t/ha and yield from field treated by SNS-F-11 was at level 8.21 t/ha (1.0 L/ha – N recommended) and 8.28 t/ha (1.3 L/ha which corresponds to 1.3N). Yield from field treated by st. reference products was: 8.40 t/ha (Porter 250 EC at 0.6 L/ha), 7.86 t/ha (Tores 250 EC at 0.6 L/ha) and 8.63 t/ha (Tores 250 EC at 0.5 L/ha).

✓ ***winter triticale***

				Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
Trial ID	Variety	Ass. Type	Unit	Mean	% rel.	% rel.	% rel.	% rel.	% rel.
SGS/2023/089/PL01	Liborious	Yield	t/ha	7.05	7.74	7.90	7.86	ns	7.90
SGS/2023/089/PL02	Tadeus	Yield	t/ha	6.55	7.07	7.21	7.15	ns	7.17
SGS/2023/089/PL03	Rotondo	Yield	t/ha	6.95	7.44	7.57	7.46	ns	7.65
SGS/2023/089/PL04	Twingo	Yield	t/ha	7.17	7.78	7.87	7.77	ns	7.80
SGS/2023/089/PL05	Medalion	Yield	t/ha	7.34	7.49	7.38	7.34	ns	7.35
Average from 5 trials:		**Yield**	**t/ha**	**7.01**	**7.50**	**7.59**	**7.52**	**ns**	**7.57**

Submitted trials are sufficient for winter triticale. Impact on yield was assessed during 5 efficacy trials carried out on winter triticale in Poland. Yield from untreated plot – 7.01 t/ha and yield from field treated by SNS-F-11 was at level 7.50 t/ha (1.0 L/ha – N recommended) and 7.59 t/ha (1.3 L/ha which corresponds to 1.3N). Yield from field treated by st. reference products was: 7.52 t/ha (Porter 250 EC at 0.6 L/ha) and 7.57 t/ha (Tores 250 EC at 0.5 L/ha).

✓ ***winter oilseed rape***

				Untreat-ed -	SNS-F-11		Reference products			
					0.98 L/ha /1.0 L/ha	1.12 L/ha/ 1.15 L/ha	POR-TER 250 EC at 0.6 L/ha	TORE S 250 EC at 0.6 L/ha	TORE S 250 EC at 0.5 L/ha	DIFO 250 EC / DIFCO R 250 EC at 0.5 L/ha
					of product per 100 kg seeds					
Trial ID	Variety	Ass. Type	Unit	Mean	% rel.	% rel.	% rel.	% rel.	% rel.	% rel.
100 F/2022	Alibaba	Yield	t/ha	3.20	3.66	3.73	3.70	3.81	ns	ns
SGS/2022/070/Pl 03	Exotter	Yield	t/ha	3.86	4.97	4.98	4.98	5.00	ns	ns

SGS/2022/070/PL04	SY Ilona	Yield	t/ha	3.40	4.65	4.70	4.39	4.40	ns	ns
101 F/2022	Architekt	Yield	t/ha	4.45	5.36	5.47	ns	ns	5.14	5.17
SF22RZ307W	Graf	Yield	t/ha	2.90	3.20	3.02	ns	ns	3.17	3.22
SGS/2022/070/PL01	Galileus	Yield	t/ha	3.20	4.81	4.69	ns	ns	4.59	4.64
SGS/2022/070/Pl02	Artemis	Yield	t/ha	4.75	5.83	5.93	ns	ns	5.31	5.56
31 F/2023	Architekt	Yield	t/ha	2.92	3.34	3.36	3.41	ns	3.46	ns
SGS/2023/042/PL01	Absolut	Yield	t/ha	3.0	3.6	3.5	3.4	ns	3.5	ns
SGS/2023/042/PL02	Sienna	Yield	t/ha	3.50	4.2	4.4	3.8	ns	4.4	ns
SGS/2023/042/PL03	Derrick	Yield	t/ha	3.35	3.64	3.89	4.08	ns	3.83	ns
32 F/2023	Hevelius	Yield	t/ha	3.50	3.86	4.39	ns	ns	4.16	4.20
SGS/2023/043/PL01	Bonanaza	Yield	t/ha	3.0	3.5	3.7	ns	ns	3.6	3.6
SGS/2023/043/PL02	Memori CS	Yield	t/ha	3.3	3.9	4.2	ns	ns	4.0	4.2
SGS/2023/043/PL03	Alabama	Yield	t/ha	3.03	3.38	3.39	ns	ns	3.36	3.37
Average from 15 trials:		**Yield**	**t/ha**	**3.42**	**4.13**	**4.22**	**3.97**	**4.40**	**4.04**	**4.25**

Submitted trials are sufficient for winter oilseed rape. Impact on yield was assessed during 15 efficacy trials carried out on winter oilseed rape in Poland. Yield from untreated plot – 3.42 t/ha and yield from field treated by SNS-F-11 was at level 4.13 t/ha (1.0 L/ha – N recommended) and 4.22 t/ha (1.3 L/ha which corresponds to 1.3N). Yield from field treated by st. ref. products was: 3.97 t/ha (Porter 250 EC at 0.6 L/ha), 4.40 t/ha (Tores 250 EC at 0.6 L/ha), 4.04 t/ha (Tores 250 EC at 0.5 L/ha) and 4.25 t/ha (Difo 250 EC/ Difcor 250 EC at 0.5 l/ha).

There are almost no significant differences in yield between SNS-F-11 and the references products. Overall, these results confirms that there is no risk for negative side effects on yield of the treated cereals (winter wheat, winter triticale) and winter oilseed rape.

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

In all trials for winter wheat, winter triticale and winter oilseed rape there was no effect of the test preparations on the quality parameters of yield. Yield and qualities parameters for winter wheat, winter triticale and winter oilseed rape were presented in efficacy study reports. Additionally the oil content in winter oilseed rape were assessed and presented in study reports 25 J/2022, 26 J/2022, 2 J/2023 and 3J/2023. The oil content in winter oilseed rape seeds was at the same level of statistical significance in all experimental treatments.

Comments of ZRMs	In all trials no detrimental effect on the quality of yield was recorded at the proposed dose rate and even at higher than recommended (on the basis on winter wheat and winter triticale). For winter oilseed rape – only dose N recommended was studied, no higher doses were studied. Application of SNS-F-11 provided a quality of yield similar to the untreated plots and to those treated with the reference products. No significant differences were observed between untreated and treated plots and also between the tested product and the standard products. Parameters such as moisture [%], weight of 1000 grains [g], protein content [%], GLA [%] and hectolitre mass grains [kg/hl] for cereals (wheat, triticale) and thousand seed weight [g], moisture [%] and oil content [%] for winter oilseed rape. **Moisture [%]** ✓ ***winter wheat*** (14 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
119 F/2022	Tobak	Moisture	%	ns	ns	ns	ns	ns	ns
SF22PZ306W	Arkadia	Moisture	%	11.28	13.50	13.59	13.04	14.27	ns
SF22PZ307W	Euforia	Moisture	%	12.18	12.35	12,39	12.23	12.18	ns
SGS/2022/069/PL01	Lavantus	Moisture	%	12.50	12.90	13.00	13.20	13.10	ns
SGS/2022/069/PL02	Opoka	Moisture	%	13.40	13.50	13.50	13.50	13.40	ns
SGS/2022/069/PL03	Findus	Moisture	%	13.10	13.10	12.90	13.00	13.10	ns
SGS/2022/069/PL04	Joker	Moisture	%	13.30	13.20	13.40	13.40	13.30	ns
63 F/2023	Patras	Moisture	%	ns	ns	ns	ns	ns	ns
SF23PZ302W	Julius	Moisture	%	16.03	16.38	16.23	16.15	ns	16.33
SF23PZ309Z	Belissa	Moisture	%	13.95	14.18	14.12	14.10	ns	14.02
SF23PZ310Z	Euforia	Moisture	%	13.20	13.20	13.40	13.80	ns	13.50
SGS/2023/041/PL01	Yukon	Moisture	%	12.90	12.90	12.90	12.90	ns	12.90
SGS/2023/041/PL02	Findus	Moisture	%	12.90	12.80	12.80	12.70	ns	12.80
SGS/2023?041/PL04	Joker	Moisture	%	13.50	13.60	13.50	13.50	ns	13.50
SGS/2023/041/PL05	Euforia	Moisture	%	12.50	12.50	12.50	12.50	ns	12.50
SGS/2023/041/PL06	Arkadia	Moisture	%	12.36	15.12	15.38	14.22	ns	15.13
Average from 16 trials		Moisture	**%**	**13.08**	**13.52**	**13.54**	**13.48**	**13.23**	**12.34**

No negative effect on moisture content was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter wheat. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for moisture content in the majority of trials.

✓ ***winter triticale*** (5 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
SGS/2023/089/PL01	Liborious	Moisture	%	12.8	12.8	12.8	12.8	ns	12.8
SGS/2023/089/PL02	Tadeus	Moisture	%	12.3	12.4	12.3	12.3	ns	12.4
SGS/2023/089/PL03	Rotondo	Moisture	%	13.1	13.1	13.2	13.0	ns	13.0
SGS/2023/089/PL04	Twingo	Moisture	%	12.6	12.6	12.6	12.7	ns	12.6
SGS/2023/089/PL05	Medalion	Moisture	%	12.5	12.7	12.6	12.5	ns	12.6
Average from 5 trials:		**Mositure**	**%**	**12.66**	**12.72**	**12.70**	**12.66**	**ns**	**12.68**

No negative effect on moisture content was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter triticale. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for moisture content in the majority of trials.

✓ ***winter oilseed rape*** (11 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products			
					0.98 L/ha /1.0 L/ha	1.12 L/ha/ 1.15 L/ha	POR-TER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha	DIFO 250 EC / DIFCOR 250 EC at 0.5 L/ha
					of product per 100 kg seeds					
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.	% rel.
100 F/2022	Alibaba	Mois-ture	%	ns	ns	ns	ns	ns	ns	ns
SGS/2022/070/Pl	Exotter	Mois-	%	7.4	7.4	7.5	7.5	7.5	ns	ns

03		ture								
SGS/2022/070/PL04	SY Ilona	Mois-ture	%	8.7	8.5	8.6	8.6	8.6	ns	ns
101 F/2022	Architekt	Mois-ture	%	ns	ns	ns	ns	ns	ns	ns
SF22RZ307W	Graf	Mois-ture	%	8.00	8.03	7.98	ns	ns	8.10	8.03
SGS/2022/070/PL01	Galileus	Mois-ture	%	6.2	6.1	6.1	ns	ns	6.0	6.1
SGS/2022/070/Pl02	Artemis	Mois-ture	%	8.2	8.6	8.5	ns	ns	8.5	8.6
31 F/2023	Architekt	Mois-ture	%	ns	ns	ns	ns	ns	ns	ns
SGS/2023/042/PL01	Absolut	Mois-ture	%	7.4	7.4	7.5	7.5	ns	7.5	ns
SGS/2023/042/PL02	Sienna	Mois-ture	%	8.7	8.7	8.8	8.7	ns	8.7	ns
SGS/2023/042/PL03	Derrick	Mois-ture	%	7.4	7.1	7.3	7.4	ns	7.3	ns
32 F/2023	Hevelius	Mois-ture	%	ns	ns	ns	ns	ns	ns	ns
SGS/2023/043/PL01	Bonanaza	Mois-ture	%	8.6	8.6	8.6	ns	ns	8.6	8.6
SGS/2023/043/PL02	Memori CS	Mois-ture	%	8.3	8.4	8.4	ns	ns	8.4	8.3
SGS/2023/043/PL03	Alabama	Mois-ture	%	9.0	8.8	9.0	ns	ns	8.9	8.9
Average from 15 trials:		**Mois-ture**	**%**	**7.99**	**7.97**	**8.03**	**7.94**	**8.05**	**8.00**	**8.09**

No negative effect on moisture content was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter oilseed rape. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for moisture content in the majority of trials.

Hectolitre mass grains [kg/hl]

- ✓ ***winter wheat*** (5 trials)

					SNS-F-11		**Reference products**		
				Untreated -	**1.0 L/ha**	**1.3 L/ha**	**PORTER 250 EC at 0.6 L/ha**	**TORES 250 EC at 0.6 L/ha**	**TORES 250 EC at 0.5 L/ha**
					of product per 100 kg seeds				
Trial ID	**Variety**	**Ass. Type**	**Unit**	**Mean**	**% rel.**	**% rel.**	**% rel.**	**% rel.**	**% rel.**
119 F/2022	Tobak	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SF22PZ306W	Arkadia	HMG	kg/hl	79.58	80.33	80.65	80.48	80.53	ns
SF22PZ307W	Euforia	HMG	kg/hl	79.39	79.73	79.58	79.55	79.75	ns
SGS/2022/069/PL01	Lavantus	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL02	Opoka	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL03	Findus	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL04	Joker	HMG	kg/hl	ns	ns	ns	ns	ns	ns
63 F/2023	Patras	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SF23PZ302W	Julius	HMG	kg/hl	77.05	76.55	76.90	77.00	ns	76.88
SF23PZ309Z	Belissa	HMG	kg/hl	77.24	76.85	77.12	77.10	ns	77.01
SF23PZ310Z	Euforia	HMG	kg/hl	77.02	76.95	77.12	77.23	ns	76.89
SGS/2023/041/PL01	Yukon	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL02	Findus	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL04	Joker	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL05	Euforia	HMG	kg/hl	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL06	Arkadia	HMG	kg/hl	ns	ns	ns	ns	ns	ns
Average from 16 trials		HMG	kg/hl	**78.06**	**78.08**	**78.27**	**78.28**	**80.14**	**76.93**

No negative effect on hectolitre mass grains [g/hl] was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter wheat. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for hectolitre mass grains in the majority of trials.

- ✓ ***winter triticale***

This parameter was not studied in winter triticale.

- ✓ ***winter oilseed rape***

This parameter was not studied in winter oilseed rape.

Thousand seed weight [g]

✓ ***winter wheat*** (16 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
119 F/2022	Tobak	TGW	g	35.36	35.46	36.79	36.93	36.31	ns
SF22PZ306W	Arkadia	TGW	g	44.57	48.92	50.25	48.40	49.42	ns
SF22PZ307W	Euforia	TGW	g	42.26	44.47	44.26	44.26	45.02	ns
SGS/2022/069/PL01	Lavantus	TGW	g	41,36	42.19	43.07	43.07	42.44	ns
SGS/2022/069/PL02	Opoka	TGW	g	46.29	50.38	50.36	50.30	50.09	ns
SGS/2022/069/PL03	Findus	TGW	g	40.58	44.34	45.85	43.62	43.79	ns
SGS/2022/069/PL04	Joker	TGW	g	40.77	44.02	44.72	43.58	44.09	ns
63 F/2023	Patras	TGW	g	51.84	52.46	53.14	52.82	ns	53.55
SF23PZ302W	Julius	TGW	g	46.30	46.31	46.64	44.82	ns	45.50
SF23PZ309Z	Belissa	TGW	g	44.51	45.61	45.67	45.72	ns	45.83
SF23PZ310Z	Euforia	TGW	g	42.80	43.30	43,50	43.60	ns	43.20
SGS/2023/041/PL01	Yukon	TGW	g	39.15	42.39	42.23	41.81	ns	41.50
SGS/2023?041/PL02	Findus	TGW	g	40.45	41.89	42.31	41.88	ns	42.45
SGS/2023?041/PL04	Joker	TGW	g	40.91	44.02	45.64	43.68	ns	44.28
SGS/2023/041/PL05	Euforia	TGW	g	39.08	42.31	41.51	41.48	ns	41.98
SGS/2023/041/PL06	Arkadia	TGW	g	39.76	41.19	41.66	41.13	ns	41.81
Average from 16 trials		TGW	g	**42.25**	**44.33**	**44.85**	**44.20**	**44.45**	**44.46**

No negative effect on thousand seed weight [g] was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter wheat. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for thousand seed weight in the majority of trials.

✓ ***winter triticale*** (5 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
SGS/2023/089/PL01	Liborious	TGW	g	39.79	42.12	43.04	42.51	ns	42.64
SGS/2023/089/PL02	Tadeus	TGW	g	40.15	41.20	41.66	41.27	ns	41.34
SGS/2023/089/PL03	Rotondo	TGW	g	38.47	40.91	41.18	41.37	ns	41.55
SGS/2023/089/PL04	Twingo	TGW	g	38.94	42.05	42.14	42.06	ns	42.01
SGS/2023/089/PL05	Medalion	TGW	g	37.50	67.50	88.80	87.50	ns	86.30
Average from 5 trials:				**38.97**	**46.96**	**51.37**	**50.94**	**ns**	**50.77**

No negative effect on thousand seed weight [g] was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter triticale. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for thousand seed weight in the majority of trials.

✓ ***winter oilseed rape*** (5 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products			
					0.98 L/ha /1.0 L/ha	1.12 L/ha/ 1.15 L/ha	POR-TER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha	DIFO 250 EC / DIFCOR 250 EC at 0.5 L/ha

					of product per 100 kg seeds					
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.	% rel.
100 F/2022	Alibaba	TGW	g	4.09	4.63	4.66	4.80	4.36	ns	ns
SGS/2022/070/Pl 03	Exotter	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2022/070/PL04	SY Ilona	TGW	g	ns	ns	ns	ns	ns	ns	ns
101 F/2022	Architekt	TGW	g	3.87	4.18	4.26	ns	ns	4.20	4.12
SF22RZ307W	Graf	TGW	g	4.88	5.30	4.89	ns	ns	5.07	5.22
SGS/2022/070/PL01	Galileus	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2022/070/Pl 02	Artemis	TGW	g	ns	ns	ns	ns	ns	ns	ns
31 F/2023	Architekt	TGW	g	5.25	5.34	5.34	5.43	ns	5.37	ns
SGS/2023/042/PL01	Absolut	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2023/042/PL02	Sienna	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2023/042/PL03	Derrick	TGW	g	ns	ns	ns	ns	ns	ns	ns
32 F/2023	Hevelius	TGW	g	3.87	4.18	4.28	ns	ns	4.20	4.12
SGS/2023/043/PL01	Bonanaza	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2023/043/PL02	Memori CS	TGW	g	ns	ns	ns	ns	ns	ns	ns
SGS/2023/043/PL03	Alabama	TGW	g	ns	ns	ns	ns	ns	ns	ns
Average from 15 trials:		**TGW**	**g**	**4.39**	**4.73**	**4.69**	**5.12**	**4.36**	**4.71**	**4.49**

No negative effect on thousand seed weight [g] was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter oilseed rape. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for thousand seed weight in the majority of trials.

Oil content [%]

- ✓ ***winter wheat***

This parameter was not studied in winter wheat.

- ✓ ***winter triticale***

This parameter was not studied in winter triticale.

- ✓ ***winter oilseed rape*** (15 trials)

					SNS-F-11		Reference products			
				Untreated -	0.98 L/ha /1.0 L/ha	1.12 L/ha/ 1.15 L/ha	POR-TER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha	DIFO 250 EC / DIFCOR 250 EC at 0.5 L/ha
					of product per 100 kg seeds					
Trial ID	Variety	Ass. Type	Unit	Mean	% rel.	% rel.	% rel.	% rel.	% rel.	% rel.
100 F/2022	Alibaba	Oil	%	48.48	48.49	48.32	49.12	48,43	ns	ns
SGS/2022/070/Pl 03	Exotter	Oil	%	42.30	42.90	42.60	42.70	42.70	ns	ns
SGS/2022/070/PL04	SY Ilona	Oil	%	42.70	43.10	42.90	43.00	43.00	ns	ns
101 F/2022	Architekt	Oil	%	49.34	49.69	49.70	ns	ns	49.32	49.67

SF22RZ307W	Graf	Oil	%	46.25	46.85	46.43	ns	ns	46.25	46.70
SGS/2022/070/PL01	Galileus	Oil	%	38.6	40.1	40.1	ns	ns	40.7	40.4
SGS/2022/070/Pl 02	Artemis	Oil	%	43.2	42.9	43.1	ns	ns	43.0	43.1
31 F/2023	Architekt	Oil	%	49.82	49.85	49.69	49.95	ns	50.42	ns
SGS/2023/042/PL01	Absolut	Oil	%	42.3	42.9	42.6	42.7	ns	42.7	ns
SGS/2023/042/PL02	Sienna	Oil	%	42.4	42.5	42.5	42.6	ns	42.6	ns
SGS/2023/042/PL03	Derrick	Oil	%	41.6	41.7	41.8	42.3	ns	42.0	ns
32 F/2023	Hevelius	Oil	%	50.22	50.11	50.14	ns	ns	50.27	50.35
SGS/2023/043/PL01	Bonanaza	Oil	%	43.5	43.5	43.8	ns	ns	43.6	43.5
SGS/2023/043/PL02	Memori CS	Oil	%	43.1	43.2	43.1	ns	ns	43.1	43.1
SGS/2023/043/PL03	Alabama	Oil	%	42.4	43.3	42.9	ns	ns	42.7	42.7
Average from 15 trials:		**Oil**	**%**	**44.41**	**44.74**	**44.65**	**44.62**	**44.71**	**44.72**	**44.94**

No negative effect on oil content was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter oilseed rape. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for oil content in the majority of trials.

GLA (retained green leaf)

✓ ***winter wheat*** (6 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
119 F/2022	Tobak	GLA	%	40.0	56.25	60.00	61.25	52.50	ns
SF22PZ306W	Arkadia	GLA	%	ns	ns	ns	ns	ns	ns
SF22PZ307W	Euforia	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL01	Lavantus	GLA	%	47.5	37.5	55.0	47.5	50.0	ns
SGS/2022/069/PL02	Opoka	GLA	%	62.5	86.3	86.3	86.3	86.3	ns
SGS/2022/069/PL03	Findus	GLA	%	21.3	80.0	85.0	87.5	82.5	ns
SGS/2022/069/PL04	Joker	GLA	%	30.0	92.5	93.8	88.8	91.3	ns
63 F/2023	Patras	GLA	%	41.25	51.25	57.50	63.75	ns	58.75
SF23PZ302W	Julius	GLA	%	ns	ns	ns	ns	ns	ns
SF23PZ309Z	Belissa	GLA	%	ns	ns	ns	ns	ns	ns
SF23PZ310Z	Euforia	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL01	Yukon	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL02	Findus	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL04	Joker	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL05	Euforia	GLA	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL06	Arkadia	GLA	%	ns	ns	ns	ns	ns	ns
Average from 16 trials		**GLA**	**%**	**40.43**	**67.30**	**72.93**	**72.52**	**72.52**	**58.75**

No negative effect on retained green leaf was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter wheat. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for retained green leaf in the majority of trials.

✓ ***winter triticale*** (5 trials)

Trial ID	Variety	Ass. Type	Unit	Untreated -	SNS-F-11		Reference products		
					1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
				Mean	% rel.	% rel.	% rel.	% rel.	% rel.
SGS/2023/089/PL01	Liborious	GLA	%	25.00	60.00	60.00	55.00	ns	60.00
SGS/2023/089/PL02	Tadeus	GLA	%	11.30	40.00	60.00	55.00	ns	60.00

SGS/2023/089/PL03	Rotondo	GLA	%	47.50	78.80	87.50	80.00	ns	90.00
SGS/2023/089/PL04	Twingo	GLA	%	47.50	83.80	83.80	83.80	ns	83.80
SGS/2023/089/PL05	Medalion	GLA	%	37.50	67.50	88.80	87.50	ns	86.30
Average from 5 trials:		**GLA**	**%**	**33.76**	**66.02**	**76.02**	**72.26**	**ns**	**76.02**

No negative effect on retained green leaf was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter triticale. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for retained green leaf in the majority of trials.

✓ ***winter oilseed rape***

This parameter was not studied in winter oilseed rape.

Protein content [%]

✓ ***winter wheat*** (2 trials)

					SNS-F-11		Reference products		
				Untreated -	1.0 L/ha	1.3 L/ha	PORTER 250 EC at 0.6 L/ha	TORES 250 EC at 0.6 L/ha	TORES 250 EC at 0.5 L/ha
					of product per 100 kg seeds				
Trial ID	Variety	Ass. Type	Unit	Mean	% rel.	% rel.	% rel.	% rel.	% rel.
119 F/2022	Tobak	Protein	%	11.29	11.88	11.81	11.77	11.38	ns
SF22PZ306W	Arkadia	Protein	%	ns	ns	ns	ns	ns	ns
SF22PZ307W	Euforia	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL01	Lavantus	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL02	Opoka	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL03	Findus	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2022/069/PL04	Joker	Protein	%	ns	ns	ns	ns	ns	ns
63 F/2023	Patras	Protein	%	9.10	9.14	9.73	9.70	ns	9.29
SF23PZ302W	Julius	Protein	%	ns	ns	ns	ns	ns	ns
SF23PZ309Z	Belissa	Protein	%	ns	ns	ns	ns	ns	ns
SF23PZ310Z	Euforia	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL01	Yukon	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL02	Findus	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2023?041/PL04	Joker	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL05	Euforia	Protein	%	ns	ns	ns	ns	ns	ns
SGS/2023/041/PL06	Arkadia	Protein	%	ns	ns	ns	ns	ns	ns
Average from 16 trials		**Protein**	**%**	**10.20**	**10.51**	**10.77**	**10.74**	**11.38**	**9.29**

No negative effect on protein content was noted for any tested dose rate of SNS-F-11 in any of trials carried out on winter wheat. Comparing SNS-F-11 with standard reference products, no statistically significant differences were noted for protein content in the majority of trials.

✓ ***winter triticale***

This parameter was not studied in winter triticale

✓ ***winter oilseed rape***

This parameter was not studded in winter oilseed rape.

There are almost no significant differences in the quality of yield between SNS-F-11 and the reference products. Overall, these results confirms that there is no risk for negative side effects on the quality of the treated cereals (winter wheat and winter triticale) and winter oilseed rape.

3.4.4 Effects on transformation processes (KCP 6.4.4)

Details concerning the remains of the active substance difenoconazole are contained in Part B section 7.

Comments of ZRMs	Difenoconazole can impact on the transformation processes in cereals and oilseed rape by enhancing growth, improving photosynthesis and nutrient uptake, increasing yield and its quality and supporting diseases resistance and stress tolerance. Difenoconazole helps maintain leaf area and chlorophyll content. Fungicide application reduces root

	infections, allowing for better nutrient absorption which leads to improved vigor and yield. For example in oilseed rape with reduced diseases pressure, plants can allocate nutrients more efficiently towards reproductive organs, enhancing seed quality and soil content. Difenoconazole is a fungicide widely used in agriculture to protect crops, including cereals and winter oilseed rape from fungal diseases. Its impact on the transformation processes such as baking, fermenting or other processing can vary depending on several factors. *Baking process* (cereals). The primary concern with difenoconazole in baking is the potential for pesticide residues in the final product. Baking typically involves high temperatures, which can degrade some pesticides residues, but not completely eliminate them. *Fermenting process* (cereals and oilseed). Difenoconazole residues could potentially affect yeast activity during fermentation. While yeast can tolerate some level of residues, higher concentrations might inhibit fermentation, leading to lower efficiency in processes such as bread making, beer brewing or bioethanol production. During fermentation, chemical changes can occur, which might transform difenoconazole into different compounds. These transformations could either reduce the toxicity or create new metabolites. *Oil processing* (winter oilseed rape). The presence of difenoconazole in oilseed rape could influence the quality of the extracted oil. While the refining process may reduce pesticide residues, complete elimination is not guaranteed. The presence of difenoconazole residues in cereals and winter oilseed rape is a significant concern for food safety and environmental health. Difenoconazole is systemic, meaning it can be absorbed and translocated within the plant. Residue level can depend on the timing of application relative to the harvest. The degradation rate of difenoconazole in plants can be influenced by environmental conditions such as temperature, humidity and sunlight. Some food processing methods can reduce pesticide residues. For example, washing, peeling and cooking can decrease difenoconazole levels in cereals and oilseed rape products. Detailed information about remains of the active substance – difenoconazole is presented in Section 7 (part B).

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

36 studies conducted in 2022 and 2023 in Poland on winter wheat, winter triticale and winter rape revealed no negative impact of SNS-F-11 on quality of plants.
No phytotoxicity symptoms occurring during the field trials suggest that product application in accaccordance with label recommendation has no negative impact on parts of plant used for propagating purposes.

Summary and conclusion

In 2 trials conducted in 2023 on winter wheat phytotoxicity symptoms (chlorosis) were observed. However, how it was mentioned in section '*Phytotoxicity to host crop'* observed symptoms was transient and did not affect the effectiveness of the products or harvest parameters. These phenomena were related to too low temperature after application of the products (SNS-F-11 and standard products). In 15 studies conducted in 2022 and 2023 on winter wheat no negative impact of SNS-F-11 on quality of plants. In 15 studies conducted in 2022 and 2023 on winter rape, no negative impact of SNS-F-11 on quality of plants were observed. In 5 studies conducted in 2023 on winter triticale, no negative impact of SNS-F-11 on

quality of plants were observed.
No phytotoxicity symptoms caused by SNS-F-11 at the proposed dose rate was observed during efficacy trials. The product has no negative impact on yield parameters.

Comments of ZRMs	The use of difenoconazole fungicide can have various effects on the propagating purposes of cereals and winter oilseed rape. Propagation, which includes the processes of seed production, seed quality and subsequent germination can be influenced by fungicide application in several ways. Fungicide application can lead to the production of higher-quality seeds with better physical and biochemical properties. Healthier plants are likely to produce seeds with higher nutritional content and better storage qualities. Effective disease management can result in seeds with higher oil content and better fatty acid profiles, which is crucial for the economic value of oilseed rape. On the basis of literature data, there is no direct evidence suggesting that difenoconazole affects genetic properties of seeds. While difenoconazole residues are generally within safe limits if used according to label, it is essential to ensure that residues do not negatively affect seed quality or germination. So, it can be stated that difenoconazole fungicide has several positive effects on the propagating purposes of cereals and oilseed rape by enhancing seed health, quality, and germination rates. It contributes to higher seed yields and better seeding vigor. In line to Table 2 from EPPO 1/135 (4) – no studies for propagation are required. The use of difenoconazole on winter wheat and winter triticale during BCH 33-55 and winter oilseed rape during BBCH 32-39 provides significant benefits in disease control, growth enhancement, and yield and quality improvement. Effective application at these critical growth stages ensures healthier plants, better stress tolerance, and improved agricultural outputs.

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

3.5.1 Impact on succeeding crops (KCP 6.5.1)

It is considered that the proposed use of SNS-F-11 is unlikely to have an adverse effect on succeeding crops. SNS-F-11 is the fungicide, limited only to fungal organisms, therefore any harmful effect for any succeeding crops are not expected

Comments of ZRMs	Difenoconazole has a relatively moderate half-life in soil, typically ranging from several weeks to a few months, depending on soil type, moisture, temperature and microbial activity. It degrades primarily through microbial activity and chemical hydrolysis. Factors such as higher temperatures and adequate soil moisture can accelerate the degradation process. Some crops may be more sensitive to difenoconazole residues than others. For example, root vegetables and legumes might show different tolerance levels compared to cereals or oilseed rape. To mitigate negative effects, it is important to follow best practices such as adhering to recommended pre-harvest intervals and implementing integrated pest management strategies.

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

At the moment there was no danger in the application of difenoconazole on neighboring plants. Moreo-

ver, strict adherence to all the rules during the fungicide techniques treatments as well as observance of GEP rules, it can protect the neighboring plants from potential adverse effects relating to the protection of the crop. It is crucial to take care when carrying the liquid spray drift during spraying as well as to keep the appropriate buffer-zone.

Comments of ZRMs	The impact of difenoconazole fungicide on adjacent crops can be influenced by various factors including application methods, environmental conditions and the sensitivity of neighbouring crops. Establishing buffer zones or untreated areas between treated fields and adjacent crops can help reduce the risk of drift. Broadleaf plants, including vegetables and certain legumes, may be more sensitive to difenoconazole compared to cereals and grasses. Exposure during critical growth stages (ex. flowering) can have more pronounced negative effects on adjacent crops, potentially leading to yield losses or quality issues. Difenoconazole can leach through soil, especially in sandy or low organic matter soils, potentially reaching the root zones of adjacent crops. Practices such as maintaining proper soil health and structure can mitigate this risk. Heavy rainfall or irrigation can cause runoff containing difenoconazole to move into adjacent fields, affecting nearby crops. Using precision application techniques such as targeted spraying and appropriate equipment can minimize off-target movement of difenoconazole. Applying fungicides during favourable weather conditions (low wind, moderate temperatures) can reduce the risk of drift and volatilization. Maintaining untreated buffer zones between treated fields and adjacent crops can help protect sensitive plants from exposure. The use of difenoconazole fungicide can impact adjacent crops through mechanism such as spray drift, volatilization, leaching and runoff. Sensitive crops may experience phytotoxicity, growth inhibition and yield reduction if exposed. Implementing best practices such as precision application, establishing buffer zones, using physical barriers and regular monitoring can help mitigate these impacts and protect adjacent crops.

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

36 studies conducted in 2022 and 2023 in Poland on winter wheat, winter triticale and winter rape revealed that the tested product had no effect on other harmful organisms and non-target organisms.
Detailed studies on the possible adverse effects to beneficial organisms are submitted and summarized in Part B, Section 9 (Ecotoxicology).

Summary and conclusion

It is considered that the proposed use of SNS-F-11 is unlikely to have an adverse effect on succeeding crops.
At the moment there was no danger in the application of difenoconazole on neighboring plants.
The tested product SNS-F-11 had no effect on other harmful organisms and non-target organisms.

Comments of ZRMs	**Detailed studies on the possible adverse effects to beneficial organisms are presented in Ecotoxicology Section (B9).** Below, ZRMs from efficacy section presents only literature data about possible impact on beneficial and non-target organisms. It is known that the use of difenoconazole can have various effects on beneficial and non-target organisms. Difenoconazole can affect the diversity and activity of soil microbial communities, including bacteria, fungi and actinomycetes. Difenoconazole may negatively affect nitrogen-fixing bacteria such as *Rhizobium* species, which form symbiotic relationships with legumes. Non-target plants, particularly broadleaf species, may experience phytotoxic effects if exposed to difenoconazole through drift, volatilization or soil residues. Symptoms can include leaf chlorosis, necrosis, stunted growth and re-

	duced reproductive success. Although difenoconazole is not highly toxic to bees, sub-lethal effects such as altered foraging behaviour or reduced brood development could occur if bees are exposed to residues. Beneficial predatory and parasitic insects, such as lady beetles, lacewings and parasitoid wasps can be affected by difenoconazole if they consume contaminated prey or come into direct contact with this fungicide. Difenoconazole can enter water bodies through leaching and runoff, potentially impacting aquatic ecosystems. Contamination of water bodies can affect fish, amphibians and aquatic invertebrates. Birds and mammals can be exposed to residues through ingestion of treated plants, seeds or contaminated water. Although difenoconazole has low acute toxicity to birds and mammals, chronic exposure to residues could have sub-lethal effects. Difenoconazole fungicide can impact beneficial and non-target organisms, including soil microorganisms, non-target plants, beneficial insects, aquatic organisms, soil fauna, birds and mammals. These effects can be direct, such as toxicity, or indirect such as disruption of food webs and habitats. Implementing integrated pest management practices, establishing buffer zones, conserving habitats and conducting regular monitoring can mitigate these impacts and promote sustainable agricultural practices.

3.6 Other/special studies

No additional information is considered relevant.

Comments of ZRMs	ZRMs agree with Applicant.

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)
SGS Polska, Sp. z o.o.	Jana Kazimierza 3 Street, 01-248 Warsaw, Poland	Yes
Institute of Plant Protection – National Research Institute, Research Centre for Registration of Agrochemicals	Władysława Węgorka 20 Street, 60-318 Poznań, Poland	Yes
Institute of Plant Protection – National Research Institute, Sosnicowice Branch, Pesticide Efficacy Testing Department	Gliwicka 29 Street, 44-153 Sośnicowice, Poland	Yes

Appendix 1 Lists of data considered in support of the evaluation

List of data submitted by the applicant and relied on

Data point	Author(s)	Year	**Title** **Company Report No.** **Source (where different from company)** **GLP or GEP status** **Published or not**	**Vertebrate study Y/N**	Owner
KCP 6.2 KCP 6.4.3	Agnieszka Mączyńska	2022	Analysis of quality parameters of winter oilseed rape after application of SNS-F-11. 26 J/2022 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Agnieszka Mączyńska	2022	Biological efficacy expertise of fungicide SNS-F-11 (90 EC) for *Leptosphaeria maculans* control in winter oilseed rape. 100 F/2022 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter oilseed rape to control of *Plenodomus lingam*, Poland, 2022 SGS/2022/070/PL03 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter oilseed rape to control of *Plenodomus lingam* , Poland, 2022. SGS/2022/070/PL04 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Agnieszka	2022	Analysis of quality parameters of winter oilseed rape after application of SNS-F-11.	N	Synthos Agro

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 6.4.3	Mączyńska		25 J/2022 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished		Sp. z o. o.
KCP 6.2	Agnieszka Mączyńska	2022	Biological efficacy expertise of fungcide SNS-F-11 (90 EC) for *Sclerotinia sclerotiorum* control in winter oilseed rape. 101 F/2022 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Beata Danielewicz	2022	An evaluation of the efficacy TORES 250 EC and SNS-F-11 against fungal diseases in oilseed rape. 334/2022 Institute of plant protection – national research institute. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter oilseed rape to control of *Sclerotinia sclerotiorum* , Poland, 2022 SGS/2022/070/PL01 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter oilseed rape to control of *Sclerotinia sclerotiorum* , Poland, 2022 SGS/2022/070/PL02 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Patrycja Płonka	2022	Biological efficacy expertise of fungcide SNS-F-11 (90 EC) for *Blumeria graminis (Erysiphe graminis)*, *Puccinia recondita* control in winter wheat.	N	Synthos Agro Sp. z o. o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
			119 F/2022 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished		
KCP 6.2	Beata Danielewicz	2022	An evaluation of the efficacy SNS-F-11 and Tores 250 EC against fungal diseases in winter wheat. 332/2022 Institute of plant protection – national research institute. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Beata Danielewicz	2022	An evaluation of the efficacy SNS-F-11 and Tores 250 EC against fungal diseases in winter wheat. 333/2022 Institute of plant protection – national research institute. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter wheat to control of foliar diseases, Poland, 2022. SGS/2022/069/PL01 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter wheat to control of foliar diseases, Poland, 2022. SGS/2022/069/PL02 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter wheat to control of foliar diseases, Poland, 2022.	N	Synthos Agro Sp. z o. o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
			SGS/2022/069/PL03 SGS Polska Sp. z o.o. GEP Unpublished		
KCP 6.2	Mateusz Krawczuk	2022	Efficacy evaluation of SNS-F-11 when applied into winter wheat to control of foliar diseases, Poland, 2022. SGS/2022/069/PL04 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2 KCP 6.4.3	Agnieszka Mączyńska	2023	Analysis of quality parameters of winter oilseed rape after application of fungicydes SNS-F-11 (90 EC), Tores 250 EC. 2 J/2023 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Agnieszka Mączyńska	2023	Biological efficacy expertise of fungcides SNS-F-11 (90 EC), Tores 250 EC for *Leptosphaeria maculans* control in winter oilseed rape. 31 F/2023 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2 KCP 6.4.3	Agnieszka Mączyńska	2023	Analysis of quality parameters of winter oilseed rape after application of fungicide SNS-F-11 (90 EC). 3 J/2023 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Agnieszka Mączyńska	2023	Biological efficacy expertise of fungcide SNS-F-11 (90 EC) for *Sclerotinia sclerotiorum* control in winter oilseed rape. 32 F/2023	N	Synthos Agro Sp. z o. o.

Data point	Author(s)	Year	**Title** **Company Report No.** **Source (where different from company)** **GLP or GEP status** **Published or not**	**Vertebrate study Y/N**	**Owner**
			Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished		
KCP 6.2	Patrycja Płonka	2023	Biological efficacy expertise of fungcides SNS-F-11 (90 EC), Tores 250 EC for *Blumeria graminis*(*Erysiphe graminis*), *Puccinia recondita*, *Zymoseptoria tritici* control in winter wheat. 63 F/2023 Institute of Plant Protection – National Research Institute, Sosnicowice Branch GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter wheat to control of foliar diseases, Poland, 2023. SGS/2023/041/PL05 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter wheat to control of foliar diseases, Poland, 2023. SGS/2023/041/PL06 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter wheat to control of foliar diseases, Poland, 2023. SGS/2023/041/PL01 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter wheat to control of foliar diseases, Poland, 2023. SGS/2023/041/PL02	N	Synthos Agro Sp. z o. o.

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KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter wheat to control of foliar diseases, Poland, 2023. SGS/2023/041/PL04 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Łukasz Siekaniec	2023	Expertise of the effectiveness of fungicide SNS-F-11 90 EC and TORES 250 EC int the control fungal diseases in the cultivation of winter wheat, 323/2023 Institute of Plant Protection – National Research Institute, Research. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Agata Korbas	2023	Expertise of the effectiveness of fungicide SNS-F-11 90 EC and TORES 250 EC int the control fungal diseases in the cultivation of winter wheat, 319/2023 Institute of Plant Protection – National Research Institute, Research. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Łukasz Siekaniec	2023	Expertise of the effectiveness of fungicide SNS-F-11 90 EC and TORES 250 EC int the control fungal diseases in the cultivation of winter wheat, 324/2023 Institute of Plant Protection – National Research Institute, Research. Research Centre for Registration of Agrochemicals Fungicide Research Team GEP Unpublished	N	Synthos Agro Sp. z o. o.

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KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in formulation EC when applied into winter oilseed rape to control of *Plenodomus lingam*, Poland, 2023 SGS/2023/042/PL02 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in formulation EC when applied into winter oilseed rape to control of *Plenodomus lingam*, Poland, 2023 SGS/2023/042/PL03 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in formulation EC when applied into winter oilseed rape to control of *Sclerotinia sclerotiorum*. SGS/2023/043/PL01 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in formulation EC when applied into winter oilseed rape to control of *Sclerotinia sclerotiorum*. SGS/2023/043/PL02 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.

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KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in formulation EC when applied into winter oilseed rape to control of *Sclerotinia sclerotiorum*. SGS/2023/043/PL03 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter triticale to control of foliar diseases, Poland, 2023. SGS/2023/089/PL01 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter triticale to control of foliar diseases, Poland, 2023. SGS/2023/089/PL02 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter triticale to control of foliar diseases, Poland, 2023. SGS/2023/089/PL03 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter triticale to control of foliar diseases, Poland, 2023. SGS/2023/089/PL04 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 6.2	Mateusz Krawczuk	2023	Efficacy evaluation of SNS-F-11 containing the active substance: difenoconazole, in EC formulation. when applied into winter triticale to control of foliar diseases, Poland, 2023. SGS/2023/089/PL05 SGS Polska Sp. z o.o. GEP Unpublished	N	Synthos Agro Sp. z o. o.

List of data submitted or referred to by the applicant and relied on, but already evaluated at EU peer review

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
-	-	-	-	-	-

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
-	-	-	-	-	-