

REGISTRATION REPORT

Part B

Section 3

Efficacy Data and Information

Concise summary

Product code: CHR/ZF/PROTI 100 FS

Product name(s): Gamelan 100 FS/ Doraltes 100 FS

Chemical active substance(s):

Active substance: prothioconazole 100 g/L

Zonal Rapporteur Member State: Poland

NATIONAL ADDENDUM Poland

(authorization)

Applicant: Innvigo Sp. z o.o.

Submission date: February 2025

MS assessment: June 2025

Version history

When	What
June 2025	Extension of use for winter barley

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

Abstract

Abstract

CHR/ZF/PROTI is a fungicide formulated as a flowable suspension (FS) for seed treatment, containing the active substance prothioconazole at a concentration of 100 g/L. In Poland, it is an authorized plant protection product for use on winter wheat, winter triticale, and winter rye, and is now newly proposed for use on winter barley. For cMS HU, it is a new seed treatment intended for use on winter wheat and winter barley against fungal diseases. The proposed maximum rate of the product is 100 ml/100 kg seed which corresponding 10.0 g a.s./100 kg seed prothioconazole.

Preliminary tests

Since products containing prothioconazole have previously been registered in several European countries, and the fungicidal activity of this active substance has been extensively researched and confirmed through commercial use, the applicant considers that no further preliminary range-finding trials are necessary for this submission. Furthermore, CHR/ZF/PROTI is an existing product already approved for use against a broad spectrum of diseases.

Minimum effective dose

The performance of the maximum label rate of 100 ml per 100 kg of seed, corresponding to 10.0 g a.s./100 kg of seed, prothioconazole per application, was evaluated during the zonal process. As a result, Gamelan 100 FS/ Doraltres 100 FS was granted registration. Based on proven efficacy from commercial use, as well as data on effectiveness against fungal diseases in winter cereals, it can be concluded that the proposed label rate is fully justified as the minimum effective dose for controlling key fungal diseases in winter barley in the North–East Zone and in both winter wheat and winter barley in the South–East Zone.

Conclusion - Efficacy

In the North-East zone, sufficient effectiveness of CHR/ZF/PROTI against *Fusarium spp.*, *Monographella nivalis*, *Pyrenophora graminea*, *Pyrenophora teres*, and *Ustilago nuda* in winter barley has been demonstrated based on trials conducted in Poland.

In the South-East zone, the available data from both winter wheat and winter barley are limited; however, there is some evidence suggesting that the level of effectiveness in winter barley is comparable to that observed in the North-East zone. Therefore, cMS should consider whether the number of trials submitted for these uses are sufficient to support authorisation. Additionally, cMS may consider the acceptability of extrapolating data from the North-East zone.

Resistance

Prothioconazole, a member of the DMI fungicides, belongs to the Sterol Biosynthesis Inhibitors (SBIs). Prothioconazole is a triazole fungicide classified under FRAC Group 3, known as Demethylation Inhibitors (DMIs). These fungicides inhibit sterol biosynthesis in fungi, disrupting cell membrane formation and function. Prothioconazole as a seed treatment is classified as low to medium risk for resistance development, primarily because it is applied only once per season (at sowing) and targets early, uniform pathogen populations. However, prolonged use and repeated solo applications across seasons may select for resistant strains—especially if the same DMI (e.g., prothioconazole) is used later in the season as a foliar spray.

Observations on other undesirable or unintended side-effects

All trials demonstrated that CHR/ZF/PROTI had no adverse effects on winter wheat or winter barley. Evaluations of crop emergence, yield (including quantity and quality parameters) and phytotoxicity revealed no negative impacts at either the target dose (1N) or the elevated dose (1.5N). These trials were conducted in accordance with EPPO guideline PP 1/135 (4), and the results consistently demonstrated the safety of the test product in all assessments. Notably, no phytotoxic symptoms were observed at the target

dose of 1N or the elevated dose of 1.5N.

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

Table 3.1-1:

PPP name/code)	(product CHR/ZF/PROTI 100 FS Gamelan 100 FS/ Doraltex 100 FS	Formulation type:	GAP rev. FS , date: 2025-02-24
Active substance 1:	prothioconazole	Conc. of as 1:	100,0 g/l
Active substance 2:	n/a	Conc. of as 2:	n/a
Active substance....:	n/a	Conc. of as:	n/a
Safener:	-	Conc. of safener:	conc. ^(c)
Synergist:	-	Conc. of synergist:	conc. ^(c)
Applicant:	Innvigo Sp. z o.o.	Professional use:	☒
Zone(s):	interzonal	Non professional use:	☐
Verified by MS:	yes/no ☒		
Field of use:	Seed treatment		

1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Use- No. (e)	Member state(s)	Crop and/ or situation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I	Pests or Group of pests controlled (additionally: develop- mental stages of the pest or pest group)	Application				Application rate per treatment			PHI (days)	Remarks: e.g. g safen- er/synergist per ha (f)		
					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 prod- uct / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max				
Zonal uses (field or outdoor uses, certain types of protected crops)															
1															
2															
Interzonal uses (use as seed treatment, in greenhouses (or other closed places of plant production), as post-harvest treatment or for treatment of empty storage rooms)															

3	PL, SK, LV, LT, EE*, DE*	Winter wheat (TRZAW)	F	<i>Tilletia caries</i> , <i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Ustilago tritici</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha EE, DE – registration ongoing	
4	CZ	Winter wheat (TRZAW)	F	<i>Tilletia caries</i> , <i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Ustilago tritici</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
5	PL, SK, LV, LT, EE*, DE*	Winter tritiale (TTLWI)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.015-0.025 kg a.s/ha b) 0.015-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 150-250 kg/ha EE, DE – registration ongoing	
6	CZ	Winter tritiale (TTLWI)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.015-0.025 kg a.s/ha b) 0.015-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
7	PL, SK, LV, LT, EE*, DE*	Winter rye (SECCW)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Urocystis occulta</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 95-250 kg/ha EE, DE – registration ongoing	
8	CZ	Winter rye (SECCW)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Urocystis occulta</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
9	PL	Winter barley (HORVW)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Pyrenophora graminea</i> , <i>Pyrenophora teres</i> (anam.	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 95-250 kg/ha	

				<i>Drechslera teres</i> , <i>Ustilago nuda</i>										
10	HU	Winter wheat (TRZAW)	F	<i>Tilletia caries</i> , <i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>).	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha	
11	HU	Winter barley (HORVW)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Pyrenophora graminea</i> , <i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>).	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 95-250 kg/ha	
12	RO	Winter wheat (TRZAW)	F	<i>Tilletia caries</i> , <i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Ustilago tritici</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha	
13	RO	Winter triticale (TTLWI)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.015-0.025 kg a.s/ha b) 0.015-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
14	RO	Winter rye (SECCW)	F	<i>Fusarium</i> sp., <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Urocystis occulta</i>	winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
Minor uses according to Article 51 (zonal uses)														
15														
16														
Minor uses according to Article 51 (interzonal uses)														
17	PL, LT, RO*, HU	Spring rye (SECCS)	F	<i>Fusarium</i> sp., <i>Urocystis occulta</i>	Spring seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 95-250 kg/ha	

									/t seed	b) 0.0095-0.025 kg a.s/ha			RO – registra- tion ongoing	
18	CZ	Spring rye (SECCS)	F	<i>Fusarium sp.</i> , <i>Urocystis occulta</i>	Spring seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.0095-0.025 kg a.s/ha b) 0.0095-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	
19	PL, RO*, HU	Durum wheat (TRZDU), Spelt wheat (TRZSP)	F	<i>Fusarium sp.</i> , <i>Tilletia caries</i> , <i>Microdochium majus</i> , <i>Ustilago tritici</i>	Winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha RO – registra- tion ongoing	
20	PL, RO*, HU	Durum wheat (TRZDU), Spelt wheat (TRZSP), Einkorn wheat (TRZMO) Emmer wheat (TRZDI)	F	<i>Fusarium sp.</i> , <i>Tilletia caries</i> , <i>Ustilago tritici</i>	Spring seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha RO – registra- tion ongoing	
21	LT	Durum wheat (TRZDU), Spelt wheat (TRZSP)	F	<i>Fusarium sp.</i> , <i>Tilletia caries</i> , <i>Microdochium majus</i> , <i>Ustilago tritici</i>	Winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180-250 kg/ha	
22	CZ	Durum wheat (TRZDU), Spelt wheat (TRZSP), Einkorn wheat (TRZMO) Emmer wheat (TRZDI)	F	<i>Fusarium sp.</i> , <i>Tilletia caries</i> , <i>Ustilago tritici</i> , <i>Microdochium majus</i>	Spring/winter seed treatment	n/a	a)1 b)1	n/a	a) Max. 1.0 l /t seed b) Max. 1.0 l /t seed	a) 0.018-0.025 kg a.s/ha b) 0.018-0.025 kg a.s/ha	max. 0.7 L/100 kg seed	n/a	Sowing rate: 180 kg/ha	

* 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

Remarks table heading:

(a) e.g. wettable powder (WP), emulsifiable concentrate (EC), granule (GR)
(b) Catalogue of pesticide formulation types and international coding system CropLife International Technical Monograph n°2, 6th Edition Revised May 2008
(c) g/kg or g/l

Remarks columns:

1 Numeration necessary to allow references
2 Use official codes/nomenclatures of EU Member States
3 For crops, the EU and Codex classifications (both) should be used; when relevant, the use situation should be described (e.g. fumigation of a structure)
4 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
5 Scientific names and EPPO-Codes of target pests/diseases/ weeds or, when relevant, the common names of the pest groups (e.g. biting and sucking insects, soil born insects, foliar fungi, weeds) and the developmental stages of the pests and pest groups at the moment of application must be named.
6 Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench
Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plants - type of equipment used must be indicated.

(d) Select relevant
(e) Use number(s) in accordance with the list of all intended GAPs in Part B, Section 0 should be given in column 1
(f) No authorization possible for uses where the line is highlighted in grey, Use should be crossed out when the notifier no longer supports this use.

7 Growth stage at first and last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
8 The maximum number of application possible under practical conditions of use must be provided.
9 Minimum interval (in days) between applications of the same product
10 For specific uses other specifications might be possible, e.g.: g/m³ in case of fumigation of empty rooms. See also EPPO-Guideline PP 1/239 Dose expression for plant protection products.
11 The dimension (g, kg) must be clearly specified. (Maximum) dose of a.s. per treatment (usually g, kg or L product / ha).
12 If water volume range depends on application equipments (e.g. ULVA or LVA) it should be mentioned under “application: method/kind”.
13 PHI - minimum pre-harvest interval
14 Remarks may include: Extent of use/economic importance/restrictions

Column 15: zRMS conclusion.

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

3.2 Efficacy data (KCP 6)

Introduction

This document summarizes the information related to the efficacy of the product CHR/ZF/PROTI 100 FS containing active substance prothioconazole.

CHR/ZF/PROTI applies in the Interzonal for the registration of in winter cereals as a seed treatment/dressing:

- CHR/ZF/PROTI is to be applied at the rate of 100 ml/100 kg seed which corresponding 10.0 g a.s./100 kg seed prothioconazole per application for the control of most important fungal diseases in:

- North–East Zone winter wheat, winter triticale, winter rye and winter barley,

- South–East Zone winter wheat and winter barley.

Description of active substances

Marketing name:

product submitted to registration under two different marketing names: Gamelan 100 FS/ Doraltes 100 FS

Formulants content:

The information concerning ingredients of product CHR/ZF/PROTI are included in the confidential part of the registration dossier: Registration Report – Part C.

Formulation of use:

FS – Flowable concentrate for seed treatment

General information on the plant protection product:

CHR/ZF/PROTI is to be applied once as a seed treatment/dressing in winter cereals, the suggested dose of the product CHR/ZF/PROTI 100 ml/ 100 kg seed.

CHR/ZF/PROTI containing prothioconazole as the active substances is prepared for the use in agricultural practice in the form FS – Flowable concentrate for seed treatment.

Information on the composition of product CHR/ZF/PROTI are included in the confidential part of the registration dossier: Registration Report – Part C.

Description of active substances

Description of active substances

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

Mode of action

Active substance:

Prothioconazole 100 g/l

Chemical name (IUPAC): (R,S) 2-[2-(1-chlorocyclopropyl)-3-(2-chlorophenyl)-2-hydroxypropyl]-2,4-dihydro-3H-1,2,4-triazole-3-thione

CAS No.: 178928-70-6

According to Prothioconazole_DAR_03_Vol_3_BI-5_public.pdf

DMI fungicides act by inhibiting the Cytochrome P450-dependent C-14 demethylase reaction in fungal sterol biosynthesis. Blockage of the sterol biosynthesis leads to a reduction in the normal sterol pathway

end products and an accumulation of other abnormal sterols. It is unclear which of these effects is responsible for impairment of membrane function and limitation of fungal growth.

According to the Fungicide Resistance Action Committee (FRAC) classification prothioconazole is included MOA Code G1. Prothioconazole target site is C14- demethylase in sterol, biosynthesis DMI-fungicides (DeMethylation Inhibitors).

SBI-fungicides that inhibit the C14 demethylation step within fungal sterol biosynthesis are now commonly characterised as DeMethylation-Inhibitors (Abbreviation: DMI's). Chemically, DMI's belong to different classes. Besides triazoles, numerous imidazoles, pyridines and pyrimidine all have been shown to act as demethylation inhibitors.

DMI fungicides are Sterol Biosynthesis Inhibitors (SBIs), but show no cross resistance to other SBI classes

Table 3.2-1: Details of the active substances

Active substance	Active substance 1	Active substance 2	Active substance 3
Concentration (Unit: g/kg or g/L...)	250 g/L	n/a	n/a
Chemical group	triazole	n/a	n/a
Mode of action	Inhibitor of fungal sterols biosynthesis (DMI)	n/a	n/a
Biological action	Prothioconazole is a systemic (loco and leaf) fungicide that interferes with fungal sterol biosynthesis resulting in the impairment of membrane function and limitation of fungal growth. Prothioconazole is recommended for the control of steam, leaf and ear diseases of cereals including <i>Oculimacula spp.</i> , <i>Blumeria graminis</i> , <i>Puccinia striiformis</i> , <i>Puccinia recondita</i> , <i>Zymoseptoria tritici</i> , <i>Pyrenophora tritici-repentis</i> , <i>Leptosphaeria nodorum</i> , <i>Rhizoctonia cerealis</i> , <i>Monographella nivalis</i> / <i>Microdochium nivale</i> , <i>Fusarium spp.</i> , <i>Rhynchosporium secalis</i> , <i>Pyrenophora teres</i> , <i>Puccinia hordei</i> , and oilseed rape diseases including <i>Sclerotinia sclerotiorum</i> , <i>Leptosphaeria maculans</i> , <i>Pyrenopeziza brassicae</i> , <i>Cylindrosporium spp.</i> , <i>Botrytis cinerea</i> , <i>Alternaria brassicae</i> .	n/a	n/a
...		n/a	n/a

Description of the plant protection product

Formulation of use:

CHR/ZF/PROTI containing active substances 100 g/l prothioconazole as the active substance is prepared for the use in agricultural practice as a seed treatment in the form FS – flowable concentrate for seed treatment.

CHR/ZF/PROTI is to be applied once as a seed treatment/dreessing in winter cereals, the suggested dose of the product CHR/ZF/PROTI 100 ml/ 100 kg seed.

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

Uses		Member State	Currently registered rate(s)		Requested rate(s)		Comments / Other relevant details on GAPs
Crop(s)	Target(s)		max. rate per appl	max. total rate per crop/season	max. rate per appl	max. total rate per crop/season	
winter wheat (TRZAW)	<i>Fusarium spp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Tilletia caries</i> , <i>Ustilago tritici</i>	PL, CZ	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	-
winter triticale (TTLWI)	<i>Fusarium spp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	PL, CZ	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	-
winter rye (SECCW)	<i>Fusarium spp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Urocystis occulta</i>	PL, CZ	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	100 ml/100 kg seed	-
winter barley (HORVW)	<i>Fusarium sp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Pyrenophora graminea</i> , <i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>), <i>Ustilago nuda</i>	PL, CZ	-	-	100 ml/100 kg seed	100 ml/100 kg seed	-
winter wheat (TRZAW)	<i>Fusarium spp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Tilletia caries</i> , <i>Ustilago tritici</i>	HU	-	-	100 ml/100 kg seed	100 ml/100 kg seed	-
winter barley (HORVW)	<i>Fusarium sp.</i> , <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>), <i>Pyrenophora graminea</i> , <i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>), <i>Ustilago nuda</i>	HU	-	-	100 ml/100 kg seed	100 ml/100 kg seed	-

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*
FUSASP	<i>Fusarium sp.</i>	-
MONGNI	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	-
TILLCA	<i>Tilletia caries</i>	-
PYRNGR	<i>Pyrenophora graminea</i>	-
PYRNTE	<i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>)	-
USTINH	<i>Ustilago nuda</i>	-
USTINT	<i>Ustilago tritici</i>	-
UROCOC	<i>Urocystis occulta</i>	-

* optional

Table 3.2-4: Major / minor status of intended uses (for all cMS and zRMS).

Crop and/or situation	Crop status		Pests or group of pests controlled	Pest status	
	Major	minor		Major	minor
winter wheat	PL, CZ, HU	-	<i>Fusarium sp.</i>	PL, CZ, HU	-
			<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	PL, CZ, HU	-
			<i>Tilletia caries</i>	PL, CZ, HU	-
			<i>Ustilago tritici</i>	-	PL, CZ
winter triticale	PL, CZ	-	<i>Fusarium sp.</i>	PL, CZ	-
			<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	PL, CZ	-
winter rye	PL, CZ	-	<i>Fusarium sp.</i>	PL, CZ	-
			<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	PL, CZ	-
			<i>Urocystis occulta</i>	no data	no data
winter barley	PL, CZ, HU	-	<i>Fusarium sp.</i>	PL, CZ, HU	-
			<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	PL, CZ, HU	-
			<i>Pyrenophora graminea</i>	PL, CZ, HU	-
			<i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>)	PL, CZ, HU	-
			<i>Ustilago nuda</i>	PL, CZ, HU	-

Compliance with the Uniform Principles

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

Information on trials submitted (3.1 Efficacy data)

North-East EPPO Zone – Poland.

A total of 99 trials in winter cereals have been carried out in season 2020/21, 2021/22 and 2023/24 in the North-East EPPO zone within the Central registration zone to evaluate the efficacy of applied at the proposed label rate of 100 ml/100 kg seed which corresponding prothioconazole 10.0 g a.s./100 kg seed for the control of most important fungal diseases in winter cereals (Table 3.2 6). Trials were conducted in the main winter cereals growing areas in the North-East EPPO zone in Poland.

South-East EPPO Zone – Hungary.

A total of 99 trials in winter cereals have been carried out in season 2023/24 in the South-East EPPO zone within the Central registration zone to evaluate the efficacy of applied at the proposed label rate of 100 ml/100 kg seed which corresponding prothioconazole 10.0 g a.s./100 kg seed for the control of most important fungal diseases in winter cereals (Table 3.2 6). Trials were conducted in the main winter cereals growing areas in South-East zone in Hungary.

Table 3.2-5a: Presentation of trials efficacy trials

North-East EPPO Zone – Poland.

Winter wheat – field trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter wheat	<i>Fusarium sp.</i>	Poland	2020-2021	E	6(6)	-	GEP	-
	<i>Microdochium majus/Monographella majus</i>	Poland	2020-2021	E	6(6)	-	GEP	-
	<i>Tilletia caries</i>	Poland	2020-2021	E	9(9)	-	GEP	-
	<i>Ustilago tritici</i>	Poland	2020-2021	E	3(3)	-	GEP	-
	<i>Ustilago tritici</i>	Poland	2021-2022	E	3(3)	-	GEP	-
TOTAL			2020-2022	-	27(27)	-	-	-

* 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.

North-East EPPO Zone – Poland.

Winter wheat – laboratory trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter wheat	<i>Fusarium sp.</i>	Poland	2020-2021	E	3(3)	-	GEP	-
	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	Poland	2020-2021	E	3(3)	-	GEP	-
TOTAL			2020-2021	-	6(6)	-	-	-

* 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.

North-East EPPO Zone – Poland.

Winter triticales field trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter triticale	<i>Fusarium sp.</i>	Poland	2020-2021	E	6(6)	-	GEP	-
	<i>Monographella nivalis (anam. Microdochium nivale)</i>	Poland	2020-2021	E	6(6)	-	GEP	-
TOTAL			2020-2021	-	12(12)	-	-	-

* 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.

North-East EPPO Zone – Poland.
 Winter triticales laboratory trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter triticale	<i>Fusarium sp.</i>	Poland	2020-2021	E	3(3)	-	GEP	-
	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	Poland	2020-2021	E	3(3)	-	GEP	-
TOTAL			2020-2021	-	6(6)	-	-	-

* 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.

North-East EPPO Zone – Poland.
 Winter rye field trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter rye	<i>Fusarium sp.</i>	Poland	2020-2021	E	6(6)	-	GEP	-
	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	Poland	2020-2021	E	6(6)	-	GEP	-
	<i>Urocystis occulta</i>	Poland	2020-2021	E	9(9)	-	GEP	-
TOTAL			2020-2021	-	21(21)	-	-	-

* 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.

North-East EPPO zone – Poland.

Winter rye laboratory trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter rye	<i>Fusarium sp.</i>	Poland	2020-2021	E	3(3)	-	GEP	-
	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	Poland	2020-2021	E	3(3)	-	GEP	-
TOTAL			2020-2021	-	6(6)	-	-	-

* 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.

North-East EPPO Zone – Poland.

Winter barley field trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter barley	<i>Fusarium sp.</i>	Poland	2023-2024	E	6(6)	-	GEP	-
	<i>Microdochium majus/Monographella majus</i>	Poland	2023-2024	E	6(6)	-	GEP	-
	<i>Pyrenophora graminea</i>	Poland	2023-2024	E	9(9)	-	GEP	-
	<i>Pyrenophora teres (anam. Drechslera teres)</i>	Poland	2023-2024	E	9(9)	-	GEP	-
	<i>Ustilago nuda</i>	Poland	2023-2024	E	9(9)	-	GEP	-
TOTAL			2023-2024	-	39(39)	-	-	-

* 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.

North-East EPPO Zone – Poland.

Winter barley laboratory trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					North-East zone	-		
winter barley	<i>Fusarium sp.</i>	Poland	2023-2024	E	3(3)	-	GEP	-
	<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	Poland	2023-2024	E	3(3)	-	GEP	-
TOTAL			2023-2024	-	6(6)	-	-	-

* 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.

South-East EPPO Zone – Hungary.

Winter wheat – field trials

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					South-east zone	-		
winter wheat	<i>Fusarium sp.</i>	Hungary	2023-2024	E	3(3)	-	GEP	-
	<i>Microdochium majus</i> / <i>Monographella majus</i>	Hungary	2023-2024	E	3(1)	-	GEP	-
	<i>Tilletia caries</i>	Hungary	2023-2024	E	3(3)	-	GEP	-
TOTAL			2023-2024	-	9(7)	-	-	-

* 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.

South-East EPPO Zone – Hungary.
Winter barley field trials

Crop(s) *	Target(s) *	Country	Years	Type of trial**	Number of trials		GEP, non-GEP, official***	Comments (any other relevant information)
					(number of valid trials)			
					South-east zone	-		
winter barley	<i>Fusarium sp.</i>	Hungary	2023-2024	E	3(3)	-	GEP	-
	<i>Microdochium majus/Monographella majus</i>	Hungary	2023-2024	E	3(2)	-	GEP	-
	<i>Pyrenophora graminea</i>	Hungary	2023-2024	E	3(3)	-	GEP	-
	<i>Pyrenophora teres (anam. Drechslera teres)</i>	Hungary	2023-2024	E	3(3)	-	GEP	-
TOTAL			2023-2024	-	12(11)	-	-	-

* 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

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	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg	tested/reference
winter triticale	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg	tested/reference
winter rye	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg	tested/reference
winter barley	Redigo Pro 170 FS	Poland	R-240/2016 - 23.12.2016; changed by decision R-348/2021d - 02.07.2021 r.	prothioconazole	FS - suspension concentrates	150 g/l	50-66.7 ml/100 kg	50-66.7 ml/100 kg	-
				tebuconazole		20 g/l			

	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020 r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg	tested/reference
winter wheat, winter barley	Premis 025 FS	Hungary	46825/2004 FVM	triticonazole	FS - suspension concentrates	25 g/l	150 ml/100 kg	150 ml/100 kg	!
	Redigo Pro 170 FS	Hungary	6300/1531-1/2021	prothioconazole tebuconazole	FS - suspension concentrates	150 g/l 20 g/l	50-66.7 ml/100 kg	50-66.7 ml/100 kg	!

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

3.2.1 Preliminary tests (KCP 6.1)

Preliminary studies on product CHR/ZF/PROTI were not carried out because this seed treatment contains prothioconazole which is a well-known active substances that has been used for many years in agricultural practice.

No specific studies were conducted to fill this data point.

Table 3.2-7: Efficacy of active substance components in test product – not applicable

Not applicable

Table 3.2-8: Percentage of control of the different ratios at timing of assessment (e.g. 10 to 14 days after application). – not applicable

Not applicable

Summary and conclusions on the preliminary trials

Not applicable

Conclusion - Preliminary tests

Since products containing prothioconazole have previously been registered in several European countries, and the fungicidal activity of this active substance has been extensively researched and confirmed through commercial use, the applicant considers that no further preliminary range-finding trials are necessary for this submission. Furthermore, CHR/ZF/PROTI is an existing product already approved for use against a broad spectrum of diseases.

3.2.2 Minimum effective dose tests (KCP 6.2)

Minimum effective dose studies on product CHR/ZF/PROTI were not carried. On the basis of the information included in point 3.2.3 the assessment of efficacy of seed treatment CHR/ZF/PROTI, the minimum effective dose of product CHR/ZF/PROTI in usage in winter cereals is:
100 ml/100 kg seed corresponding to 10.0 g a.s./100 kg seed of prothioconazole.

Crop(s) 1 AND/OR Target(s) 1

Not applicable

Table 3.2-9 Minimum effective dose. Efficacy of product at proposed label rate, at X% and Y% dose rates on target 1 at assessment timing against “Crop(s) 1 AND/OR Target(s) 1”.

No specific studies were conducted to fill this data point.

Crop(s) 2 AND/OR Target(s) 2

Not applicable

Summary and conclusions on the minimum effective dose

Not applicable

Conclusion - Minimum effective dose

The performance of the maximum label rate of 100 ml per 100 kg of seed, corresponding to 10.0 g a.s./100 kg of seed, prothioconazole per application, was evaluated during the zonal process. As a result, Gamelan 100 FS/ Doraltes 100 FS was granted registration. Based on proven efficacy from commercial use, as well as data on effectiveness against fungal diseases in winter cereals, it can be concluded that the proposed label rate is fully justified as the minimum effective dose for controlling key fungal diseases in winter barley in the North–East Zone and in both winter wheat and winter barley in the South–East Zone.

3.2.3 Efficacy tests (KCP 6.2)

North- East Zone - Poland

The efficacy trials carried out in in 2020/21, 2021/22 in winter wheat, winter triticale, winter rye and in 2023/24 in winter barley in Poland.

Materials and methods

The applicant submitted 99 reports (in total) showing the results in research into product efficacy carried out in 2020/21, 2021/22, 2023/24 in winter cereals (42 field trials and 18 laboratory experiments in winter wheat, winter triticale and winter rye, 33 field trials and 6 laboratory experiments in winter barley). List of these reports is contained in Appendix 1

Site

Trials were conducted in different regions in Poland where winter cereals are grown commercially. Laboratory experiments were carried out on three winter crops against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*). The experiment was established on a set of complete randomized blocks in 4 replications.

Details on trial sites, applications and data on effectiveness are included in Appendix 4 and 5

Testing units

Efficacy studies on fungicide/ seed treatment CHR/ZF/PROTI were performed in 2020/21, 2021/22 and 2023/24 by:

- Staphyt Sp. z o.o., ul. Poznanska 62/53, 60-853 Poznań, Poland
- Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, ul. Gliwicka 29, 44-153 Sońnicowice, Poland
- Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department ul. Wojska Polskiego 28, 60-637 Poznań, Poland

Experimental details

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

- PP 1/135 (4) Phytotoxicity assessment
- PP 1/152 (4) Design and analysis of efficacy evaluation trials
- PP 1/181 (5) Conduct and reporting of efficacy evaluation trials including good experimental practice

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

- PP 1/19(5) Seed-borne cereal fungi

Assessment methods

Statistical Analysis

In case of statistical analysis, data were analysed using a two way analysis of variance (ANOVA). The probability of no significant differences occurring between treatment means is calculated as the F probability value (Prob(F)). Student-Newman-Keuls test was then applied to separate any treatment differences that may be implied by the ANOVA TEST (Prob(F)<0.05) and these are indicated by the LSD-value and by a letter-test.

Assessment of efficacy

The assessment of efficacy in the treated plots was made in relation to the untreated plot on an overall plot basis (scale 0-100 %, 0 % =no efficacy). The assessment date was determined by the speed of action and period of efficacy of the test items.

The assessment of efficacy in the treated plots was made in relation to the average value on untreated plots (according to Abbott; scale 0-100 %, 0 % =no efficacy). The assessment date was determined by the crop development stage.

Assessment of phytotoxicity

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). The assessment date was determined by the speed of action and period of efficacy of the test substances.

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). Visual emergence uniformity was assessed by visual estimation in relation to untreated check on an overall plot basis on a percentage scale 0-100 % (100=untreated check) The assessment date was determined by the crop development stage

Assessment of fungal diseases

Efficacy was recorded by estimation and/or counting of severity of disease. The assessment date was determined by the speed of action and period of efficacy of the test substances.

Efficacy was recorded by estimation and/or counting of incidence or severity of disease. The assessment date was determined by the crop development stage.

Harvest

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content. If quality indices are made, they will be recorded.

Applications methods and rates

The applications were carried out by Hege-11, SETRDR Hege 11 - SEEDDR

The suggested dose of the seed treatment CHR/ZF/PROTI:

100 ml/100 kg seed in winter cereals are corresponding to 10.0 g a.s./100 kg seed of prothioconazole.

The product CHR/ZF/PROTI has been used:

in winter cereals at the following rates of:

- 60 ml/100 kg/seed,
- 80 ml/100 kg/seed,

- 100 ml/100 kg/seed

Premis 025 FS was used as a reference product in winter cereals

Redigo Pro 170 FS was used as a reference product in winter barley

Redigo 100 FS was used as a test product/reference product in winter cereals

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

Experiment pattern:

Winter wheat, winter triticale and winter rye season 2020/21, 2021/22 field and laboratory trials

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	rate a.s. [g/ha] (max)	Appl code	Growth Stage
1	Untreated Check					
2	CHR/ZF/PROTI 100 FS	60	6	10,8	A	BBCH 00
3	CHR/ZF/PROTI 100 FS	80	8	14,4	A	BBCH 00
4	CHR/ZF/PROTI 100 FS	100	10	18,0	A	BBCH 00
5	Premis 025 FS	200	5	9,0	A	BBCH 00
6	Redigo 100 FS	100	10	18,0	A	BBCH 00

Winter barley season 2023/24 field and laboratory trials

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check				
2	CHR/ZF/PROTI 100 FS	60	6	A	BBCH 00
3	CHR/ZF/PROTI 100 FS	80	8	A	BBCH 00
4	CHR/ZF/PROTI 100 FS	100	10	A	BBCH 00
5	Redigo Pro 170 FS	66,7	10,005 + 1,334	A	BBCH 00
6	Redigo 100 FS	100	10	A	BBCH 00

Winter barley season 2023/24 field trials against *Ustilago nuda*

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check	1	1	1	1
2	CHR/ZF/PROTI 100 FS	60	6	A	BBCH 00
3	CHR/ZF/PROTI 100 FS	80	8	A	BBCH 00
4	CHR/ZF/PROTI 100 FS	100	10	A	BBCH 00
5	Redigo Pro 170 FS	50	7,5 + 1,0	A	BBCH 00
6	Redigo 100 FS	100	10	A	BBCH 00

Details of experiments

Winter wheat season 2020/21 field trials

Report code	8 F/2021	9 F/2021	10 F/2021	11 F/2021	12 F/2021	22 F/2021	23 F/2021
Location	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Łany Wielkie / Poland
Plant /cultivar	winter wheat / Jubilar	winter wheat / Turnia	winter wheat / Nadobna	winter wheat / Tobak	winter wheat / Zyta	winter wheat / Zyta	winter wheat / Fidelius
Seeding date	06.10.2020	06.10.2020	06.10.2020	06.10.2020	08.10.2020	06.10.2020	08.10.2020
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha	200 kg/ha	200 kg/ha	188 kg/ha	188 kg/ha
Forecrop	winter rye	winter triticale	winter rape	winter rye	winter rape	winter rye	potato
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	25.09.2020	25.09.2020	25.09.2020	25.09.2020	25.09.2020	25.09.2020	25.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	6,2	6,6	6,4	6,2	6,4	6,2	6,1
Water volume (ml/100 kg)	700	700	700	700	700	700	700

Winter wheat season 2020/21 field trials

Report code	APK-20-47775-PL01	APK-20-47775-PL02	APK-20-47775-PL03	APK-20-47891-PL01	APK-20-47891-PL02	APK-20-47891-PL03
Location	Kajkowo / Poland	Jasiona / Poland	Łobez / Poland	Kajkowo / Poland	Jasiona / Poland	Łobez / Poland
Plant /cultivar	winter wheat / Bilanz	winter wheat / Mewa	winter wheat / Julius	winter wheat / Julius	winter wheat / Bilanz	winter wheat / Julius
Seeding date	09.10.2020	08.10.2020	09.10.2020	09.10.2020	08.10.2020	09.10.2020
Seeding rate	180 kg/ha	180 kg/ha	450 S/m2	180 kg/ha	180 kg/ha	450 P/m2
Forecrop	winter rape	winter rape	maize	winter rape	winter rape	maize
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	29.09.2020	30.09.2020	29.09.2020	30.09.2020	01.10.2020	29.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	5,6	7,2	5,6	5,6	7,2	5,6
Water volume (ml/100 kg)	700	700	700	700	700	700

Winter wheat season 2020/21 field trials

Report code	AF/20/PO/32/Br/01	AF/20/PO/32/Pr/02	AF/20/PO/32/Gr/03	AF/20/PO/32/Zł/04	AF/20/PO/32/Br/05
Location	Brody / Poland	Przybroda / Poland	Gorzyń / Poland	Złotniki / Poland	Brody / Poland
Plant /cultivar	winter wheat / Potenzial	winter wheat / Tonacja	winter wheat / Princeps	winter wheat / Bogatka	winter wheat / Princeps
Seeding date	30.09.2020	30.09.2020	30.09.2020	01.10.2020	30.09.2020
Seeding rate	230 kg/ha	180 kg/ha	182 kg/ha	180 kg/ha	185 kg/ha
Forecrop	spring barley	spring wheat	white lupin	winter rape	spring barley
Type of sprayer	SETRDR	SETRDR	SETRDR	SETRDR	SETRDR
Date of treatment	30.09.2020	30.09.2020	30.09.2020	01.10.2020	30.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	5,8	6	6,4	5,6	5,8
Water volume (ml/100 kg)	700	700	700	700	700

Winter wheat season 2020/21 laboratory trials

Report code	AF/20/PO/32/Pn/01	AF/20/PO/32/Pn/02	AF/20/PO/32/Pn/03	AF/20/PO/32/Pn/04	AF/20/PO/32/Pn/05	AF/20/PO/32/Pn/06
Location	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland
Plant /cultivar	winter wheat / Arkadia	winter wheat / Potenzial	winter wheat / Opal	winter wheat / Opal	winter wheat / Princeps	winter wheat / Tonacja
Seeding date	16.11.2020	16.11.2020	16.11.2020	11.01.2021	11.01.2021	11.01.2021
Seeding rate	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT
Type of sprayer	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA
Date of treatment	16.11.2020	16.11.2020	16.11.2020	11.01.2021	11.01.2021	11.01.2021
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	peat	peat	peat	peat	peat	peat
Soil pH	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3
Water volume (ml/100 kg)	700	700	700	700	700	700

winter triticale – season 2020/21 field trials

Report code	15 F/2021	16 F/2021	APK-20-47891-PL04	APK-20-47891-PL05	APK-20-47891-PL06	AF/20/PszO/32/Pr/06
Location	Sośnicowice / Poland	Sierakowice / Poland	Kajkowo / Poland	Wilkowyja / Poland	Łaźniki / Poland	Przybroda / Poland
Plant /cultivar	winter triticale / Trismart	winter triticale / Rotondo	winter triticale / Porto	winter triticale / Borowik	winter triticale / Borowik	winter triticale / Twingo
Seeding date	24.09.2020	09.10.2020	09.10.2020	30.09.2020	07.10.2020	30.09.2020
Seeding rate	180 kg/ha	150 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha
Forecrop	winter wheat	winter rye	winter rape	potato	maize	spring wheat
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	SETRDR
Date of treatment	21.09.2020	21.09.2020	29.09.2020	30.09.2020	29.09.2020	30.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy clay loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	6,07	6,3	5,6	5,4	7,4	6
Water volume (ml/100 kg)	700	700	700	700	700	700

winter triticale – season 2020/21 laboratory trials

Report code	AF/20/PszO/32/Pn/07	AF/20/PszO/32/Pn/08	AF/20/PszO/32/Pn/09	AF/20/PszO/32/Pn/10	AF/20/PszO/32/Pn/11	AF/20/PszO/32/Pn/12
Location	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland
Plant /cultivar	winter triticale / Twingo	winter triticale / Salto	winter triticale / Grenado	winter triticale / Wilton	winter triticale / Salto	winter triticale / Magnat
Seeding date	01.02.2021	01.02.2021	01.02.2021	23.02.2021	23.02.2021	23.02.2021
Seeding rate	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT
Type of sprayer	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA
Date of treatment	01.02.2021	01.02.2021	01.02.2021	23.02.2021	23.02.2021	23.02.2021
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	peat	peat	peat	peat	peat	peat
Soil pH	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3
Water volume (ml/100 kg)	700	700	700	700	700	700

Winter rye – season 2020/21 field trials

Report code	17 F/2021	18 F/2021	19 F/2021	26 F/2021	27 F/2021
Location	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland
Plant /cultivar	winter rye / Dańkowskie Rubin	winter rye / Dukato	winter rye / Su Forsetti	winter rye / Dukato	winter rye / Dańkowskie Rubin
Seeding date	07.10.2020	07.10.2020	09.10.2020	07.10.2020	07.10.2020
Seeding rate	140 kg/ha	118 kg/ha	113 kg/ha	118 kg/ha	140 kg/ha
Forecrop	winter tritcale	winter rape	winter tritcale	winter rape	winter tritcale
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	01.10.2020	01.10.2020	01.10.2020	01.10.2020	01.10.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	6,6	6	5,9	6	6,6
Water volume (ml/100 kg)	700	700	700	700	700

Winter rye – season 2020/21 field trials

Report code	28 F/2021	29 F/2021	30 F/2021	APK-20-47891-PL07	APK-20-47891-PL08
Location	Sierakowice / Poland	Sośnicowice / Poland	Sośnicowice / Poland	Kajkowo / Poland	Wilkowyja / Poland
Plant /cultivar	winter rye / Su Forsetti	winter rye / Dańkowskie Granat	winter rye / Dańkowskie Diament	winter rye / Agat	winter rye / Dańkowskie Turkus
Seeding date	09.10.2020	07.10.2020	07.10.2020	09.10.2020	30.09.2020
Seeding rate	113 kg/ha	95 kg/ha	116 kg/ha	180 kg/ha	180 kg/ha
Forecrop	winter tritcale	winter rape	winter rape	winter rape	potato
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	01.10.2020	01.10.2020	01.10.2020	29.09.2020	29.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	5,9	6	6	5,6	5,4
Water volume (ml/100 kg)	700	700	700	700	700

Winter rye – season 2020/21 field trials

Report code	APK-20-47891-PL09	AF/20/ŽO/32/Br/07	AF/20/ŽO/32/Pr/08	AF/20/ŽO/32/Gr/09	AF/20/ŽO/32/Zi/10
Location	Wólka Krosnowska / Poland	Brody / Poland	Przybroda / Poland	Gorzyń / Poland	Złotniki / Poland
Plant /cultivar	winter rye / Dańkowskie Amber	winter rye / Daniello	winter rye / Poznańskie	winter rye / Palazzo	winter rye / Dańkowskie Diamenty
Seeding date	05.10.2020	30.09.2020	30.09.2020	30.09.2020	01.10.2020
Seeding rate	180 kg/ha	125 kg/ha	150 kg/ha	102 kg/ha	150 kg/ha
Forecrop	winter wheat	spring barley	spring wheat	white lupin	winter rape
Type of sprayer	HEGE 11	SETRDR	SETRDR	SETRDR	SETRDR
Date of treatment	30.09.2020	30.09.2020	30.09.2020	30.09.2020	01.10.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	7,2	5,8	6	6,4	5,6
Water volume (ml/100 kg)	700	700	700	700	700

Winter rye – season 2020/21 laboratory trials

Report code	AF/20/ŽO/32/Pn/13	AF/20/ŽO/32/Pn/14	AF/20/ŽO/32/Pn/15	AF/20/ŽO/32/Pn/16	AF/20/ŽO/32/Pn/17	AF/20/ŽO/32/Pn/18
Location	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland	Poznań-Biocentrum / Poland
Plant /cultivar	winter rye / Poznańskie	winter rye / Diamant	winter rye / Daniello	winter rye / Palazzo	winter rye / Diamant	winter rye / Poznańskie
Seeding date	16.11.2020	16.11.2020	16.11.2020	11.01.2021	11.01.2021	11.01.2021
Seeding rate	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT	50 S/POT
Type of sprayer	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA	SEDRLA
Date of treatment	16.11.2020	16.11.2020	16.11.2020	11.01.2021	11.01.2021	11.01.2021
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	peat	peat	peat	peat	peat	peat
Soil pH	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3	5,2-6,3
Water volume (ml/100 kg)	700	700	700	700	700	700

Winter wheat season 2021/22 field trials

Report code	9 F/2022	10 F/2022	11 F/2022
Location	Sośnicowice/ Poland	Sośnicowice/ Poland	Sośnicowice/ Poland
Plant /cultivar	winter wheat / Jubilar	winter wheat / Turnia	winter wheat / Nadobna
Seeding date	05.10.2021	05.10.2021	05.10.2021
Seeding rate	210 kg/ha	210 kg/ha	210 kg/ha
Forecrop	spring barley	spring barley	spring barley
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	04.10.2021	04.10.2021	04.10.2021
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam
Soil pH	6,6	6,6	6,6
Water volume (ml/100 kg)	700	700	700

Winter barley – season 2023/24 field trials (*Fusarium spp. and Monographella nivalis (anam. Microdochium nivale)*)

Report code	19 F/2024	20 F/2024	21 F/2024	22 F/2024	AF/23/JO/34/ZI/01	AF/23/JO/34/Pr/02
Location	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Złotniki/ Poland	Przybroda/ Poland
Plant /cultivar	winter barley/ Bażant	winter barley/ Return	winter barley/ Jeanie	winter barley/ Jakubus	winter barley/ Su Jule	winter barley/ Gloria
Seeding date	21.09.2023	21.09.2023	21.09.2023	21.09.2023	22.09.2023	20.09.2023
Seeding rate	180 kg/ha	175 kg/ha	178 kg/ha	180 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	winter wheat	winter wheat	winter wheat	winter rye	winter wheat
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	SEDRLA	SEDRLA
Date of treatment	19.09.2023	19.09.2023	19.09.2023	19.09.2023	22.09.2023	20.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	loamy sand	loamy sand
Soil pH	6,5	6,5	6,5	6,5	6	6
Water volume (ml/100 kg)	700	700	700	700	700	700
Plot size	15 m ²	15 m ²	15 m ²	15 m ²	1,5x10=15m ²	1,5x10=15m ²

Winter barley – season 2023/24 field trials (*Pyrenophora graminea*)

Report code	1 F/2024	2 F/2024	3 F/2024	4 F/2024	5 F/2024	AF/23/JO/34/Zł/03	AF/23/JO/34/Pr/04	AF/23/JO/34/Br/05	AF/23/JO/34/De/06
Location	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Złotniki / Poland	Przybroda / Poland	Brody / Poland	Dębno / Poland
Plant /cultivar	winter barley/ Clakri	winter barley/ Astoria	winter barley/ Igri	winter barley/ U313	winter barley/ Titus	winter barley/ Kosmos	winter barley/ Sandra	winter barley/ Sandra	winter barley/ Arenia
Seeding date	20.09.2023	20.09.2023	20.09.2023	20.09.2023	20.09.2023	22.09.2023	20.09.2023	21.09.2023	28.09.2023
Seeding rate	180 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha	200 kg/ha	200 kg/ha	195 kg/ha	165 kg/ha
Forecrop	winter wheat	winter wheat	winter wheat	winter wheat	winter wheat	winter rye	winter wheat	spring barley	winter wheat
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	SEDRLA	SEDRLA	SEDRLA	SEDRLA
Date of treatment	19.09.2023	19.09.2023	19.09.2023	19.09.2023	19.09.2023	22.09.2023	20.09.2023	21.09.2023	28.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	loamy sand	loamy sand	loamy sand	loamy sand
Soil pH	6,5	6,5	6,5	6,5	6,5	6	6	6,8	6,3
Water volume (ml/100 kg)	700	700	700	700	700	700	700	700	700
Plot size	15 m ²	15 m ²	15 m ²	15 m ²	15 m ²	1,5x10=15m ²	1,5x10=15m ²	1,5x9=13,5m ²	2,0x12=24,0m ²

Winter barley – season 2023/24 field trials (*Pyrenophora teres (anam. Drechslera teres)*)

Report code	6 F/2024	7 F/2024	8 F/2024	9 F/2024	10 F/2024	AF/23/JO/34/Zł/11	AF/23/JO/34/Pr/12	AF/23/JO/34/Br/13	AF/23/JO/34/De/14
Location	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Field No. 12/24 of Łany Wielkie / Poland	Złotniki/ Poland	Przybroda/ Poland	Brody/ Poland	Dębno/ Poland
Plant /cultivar	winter barley/ Ketos	winter barley/ Return	winter barley/ Jeanie	winter barley/ Jakubus	winter barley/ Bażant	winter barley/ Kosmos	winter barley/ Sandra	winter barley/ Sandra	winter barley/ Arenia
Seeding date	20.09.2023	20.09.2023	20.09.2023	20.09.2023	20.09.2023	22.09.2023	20.09.2023	21.09.2023	28.09.2023
Seeding rate	180 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha	180 kg/ha	200 kg/ha	200 kg/ha	195 kg/ha	165 kg/ha
Forecrop	winter wheat	winter wheat	winter wheat	winter wheat	winter wheat	winter rye	winter wheat	spring barley	winter wheat
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	HEGE 11	HEGE 11	SEDRLA	SEDRLA	SEDRLA	SEDRLA
Date of treatment	19.09.2023	19.09.2023	19.09.2023	19.09.2023	19.09.2023	22.09.2023	20.09.2023	21.09.2023	28.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	loamy sand	loamy sand	loamy sand	loamy sand
Soil pH	6,5	6,5	6,5	6,5	6,5	6	6	6,8	6,3
Water volume (ml/100 kg)	700	700	700	700	700	700	700	700	700
Plot size	15 m ²	15 m ²	15 m ²	15 m ²	15 m ²	1,5x10=15m ²	1,5x10=15m ²	1,5x9=13,5m ²	2x12=24m ²

Efficacy tests

The 99 trials (including 18 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*) in winter wheat, winter triticale, winter rye and 6 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*) in winter barley) in total were carried out in 2020/21, 2021/22, 2023/24 in Poland. The seed treatment CHR/ZF/PROTI has been used at the following rates:

- 60 ml/100 kg/ seed,
- 80 ml/100 kg/seed,
- 100 ml/100 kg/seed

Table 3.2-10a: Details on trial methodology

Guidelines	General guidelines	PP 1/152 (3) Design and analysis of efficacy evaluation trials
		PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice
		PP 1/135 (3) Phytotoxicity assessment
	Specific guidelines	PP 1/19 (5) Seed-borne cereal fungi
Experimental design	Plot design	Randomized Complete Block (RCB) – (99)
	Plot size	Winter wheat: 7,5 – 18 m ² ; laboratory trials (pot) 0,125 m ² Winter triticale: 10,5 – 18 m ² , laboratory trials (pot) 0,125 m ² Winter rye: 10,0 – 18 m ² , laboratory trials (pot) 0,125 m ² Winter barley: 13,5 – 24 m ² , laboratory trials (pot) 3500 cm ²
	Number of replications	4 (99)
Crop	Trials per crop	Winter wheat (21 field trials, 6 laboratory trials) Winter triticale (6 field trials, 6 laboratory trials) Winter rye (15 field trials, 6 laboratory trials) Winter barley (33 field trials, 6 laboratory trials)
	Varieties per crop	Winter wheat (field trials): Jubilar, Turnia, Nadobna, Tobak, Zyta, Fidelius, Bilanz, Mewa, Julius, Potenzial, Tonacja, Princeps, Bogatka Winter wheat (laboratory trials): Arkadia, Potenzial, Opal, Princeps, Tonacja Winter triticale (field trials): Trismart, Rotondo, Porto, Borowik, Twingo Winter triticale (laboratory trials): Twingo, Salto, Grenado, Wilton, Salto, Magnat Winter rye (field trials): Dańkowskie Rubin, Dukato, Su Forsetti, Dańkowskie Rubin, Dańkowskie Granat, Dańkowskie Diamant, Agat, Dańkowskie Turkus, Dańkowskie Amber, Daniello, Poznańskie, Palazzo, Dańkowskie Diamenty Winter rye (laboratory trials): Poznańskie, Diamant, Daniello, Palazzo Winter barley (field trials): Clakri, Astoria, Igri, U313, Titus, Kosmos, Sandra, Arenia, Ketos, Return, Jeanie, Jakubus, Bażant, Su Jule, Gloria Winter barley (laboratory trials): Su Jule, Bordeaux, Gloria
	Sowing period	Winter wheat field trials: 30.09.2020 – 09.10.2020; 05.10.2021 Winter wheat laboratory trials: 16.11.2020 and 11.01.2021 Winter triticale field trials: 24.09.2020-09.10.2020 Winter triticale laboratory trials: 01.02.2021 and 23.02.2021 Winter rye field trials: 30.09.2020-09.10.2020 Winter rye laboratory trials: 16.11.2020 and 11.01.2021 Winter barley field trials: 20.09.2023-28.09.2023 Winter barley laboratory trials: 04.10.2023

Application	Crop stage (BBCH)* at application	Winter wheat: BBCH 00 – seed treatment Winter tritcale: BBCH 00 – seed treatment Winter rye: BBCH 00 – seed treatment Winter barley: BBCH 00 – seed treatment
	Timing Pest stage at application (1)	The data available in Appendix 4
	Number of applications Intervals between applications	1 (99 trials), interval – n/a
	Spray volumes	0.7 L
Assessment	Assessment types	Assessment of efficacy Assessment of phytotoxicity
	Assessment dates	Assessment dates deatalis is available in Appendix 4
Other re-levant infor-mation	e.g. Soil type, pH (in case of soil active substance ...)	Winter wheat field trials: pH: 5,6 – 7,2 Winter wheat laboratory trials: pH: 5,2-6,3 Winter tritcale field trials: pH: 5,4 – 7,4 Winter tritcale laboratory trials: pH: 5,2-6,3 Winter rye field trials: pH: 5,4 – 7,2 Winter rye laboratory trials: pH: 5,2-6,3 Winter barley field trials: pH: 6,0 – 6,8 Winter barley laboratory trials: pH: 5,5
	e.g. Natural / artificial inoculation...	n/a
	e.g. Field / Greenhouse...	n/a
	...	n/a

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

Crop(s) 1 AND/OR Target(s) 1

A total of 99 trials were carried out to evaluate the efficacy of product CHR/ZF/PROTI for the control of most important fungal diseases in winter cereals.

Efficacy data for fungal diseases are presented from 99 efficacy trials assessed.

Winter wheat

The 27 trials (including 6 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*)) were carried out in winter wheat in season 2020/21 and 2021/22. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter tritcale

The 12 trials (including 6 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*)) were carried out in winter tritcale in season 2020/21. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter rye

The 21 trials (including 6 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*)) were carried out in winter rye in season 2020/21. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter barley

The 39 trials (including 6 laboratory experiments against *Fusarium sp.* and *Monographella nivalis* (anam. *Microdochium nivale*)) were carried out in winter barley in season 2023/24. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter wheat

3.2.3-1.1 The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.*

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 9 trials (6 field trials and 3 laboratory trials), for the field trials assessment were conducted in autumn and spring.

Assessment of efficacy in autumn 16 - 52 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 14,5% (49 DA-A) to 38,0 % (16 DA-A), at rate 80 ml from 35,5 % (52 DA-A) to 72,2 % (16 DA-A), at rate 100 ml from 50,8 % (49 DA-A) to 95,7 % (16 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and comparable to the product Redigo 100 FS. In the trials efficacy amounted to 67 % during the assessment. (Appendix 5 tab. 1).

Assessment of efficacy in spring 169-183 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 33,4 % (183 DA-A) to 79,5 % (181 DA-A), at rate 80 ml from 39,1 % (183 DA-A) to 100,0 % (181 DA-A), at rate 100 ml from 50,2 % (183 DA-A) to 100,0 % (181 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 79 % during the assessment. (Appendix 5 tab. 2).

Assessment of efficacy in laboratory experiments 8 - 18 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 36,0 % (8 DA-A) to 54,2 % (18 DA-A), at rate 80 ml from 57,1 % (8 DA-A) to 69,7 % (18 DA-A), at rate 100 ml from 62,5 % (18 DA-A) to 81,8 % (18 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 72 % during the assessment. (Appendix 5 tab. 3).

3.2.3-1.2 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*)

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 9 trials (6 field trials and 3 laboratory trials).

Assessment of efficacy in field trials 153-188 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 32,6 % (188 DA-A) to 91,4 % (181 DA-A), at rate 80 ml from 54,8 % (153 DA-A) to 100 % (169, 181 DA-A), at rate 100 ml from 61,3 % (153 DA-A) to 100,0 % (169, 181 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 83 % during the assessment. (Appendix 5 tab. 4).

Assessment of efficacy in laboratory experiments 8 - 16 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 13,8 % (8 DA-A) to 39,4 % (16 DA-A), at rate 80 ml from 29,4 % (16 DA-A) to 69,7 % (16 DA-A), at rate 100 ml from 52,0 % (8 DA-A) to 77,8 % (16 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 65 % during the assessment. (Appendix 5 tab. 5).

3.2.3-1.3 The efficacy of CHR/ZF/PROTI in control of TILLCA *Tilletia caries*

The efficiency of CHR/ZF/PROTI in control of *Tilletia caries* were investigated in 9 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 77,0 % (251 DA-A) to 100,0 % (284 DA-A), at rate 80 ml from 91,0 % (251 DA-A) to 100,0 % (281, 284, 293 DA-A), at rate 100 ml up to 100,0 % (247 DA-A- 302 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted up to 100,0 % during the assessment. (Appendix 5 tab. 6).

3.2.3-1.4 The efficacy of CHR/ZF/PROTI in control of USTINT *Ustilago tritici*

The efficiency of CHR/ZF/PROTI in control of *Ustilago tritici* were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 93,6 % (266 DA-A) to 99,0 % (245 DA-A), at rate 80 ml up to 100,0 % (245, 266 DA-A), at rate 100 ml up to 100,0 % (245, 266 DA-A). The efficacy of the tested seed treatment was comparable to the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted up to 100,0 % during the assessment. (Appendix 5 tab. 7).

Winter triticale

3.2.3-1.5 The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* sp.

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 9 trials (6 field trials and 3 laboratory trials), assessment were conducted in autumn and spring.

Assessment of efficacy in autumn 20 - 49 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 27,2 % (49 DA-A) to 34,6 % (29 DA-A), at rate 80 ml from 60,6 % (29 DA-A) to 66,7 % (49 DA-A), at rate 100 ml from 66,3 % (29 DA-A) to 80,2 % (49 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Premis 025 FS and higher than the product Redigo 100 FS. In the trials efficacy amounted above 80 % during the assessment. (Appendix 5 tab. 8).

Assessment of efficacy in spring 175-184 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 26,1 % (184 DA-A) to 58,4 % (183 DA-A), at rate 80 ml from 43,4 % (184 DA-A) to 81,2 % (183 DA-A), at rate 100 ml from 64,2 % (184 DA-A) to 88,9 % (183 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and product Redigo 100 FS. In the trials efficacy amounted above 79 % during the assessment. (Appendix 5 tab. 9).

Assessment of efficacy in laboratory experiments 9 - 21 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 45,0 % (9 DA-A) to 60,0 % (21 DA-A), at rate 80 ml from 55,0 % (9 DA-A) to 71,4 % (9 DA-A), at rate 100 ml from 64,0 % (21 DA-A) to 88,9 % (21 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 75 % during the assessment. (Appendix 5 tab. 10).

3.2.3-1.6 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*)

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 9 trials (6 field trials and 3 laboratory trials).

Assessment of efficacy in field trials 157-184 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 19,0 % (184 DA-A) to 86,7 % (183 DA-A), at rate 80 ml from 53,0 % (184 DA-A) to 100 % (175, 183 DA-A), at rate 100 ml from 66,7 % (157 DA-A) to 100,0 % (175, 183 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and slightly lower than the product Redigo 100 FS. In the trials efficacy amounted above 85 % during the assessment. (Appendix 5 tab. 11).

Assessment of efficacy in laboratory experiments 7 - 15 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 30,4 % (15 DA-A) to 40,0 % (7 DA-A), at rate 80 ml from 65,8 % (7 DA-A) to 80,0 % (7 DA-A), at rate 100 ml from 71,1 % (7 DA-A) to 90,0 % (7 DA-A). The efficacy of the tested seed treatment was higher than the standard

product Premis 025 FS and slightly the product Redigo 100 FS. In the trials efficacy amounted above 81 % during the assessment. (Appendix 5 tab. 12).

Winter rye

3.2.3-1.7 The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* sp.

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 9 trials (6 field trials and 3 laboratory trials), assessment were conducted in autumn and spring.

Assessment of efficacy in autumn 35-39 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 57,9 % (39 DA-A) to 75,0 % (35 DA-A), at rate 80 ml from 75,7 % (35 DA-A) to 100,0 % (35 DA-A), at rate 100 ml from 86,5 % (35 DA-A) to 100,0 % (35, 39 DA-A). The efficacy of the tested seed treatment was higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 95,0 % during the assessment. (Appendix 5 tab. 13).

Assessment of efficacy in spring 167-184 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 33,9 % (184 DA-A) to 42,9 % (167 DA-A), at rate 80 ml from 41,2 % (182 DA-A) to 71,6 % (167 DA-A), at rate 100 ml from 53,6 % (35 DA-A) to 82,8 % (167 DA-A). The efficacy of the tested seed treatment was higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 63,0 % during the assessment. (Appendix 5 tab. 14).

Assessment of efficacy in laboratory experiments 8-18 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 25,0 % (8 DA-A) to 64,3 % (18 DA-A), at rate 80 ml from 45,0 % (8 DA-A) to 75,0 % (8 DA-A), at rate 100 ml from 74,1 % (18 DA-A) to 85,7 % (18 DA-A). The efficacy of the tested seed treatment was higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 81 % during the assessment. (Appendix 5 tab. 15).

3.2.3-1.8 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*)

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 9 trials (6 field trials and 3 laboratory trials).

Assessment of efficacy in field trials 147-184 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 26,9 % (184 DA-A) to 79,5 % (167 DA-A), at rate 80 ml from 64,2 % (184 DA-A) to 100 % (167 DA-A), at rate 100 ml from 77,2 % (157 DA-A) to 100,0 % (147, 167 DA-A). The efficacy of the tested seed treatment was slight-

ly higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 92 % during the assessment. (Appendix 5 tab. 16).

Assessment of efficacy in laboratory experiments 8 - 16 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 36,4 % (8 DA-A) to 63,2 % (8 DA-A), at rate 80 ml from 66,7 % (16 DA-A) to 82,1 % (16 DA-A), at rate 100 ml from 70,4 % (16 DA-A) to 85,7 % (16 DA-A). The efficacy of the tested seed treatment was higher than the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted above 75 % during the assessment. (Appendix 5 tab. 17).

3.2.3-1.9 The efficacy of CHR/ZF/PROTI in control of UROCOC *Urocystis occulata*

The efficiency of CHR/ZF/PROTI in control of *Urocystis occulata* were investigated in 9 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 89,0 % (251, 254, 257 DA-A) to 100,0 % (242 DA-A), at rate 80 ml from 97,0 % (251, 254 DA-A) to 100 % (242 DA-A), at rate 100 ml up to 100,0 % (242-257 DA-A). The efficacy of the tested seed treatment was comparable the standard product Premis 025 FS and the product Redigo 100 FS. In the trials efficacy amounted up to 100,0 % during the assessment. (Appendix 5 tab. 18).

Winter barley

3.2.3-1.10 The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* sp.

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 9 trials (6 field trials and 3 laboratory trials), assessment were conducted in autumn and spring.

Assessment of efficacy in autumn 20 -24 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 44,0 % (23 DA-A) to 73,0 % (20 DA-A), at rate 80 ml from 70,4 % (23 DA-A) to 87,8 % (20 DA-A), at rate 100 ml from 84,0 % (23 DA-A) to 97,1 % (20 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Redigo Pro 170 FS and was slightly higher than the product Redigo 100 FS. In the trials efficacy amounted above 89,02 % during the assessment. (Appendix 5 tab. 19).

Assessment of efficacy in laboratory experiments 7-16 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 61,3 % (16 DA-A) to 82,5 % (7 DA-A), at rate 80 ml from 64,5 % (16 DA-A) to 92,1 % (7 DA-A), at rate 100 ml from 83,9 % (16 DA-A) to 93,7 % (7 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Redigo Pro 170 FS and the product Redigo 100 FS. In the trials efficacy amounted above 88,5 % during the assessment. (Appendix 5 tab. 20).

3.2.3-1.11 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Mi-*

Microdochium nivale

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 9 trials (6 field trials and 3 laboratory trials).

Assessment of efficacy in field trials 146-194 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 40,50 % (146 DA-A) to 76,1 % (189 DA-A), at rate 80 ml from 62,2 % (146 DA-A) to 94,4 % (189 DA-A), at rate 100 ml from 82,1 % (146 DA-A) to 96,0 % (189 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Redigo Pro 170 FS and slightly higher than the product Redigo 100 FS. In the trials efficacy amounted above 88,8 % during the assessment. (Appendix 5 tab. 21).

Assessment of efficacy in laboratory experiments 7 - 16 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 56,4 % (16 DA-A) to 66,0 % (7 DA-A), at rate 80 ml from 62,8 % (16 DA-A) to 84,0 % (7 DA-A), at rate 100 ml from 76,9 % (16 DA-A) to 86,0 % (7 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Redigo Pro 170 FS and the product Redigo 100 FS. In the trials efficacy amounted above 80,73 % during the assessment. (Appendix 5 tab. 22).

3.2.3-1.12 The efficacy of CHR/ZF/PROTI in control of PYRNGR *Pyrenophora graminea*

The efficiency of CHR/ZF/PROTI in control of *Pyrenophora graminea* were investigated in 9 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 69,0 % (230 DA-A) to 87,0 % (244 DA-A), at rate 80 ml from 78,0 % (230 DA-A) to 97,0 % (244 DA-A), at rate 100 ml from 81,0 % (230 DA-A) to 100,0 % (235, 250 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Redigo Pro 170 FS and slightly lower than the product Redigo 100 FS. In the trials efficacy amounted up to 91,67 % during the assessment. (Appendix 5 tab. 23).

3.2.3-1.13 The efficacy of CHR/ZF/PROTI in control of PYRNTE *Pyrenophora teres* (anam. *Drechslera teres*)

The efficiency of CHR/ZF/PROTI in control of *Pyrenophora teres* (anam. *Drechslera teres*) were investigated in 9 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to medium level of efficacy. The effectiveness fluctuated at rate 60 ml from 24,0 % (29 DA-A) to 77,74 % (76 DA-A), at rate 80 ml from 33,0 % (196 DA-A) to 88,3 % (76 DA-A), at rate 100 ml from 41,0 % (29, 196 DA-A) to 94,0 % (36 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Redigo Pro 170 FS and slightly higher than the product Redigo 100 FS. In the trials efficacy amounted up to 69,41 % during the assessment (Appendix 5 tab. 24).

3.2.3-1.14 The efficacy of CHR/ZF/PROTI in control of USTINH *Ustilago nuda*

The efficiency of CHR/ZF/PROTI in control of *Ustilago nuda* were investigated in 9 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 37,0 % (237 DA-A) to 86,0 % (255 DA-A), at rate 80 ml from 61,0 % (237 DA-A) to 98,0 % (245 DA-A), at rate 100 ml from 71,0 % (237 DA-A) to 100 % (245,

263 DA-A). The efficacy of the tested seed treatment was slightly lower than the standard product Redigo Pro 170 FS and slightly higher than the product Redigo 100 FS. In the trials efficacy amounted up to 86,44 % during the assessment. (Appendix 5 tab. 25).

Conclusions on the biological efficacy

The obtained data in performed trials show that CHR/ZF/PROTI provides benefits against the most important fungal in winter cereals.

On the basis of submitted research, it is possible to state that the CHR/ZF/PROTI:

Used CHR/ZF/PROTI in winter wheat:

at rate 60 ml/100 kg seed:

Was effective: *Tilletia caries* (TILLCA), *Ustilago tritici* (USTINT)

Resistant/Reduction of diseases: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 80 ml/100 kg seed:

Was effective: *Tilletia caries* (TILLCA), *Ustilago tritici* (USTINT)

Medium sensitive: *Fusarium* spp. (FUSASP)

Resistant/Reduction of diseases: *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 100 ml/100 kg seed:

Was effective: *Tilletia caries* (TILLCA), *Ustilago tritici* (USTINT)

Medium sensitive: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

Used CHR/ZF/PROTI in winter triticale:

at rate 60 ml/100 kg seed:

Resistant/Reduction of diseases: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 80 ml/100 kg seed:

Medium sensitive: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 100 ml/100 kg seed:

Was effective: *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

Medium sensitive: *Fusarium* spp. (FUSASP)

Used CHR/ZF/PROTI in winter rye:

at rate 60 ml/100 kg seed:

Was effective: *Urocystis occulata* (UROCOC)

Resistant/Reduction of diseases: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 80 ml/100 kg seed:

Was effective: *Urocystis occulata* (UROCOC)

Medium sensitive: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 100 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI), *Urocystis occulata* (UROCOC)

Used CHR/ZF/PROTI in winter barley:

at rate 60 ml/100 kg seed:

Medium sensitive: *Fusarium* spp. (FUSASP), *Pyrenophora graminea* (PYRNGR), *Ustilago nuda* (USTINH)

Resistant/Reduction of diseases: *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE)

at rate 80 ml/100 kg seed:

Was effective: *Pyrenophora graminea* (PYRNGR)

Medium sensitive: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE), *Ustilago nuda* (USTINH)

at rate 100 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora graminea* (PYRNGR), *Ustilago nuda* (USTINH)

Medium sensitive: *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE)

Table 3.2-1a: Efficacy of product CHR/ZF/PROTI at the timing of assessment.

Winter wheat field trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control							No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS		
	Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max			
<i>Fusarium sp. summary (autumn and spring)</i>	60 ml/100 kg	6	42,15	15,3 & 62,8	42,67	14,5	79,5	67,32	23,9 & 100	69,4	29,9 & 100	
	80 ml/100 kg				61,35	35,5	100					
	100 ml/100 kg				73,28	50,2	100					
<i>Fusarium sp. autumn assessment</i>	60 ml/100 kg	3	50,97	35,9 & 62	25,37	14,5	38	65,77	48,4 & 98	68	50,8 & 95	
	80 ml/100 kg				50,4	35,5	72,2					
	100 ml/100 kg				67	50,8	95,7					
<i>Fusarium sp. spring assessment</i>	60 ml/100 kg	3	33,33	15,3 & 62,8	59,97	33,4	79,5	68,87	23,9 & 100	70,8	29,9 & 100	
	80 ml/100 kg				72,3	39,1	100					
	100 ml/100 kg				79,57	50,2	100					
<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	60 ml/100 kg	6	11,92	5 & 31,4	57,92	32,6	91,4	82,37	53,5 & 100	73,55	38,1 & 100	
	80 ml/100 kg				76,13	54,8	100					
	100 ml/100 kg				83,35	61,3	100					
<i>Tilletia caries</i>	60 ml/100 kg	9	233,37	29,04 & 432,8	89,99	77	100	99,76	99 & 100	99,97	99,7 & 100	
	80 ml/100 kg				96,36	91	100					
	100 ml/100 kg				100	100	100					
<i>Ustilago tritici</i>	60 ml/100 kg	6	5,56	3,03 & 7,86	96,35	93,6	99	100	100 & 100	100	100 & 100	
	80 ml/100 kg				100	100	100					
	100 ml/100 kg				100	100	100					

* A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...).

In order to adapt the table to the data presented, it is possible:

- to add lines or columns,

- to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

** Optional

Winter wheat laboratory trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max
<i>Fusarium sp.</i>	60 ml/100 kg	3	6,82	5,3 & 8,3	42,83	36,00	54,2	58,47	47,6 & 68,8	70,20	66,7 & 71,9		
	80 ml/100 kg				62,05	57,10	69,7						
	100 ml/100 kg				72,77	62,50	81,8						
<i>Monographella nivalis (anam. Microdochium nivale)</i>	60 ml/100 kg	3	7,7	6,3 & 9,0	26,22	13,80	39,4	61,15	48,0 & 75,0	53,50	44,0 & 69,7		
	80 ml/100 kg				41,88	29,40	69,7						
	100 ml/100 kg				65,97	52,00	77,8						

* A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:

- to add lines or columns,

- to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

** Optional

Winter triticale field trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max
Fusarium sp. summary (autumn and spring)	60 ml/100 kg	6	38,73	18 & 66	38,02	26,10	58,4	79,62	62,6 & 91,5	76,20	54,8 & 94,4		
	80 ml/100 kg				63,85	43,40	81,2						
	100 ml/100 kg				79,87	64,20	93,7						
Fusarium sp. autumn assessment	60 ml/100 kg	3	43,1	36,8 & 52	30,60	27,20	34,6	82,70	77,8 & 91,5	74,43	54,8 & 94,4		
	80 ml/100 kg				63,77	60,60	66,7						
	100 ml/100 kg				80,07	66,30	93,7						
Fusarium sp. spring assessment	60 ml/100 kg	4	34,98	18 & 66	45,43	26,10	58,4	76,53	62,6 & 87,5	77,97	61,6 & 89,9		
	80 ml/100 kg				63,93	43,40	81,2						
	100 ml/100 kg				79,67	64,20	88,9						
<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	60 ml/100 kg	6	17,61	10,2 & 29,7	49,85	19,00	86,7	83,58	56,5 & 100	87,80	68,1 & 100		
	80 ml/100 kg				73,15	53,00	100						
	100 ml/100 kg				85,55	66,70	100						

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

** Optional

Winter triticale laboratory trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max
<i>Fusarium sp.</i>	60 ml/100 kg	3	6,5	5 & 9,3	52,05	45,00	60	55,75	30 & 91,9	59,52	35 & 81,1		
	80 ml/100 kg				64,17	55,00	71,4						
	100 ml/100 kg				75,27	64,00	88,9						
<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	60 ml/100 kg	3	6,17	5 & 8,3	35,85	30,40	40	73,23	56 & 85	70,23	44 & 81,8		
	80 ml/100 kg				73,25	65,80	80						
	100 ml/100 kg				81,75	71,10	90						

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In order to adapt the table to the data presented, it is possible:
- to add lines or columns,
- to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

** Optional

Winter rye field trials

Target	CHR/ZF/PROTI 100 FS	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s) **
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max
<i>Fusarium sp. summary (autumn and spring)</i>	60 ml/100 kg	6	26,62	9,5 & 51,8	50,78	33,90	75	73,4	50,1 & 94,7	73,52	52,2 & 89,2		
	80 ml/100 kg				71,40	41,20	100						
	100 ml/100 kg				79,72	53,60	100						
<i>Fusarium sp. autumn assessment</i>	60 ml/100 kg	3	13,33	9,5 & 18,5	64,13	57,90	75	87,27	83,3 & 94,7	85,57	83,3 & 89,2		
	80 ml/100 kg				90,13	75,70	100						
	100 ml/100 kg				95,50	86,50	100						
<i>Fusarium sp. spring assessment</i>	60 ml/100 kg	3	39,9	21 & 51,8	37,43	33,90	42,9	59,53	50,1 & 77,8	61,47	52,2 & 76,7		
	80 ml/100 kg				52,67	41,20	71,6						
	100 ml/100 kg				63,93	53,60	82,8						
<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	60 ml/100 kg	6	9,01	5,25 & 13,5	61,15	26,90	79,5	88,42	78,6 & 100	85,45	76 & 100		
	80 ml/100 kg				86,32	64,20	100						
	100 ml/100 kg				92,75	77,20	100						
<i>Urocystis occulta</i>	60 ml/100 kg	9	249,79	5,01 & 623,3	94,90	89,00	100	100,00	100 & 100	100,00	100 & 100		
	80 ml/100 kg				99,00	97,00	100						
	100 ml/100 kg				100,00	100,00	100						

* A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:

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- to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

** Optional

Winter rye laboratory trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Prod- uct is >, <, = compared to standard(s)**	
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo 100 FS				
					Mean	Min & Max								
					Mean	Min	Max	Mean	Min & Max	Mean	Min & Max			
<i>Fusarium sp.</i>	60 ml/100 kg	3	6,23	5 & 7	44,32	25,00	64,3	65,25	50 & 71,4	62,98	55 & 69,6			
	80 ml/100 kg				62,52	45,00	75							
	100 ml/100 kg				81,97	74,10	85,7							
<i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)	60 ml/100 kg	3	6,32	5,5 & 7,3	53,60	36,40	63,2	66,33	58,6 & 75	61,27	51,7 & 78,6			
	80 ml/100 kg				71,38	66,70	82,1							
	100 ml/100 kg				75,53	70,40	85,7							

* A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:

- to add lines or columns,
- to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

** Optional

Winter barley field trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Redigo Pro 170 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	
Fusarium sp.	60 ml/100 kg	6	28,67	12,5 & 60,5	56,02	44,00	73,00	93,78	89,5 & 96,2	88,22	80 & 96,2		
	80 ml/100 kg				76,67	70,40	87,80						
	100 ml/100 kg				89,02	84,00	97,10						
Monographella nivalis (anam. Microdochium nivale)	60 ml/100 kg	6	22,22	14,0 & 32,0	58,25	40,50	76,10	92,53	89,3&96,6	87,18	81,3&94,5		
	80 ml/100 kg				73,85	62,20	94,40						
	100 ml/100 kg				88,80	82,10	96,00						
Pyrenophora graminea	60 ml/100 kg	9	249,41	5,64 & 589,50	76,22	69,00	87,00	98,44	97 & 100	93,89	88 & 100		
	80 ml/100 kg				86,78	78,00	97,00						
	100 ml/100 kg				91,67	81,00	100,00						
Pyrenophora teres (anam. Drechslera teres)	60 ml/100 kg	9	12,3	5 & 25,0	50,56	24,00	77,74	74,69	46 & 93	62,24	27 & 92		
	80 ml/100 kg				61,00	33,00	88,30						
	100 ml/100 kg				69,41	41,00	94,00						
Ustilago nuda	60 ml/100 kg	9	284,33	5,22 & 829,0	62,89	37,00	86,00	97,22	94&100	77,44	47&100		
	80 ml/100 kg				78,22	61,00	98,00						
	100 ml/100 kg				86,44	71,00	100,00						

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

Winter barley laboratory trials

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Redigo Pro 170 FS		Redigo 100 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	
Fusarium sp.	60 ml/100 kg	3	12,53	8,1 & 17,0	70,62	61,30	82,50	82,95	77,4 & 88,9	82,75	79 & 90,5		
	80 ml/100 kg				80,12	64,50	92,10						
	100 ml/100 kg				88,50	83,90	93,70						
Monographella nivalis (anam. Microdochium nivale)	60 ml/100 kg	3	15,63	12,5 & 19,5	61,40	56,40	66,00	74,02	71 & 78,3	71,60	66,1 & 76,0		
	80 ml/100 kg				70,22	62,80	84,00						
	100 ml/100 kg				80,73	76,90	86,00						

Crop(s) * A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:

- to add lines or columns,
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** Optional

South-East zone - Hungary

The efficacy trials carried out in 2023/24 in winter wheat and winter barley in Hungary. Materials and methods

The applicant submitted 21 reports (in total) showing the results in research into product efficacy carried out in 2023/24 in winter cereals (9 field trials in winter wheat, 12 field trials in winter barley). List of these reports is contained in Appendix 1

Site

Trials were conducted in different regions in Hungary where winter cereals are grown commercially. The experiment was established on a set of complete randomized blocks in 4 replications.

Details on trial sites, applications and data on effectiveness are included in Appendix 4 and 5

Testing units

Efficacy studies on fungicide/ seed treatment CHR/ZF/PROTI were performed in 2023/24 by:

- CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary.

Experimental details

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

- PP 1/135 (4) Phytotoxicity assessment
- PP 1/152 (4) Design and analysis of efficacy evaluation trials
- PP 1/181 (5) Conduct and reporting of efficacy evaluation trials including good experimental practice

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

- PP 1/19(5) Seed-borne cereal fungi

Assessment methods

Statistical Analysis

Software for analysis of the results was ARM Revision 2024.2 from Gylling Data Management. Data were analysed using analysis of variance (ANOVA) on untransformed data and on transformed ones when the Levene's test indicated so. Regardless of the result of the Levene's test, the transformation was performed

only if requested and approved in advance by the client. If transformation did not improve the distribution, original values were used and therefore significant differences reported should be interpreted with caution. The probability of no significant differences occurring between treatment means was calculated as the F probability value (Treatment Prob(F)). Student-Newman-Keuls (S-N-K) tests were applied when treatment differences were identified on the basis of the ANOVA test. Mean comparison performed only when AOV Treatment P(F) is significant at level selected. Results obtained were indicated by a letter-treatment means with no letters in common are significantly different in accordance with a S-N-K conducted at a 95% confidence level. Where data have been transformed, letters are included in the transformed data.

Assessment of efficacy

The assessment of efficacy in the treated plots was made in relation to the untreated plot on an overall plot basis (scale 0-100 %, 0 % =no efficacy). The assessment date was determined by the speed of action and period of efficacy of the test items.

The assessment of efficacy in the treated plots was made in relation to the average value on untreated plots (according to Abbott; scale 0-100 %, 0 % =no efficacy). The assessment date was determined by the crop development stage.

Assessment of phytotoxicity

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). The assessment date was determined by the speed of action and period of efficacy of the test substances.

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). Visual emergence uniformity was assessed by visual estimation in relation to untreated check on an overall plot basis on a percentage scale 0-100 % (100=untreated check) The assessment date was determined by the crop development stage

Assessment of fungal diseases

Efficacy was recorded by estimation and/or counting of severity of disease. The assessment date was determined by the speed of action and period of efficacy of the test substances.

Efficacy was recorded by estimation and/or counting of incidence or severity of disease. The assessment date was determined by the crop development stage.

Harvest

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content. If quality indices are made, they will be recorded.

Applications methods and rates

The applications were carried out by Hege-11, SETRDR

The suggested dose of the seed treatment CHR/ZF/PROTI:

100 ml/100 kg seed in winter cereals are corresponding to 10.0 g a.s./100 kg seed of prothioconazole.

The product CHR/ZF/PROTI has been used:

in winter cereals at the following rates of:

- 60 ml/100 kg/seed,
- 80 ml/100 kg/seed,
- 100 ml/100 kg/seed

Premis 025 FS was used as a reference product in winter cereals

Redigo Pro 170 FS was used as a reference product in winter cereals

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

Experiment pattern:

Winter cereals season 2023/24 field trials

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check				
2	CHR/ZF/PROTI 100 FS	60	6	A	BBCH 00
3	CHR/ZF/PROTI 100 FS	80	8	A	BBCH 00
4	CHR/ZF/PROTI 100 FS	100	10	A	BBCH 00
5	Premis 025 FS	150	3,75	A	BBCH 00
6	Redigo Pro 170 FS	66,7	11,3	A	BBCH 00

Details of experiments

Winter wheat season 2023/24 field trials *Fusarium spp.*

Report code	CPRHU23-1062-025FE	CPRHU23-1063-025FE	CPRHU23-1064-025FE
Location	Szombathely / Hungary	Zákány / Hungary	Balástya / Hungary
Plant /cultivar	winter wheat/ NS 46	winter wheat/ GK Csillag	winter wheat/ MV Nádor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter braley	winter tritcale	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	4,59	5,81	7
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Winter wheat season 2023/24 field trials *Microdochium majus*

Report code	CPRHU23-1065-025FE	CPRHU23-1066-025FE	CPRHU23-1067-025FE
Location	Szombathely / Hungary	Zákány / Hungary	Balástya / Hungary
Plant /cultivar	winter wheat/ KWS Exotic	winter wheat/ NS 46	winter wheat/ MV Nádor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter barley	winter tritcale	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	4,59	5,81	7
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Winter wheat season 2023/24 field trials *Tilletia caries*

Report code	CPRHU23-1068-025FE	CPRHU23-1069-025FE	CPRHU23-1070-025FE
Location	Szombathely / Hungary	Zákány / Hungary	Balástya / Hungary
Plant /cultivar	winter wheat/ KWS Exotic	winter wheat/ GK Csillag	winter wheat/ MV Nádor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter barley	winter triticale	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	4,59	5,81	7
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Winter barley season 2023/24 field trials *Fusarium spp.*

Report code	CPRHU23-1071-025FE	CPRHU23-1072-025FE	CPRHU23-1073-025FE
Location	Szombathely / Hungary	Zákány/ Hungary	Hódmezővásárhely / Hungary
Plant /cultivar	winter barley/ KWS Donau	winter barley/ GK Judy	winter barley/ KWS Daxor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	winter triticale	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	clay loam
Soil pH	6,35	5,81	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	1,35 m ²	5,4 m ²	5,4 m ²

Winter barley season 2023/24 field trials *Microdochium majus*

Report code	CPRHU23-1074-025FE	CPRHU23-1075-025FE	CPRHU23-1076-025FE
Location	Szombathely / Hungary	Porrog / Hungary	Hódmezővásárhely / Hungary
Plant /cultivar	winter barley/ KWS Donau	winter barley/ GK Judy	winter barley/ KWS Daxor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	spring wheat	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	6,35	5,72	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Winter barley season 2023/24 field trials *Pyrenophora graminea*

Report code	CPRHU23-1077-025FE	CPRHU23-1078-025FE	CPRHU23-1079-025FE
Location	Szombathely/ Hungary	Porrog / Hungary	Hódmezővásárhely / Hungary
Plant /cultivar	winter barley/ KWS Do- nau	winter barley/ KH KOR- SÓ	winter barley/ Botond
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	spring wheat	HELAN
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	4,59	5,72	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Winter barley season 2023/24 field trials *Pyrenophora teres (anam. Drechslera teres)*

Report code	CPRHU23-1080-025FE	CPRHU23-1081-025FE	CPRHU23-1082-025FE
Location	Szombathely / Hungary	Porrog / Hungary	Hódmezővásárhely / Hun- gary
Plant /cultivar	winter barley/ KWS Do- nau	winter barley/ Botond	winter barley/ KH Korsó
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	spring wheat	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	clay loam
Soil pH	4,59	5,72	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m ²	5,4 m ²	5,4 m ²

Efficacy tests

The 21 trials (9 trials in winter wheat and 12 in winter barley) in total were carried out in 2023/24 in Hungary. The seed treatment CHR/ZF/PROTI has been used at the following rates:

- 60 ml/100 kg/ seed,
- 80 ml/100 kg/seed,
- 100 ml/100 kg/seed

Table 3.2-2a: Details on trial methodology

Guidelines	General guidelines	PP 1/152 (3) Design and analysis of efficacy evaluation trials
		PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice
		PP 1/135 (3) Phytotoxicity assessment
	Specific guidelines	PP 1/19 (5) Seed-borne cereal fungi
Experimental design	Plot design	Randomized Complete Block (RCB) – (21)
	Plot size	Winter wheat: 5,4 m ² ; Winter barley: 5,4 m ²
	Number of replications	4 (21)
Crop	Trials per crop	Winter wheat 9 field trials Winter barley 12 field trials
	Varieties per crop	Winter wheat: KWS Exotic, GK Csillag, MV Nádor, NS 46. Winter barley: KWS Donau, Botond, KH Korsó, GK Judy, KWS Daxor.
	Sowing period	Winter wheat: 01.11.2023-18.11.2023 Winter barley field: 01.11.2023-18.11.2023
Application	Crop stage (BBCH)* at application	Winter wheat: BBCH 00 – seed treatment Winter barley: BBCH 00 – seed treatment
	Timing Pest stage at application (1)	The data available in Appendix 4
	Number of applications Intervals between applications	1 (21 trials), interval – n/a
	Spray volumes	0.7 L
Assessment	Assessment types	Assessment of efficacy Assessment of phytotoxicity
	Assessment dates	Assessment dates deatalis is available in Appendix 4
Other relevant information	e.g. Soil type, pH (in case of soil active substance ...)	Winter wheat: pH: 4,59-7,0 Winter barley: pH: 4,59-7,1
	e.g. Natural / artificial inoculation...	n/a
	e.g. Field / Greenhouse...	n/a
	...	n/a

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

Crop(s) 1 AND/OR Target(s) 1

A total of 21 trials were carried out to evaluate the efficacy of product CHR/ZF/PROTI for the control of most important fungal diseases in winter cereals.

Efficacy data for fungal diseases are presented from 18 efficacy trials assessed. In three experiments due to the conditions *Microdochium majus* did not occur or the degree of infestation was too low (report no.: CPRHU23-1066-025FE, CPRHU23-1067-025FE, CPRHU23-1075-025FE), therefore data were not provided. Only phytotoxicity symptoms data were taken into account.

Winter wheat

The 9 trials were carried out in winter wheat in season 2023/24. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter barley

The 12 trials were carried out in winter barley in season 2023/24. The seed treatment CHR/ZF/PROTI was applied at the following rates of 60; 80; 100 ml/100 kg seed.

Winter wheat

3.2.3-1.15 The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.*

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials.

Assessment of efficacy in 49-146 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium spp.* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 33,09 % (146 DA-A) to 100 % (49, 139 DA-A), at rate 80 ml from 72,12 % (146 DA-A) to 100,0 % (49, 87, 129, 139 DA-A), at rate 100 ml from 92,44 % (146 DA-A) to 100,0 % (49, 87, 129, 139 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and slightly lower than the standard product Redigo Pro 170 FS. In the trials efficacy amounted to 97,59 % during the assessment. (Appendix 5 tab. 26).

3.2.3-1.16 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*)

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. In two experiments due to the conditions *Microdochium majus* did not occur or the degree of infestation was too low (report no.: CPRHU23-1066-025FE, CPRHU23-1067-025FE), therefore data were not provided. Only phytotoxicity symptoms data were taken into account.

Assessment of efficacy in field trials 123-146 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) was investigated in 1 trial. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the low to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 53,56 % (146 DA-

A) to 57,86 % (123 DA-A), at rate 80 ml from 81,5 % (146 DA-A) to 83,44 % (123 DA-A), at rate 100 ml from 84,8 % (146 DA-A) to 86,35 % (123 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and slightly lower than the standard product Redigo Pro 170 FS. In the trials efficacy amounted above 85,58 % during the assessment. (Appendix 5 tab. 27).

3.2.3-1.17 The efficacy of CHR/ZF/PROTI in control of TILLCA *Tilletia caries*

The efficiency of CHR/ZF/PROTI in control of *Tilletia caries* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 93,13 % (226 DA-A) to 93,44 % (242 DA-A), at rate 80 ml from 95,28 % (226 DA-A) to 100,0 % (235 DA-A), at rate 100 ml from 95,37 % (226 DA-A) to 100,0 % (235 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the standard product Redigo Pro 170 FS. In the trials efficacy amounted up to 98,38 % during the assessment. (Appendix 5 tab. 28).

Winter barley

3.2.3-1.18 The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* sp.

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials.

Assessment of efficacy in 49-146 days after application

The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The efficiency of CHR/ZF/PROTI in control of *Fusarium* spp. were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 60,97 % (146 DA-A) to 100,0 % (49, 139 DA-A), at rate 80 ml from 85,33 % (146 DA-A) to 100,0 % (49, 87, 129, 139 DA-A), at rate 100 ml from 90,18 % (146 DA-A) to 100,0 % (49, 87, 129, 139 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the standard product Redigo Pro 170 FS. In the trials efficacy amounted above 96,97 % during the assessment. (Appendix 5 tab. 29).

3.2.3-1.11 The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*)

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 3 trials. In one experiment due to the conditions *Microdochium majus* did not occur or the degree of infestation was too low (report no.: CPRHU23-1075-025FE), therefore data were not provided. Only phytotoxicity symptoms data were taken into account.

Assessment of efficacy in field trials 87-146 days after application

The efficiency of CHR/ZF/PROTI in control of *Monographella nivalis* (anam. *Microdochium nivale*) were investigated in 6 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 71,85 % (146 DA-A) to 100,0 % (87, 129 DA-A), at rate 80 ml from 84,42 % (146 DA-A) to 100 % (87, 129 DA-A), at rate 100 ml from 93,05 % (146 DA-A) to 100,0 % (87, 129 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and the standard product Redigo Pro 170 FS. In the trials efficacy amounted above 97,11 % during the assessment. (Appendix 5 tab. 30).

3.2.3-1.12 The efficacy of CHR/ZF/PROTI in control of PYRNGR *Pyrenophora graminea*

The efficiency of CHR/ZF/PROTI in control of *Pyrenophora graminea* were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the high level of efficacy. The effectiveness fluctuated at rate 60 ml from 79,74 % (186 DA-A) to 90,68 % (182 DA-A), at rate 80 ml from 90,82 % (186 DA-A) to 100 % (182, 192 DA-A), at rate 100 ml from 95,64 % (186 DA-A) to 100,0 % (182, 192 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and slightly lower than the standard product Redigo Pro 170 FS. In the trials efficacy amounted up to 98,55 % during the assessment. (Appendix 5 tab. 31).

3.2.3-1.13 The efficacy of CHR/ZF/PROTI in control of PYRNTE *Pyrenophora teres* (anam. *Drechslera teres*)

The efficiency of CHR/ZF/PROTI in control of *Pyrenophora teres* (anam. *Drechslera teres*) were investigated in 3 trials. The tested product at rates 60; 80; 100 ml/100 kg seed controlled this species of fungal at the medium to high level of efficacy. The effectiveness fluctuated at rate 60 ml from 69,41 % (138 DA-A) to 89,66 % (129 DA-A), at rate 80 ml from 83,60 % (146 DA-A) to 95,4 % (129 DA-A), at rate 100 ml from 87,83 (146 DA-A) to 98,18 % (138 DA-A). The efficacy of the tested seed treatment was slightly higher than the standard product Premis 025 FS and slightly lower than the standard product Redigo Pro 170 FS. In the trials efficacy amounted up to 94,57 % during the assessment. (Appendix 5 tab. 32).

Conclusions on the biological efficacy

The obtained data in performed trials show that CHR/ZF/PROTI provides benefits against the most important fungal in winter cereals.

On the basis of submitted research, it is possible to state that the CHR/ZF/PROTI:

Used CHR/ZF/PROTI in winter wheat:

at rate 60 ml/100 kg seed:

Was effective: *Tilletia caries* (TILLCA)

Medium sensitive: *Fusarium* spp. (FUSASP)

Resistant/Reduction of diseases: *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI)

at rate 80 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI), *Tilletia caries* (TILLCA)

at rate 100 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MONGNI), *Tilletia caries* (TILLCA)

Used CHR/ZF/PROTI in winter barley:

at rate 60 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora graminea* (PYRNGR)

Medium sensitive: *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE)

at rate 80 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora graminea* (PYRNGR), *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE)

at rate 100 ml/100 kg seed:

Was effective: *Fusarium* spp. (FUSASP), *Monographella nivalis* (anam. *Microdochium nivale*) (MICDMA), *Pyrenophora graminea* (PYRNGR), *Pyrenophora teres* (anam. *Drechslera teres*) (PYRNTE)

Table 3.2-1b: Efficacy of product CHR/ZF/PROTI at the timing of assessment.

Winter wheat field trials – Hungary

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s) **
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo Pro 170 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	
Fusarium sp.	60 ml/100 kg	3	22,90	4,84 & 59,83	75,71	33,09	100,00	95,09	84,57 & 100	98,28	94,45 & 100		
	80 ml/100 kg				91,01	72,12	100,00						
	100 ml/100 kg				97,59	92,44	100,00						
Monographella nivalis (anam. Microdochium nivale)	60 ml/100 kg	1	5,60	5,47 & 5,72	55,71	53,56	57,86	80,85	78,59 & 83,11	86,84	85,59 & 88,09		
	80 ml/100 kg				82,47	81,50	83,44						
	100 ml/100 kg				85,58	84,80	86,35						
Tilletia caries	60 ml/100 kg	3	36,81	27,39 & 41,56	93,87	93,13	95,04	96,18	89,33 & 100	98,26	94,98 & 100		
	80 ml/100 kg				98,01	95,28	100,00						
	100 ml/100 kg				98,38	95,37	100,00						

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

Winter barley field trials - Hungary

Target	CHR/ZF/PROTI 100 FS at rate	Number of trials	Infestation in the untreated control (% leaf area/stems/ears)		% control								No of trials where Product is >, <, = compared to standard(s)**
					CHR/ZF/PROTI 100 FS			Premis 025 FS		Redigo Pro 170 FS			
					Mean	Min & Max	Mean	Min	Max	Mean	Min & Max	Mean	Min & Max
Fusarium sp.	60 ml/100 kg	3	7.57	4.63 & 10.93	83.62	60.97	100.00	95.84	86.98 & 100	96.60	89.58 & 100		
	80 ml/100 kg				95.29	85.33	100.00						
	100 ml/100 kg				96.97	90.18	100.00						
Monographella nivalis (anam. Microdochium nivale)	60 ml/100 kg	2	6.63	5.46 & 7.79	86.49	71.85	100.00	95.95	91.13 & 100	96.74	92.26 & 100		
	80 ml/100 kg				92.98	84.42	100.00						
	100 ml/100 kg				97.11	93.05	100.00						
Pyrenophora graminea	60 ml/100 kg	3	5.59	5.25 & 5.78	84.36	79.74	90.68	98.33	94.99 & 100	98.85	96.55 & 100		
	80 ml/100 kg				96.94	90.82	100.00						
	100 ml/100 kg				98.55	95.64	100.00						
Pyrenophora teres (anam. Drechslera teres)	60 ml/100 kg	3	5.52	5.26 & 5.80	76.53	69.41	89.66	93.59	85.71& 98.33	95.00	88.97 & 98.12		
	80 ml/100 kg				91.14	83.60	95.40						

	100 ml/100 kg	!	!	!	94,57	87,83	98,18					
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- * A, B, C can be a “trial group” (as defined in page 10, e.g. EPPO climatic zone A) or a specific target (e.g. weed A, weed B...). In order to adapt the table to the data presented, it is possible:
- to add lines or columns,
 - to duplicate the table (e.g. one table for “trial group 1”, one table for “trial group 2”, one table for “all”).

2 / Target(s) 2

Not applicable

Minor use

Not applicable

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

Not applicable

Table 3.2-2: Yield (quality) effect of product CHR/ZF/PROTI in efficacy trials on crop * target 1

Not applicable

Summary and conclusion

Not applicable

Conclusion – Efficacy tests

NORTH EAST zone

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials).

A total of 39 trials, including six laboratory trials targeting *Fusarium* spp. and *Monographella nivalis* (*Microdochium nivale*), were conducted in winter barley during the 2023/24 season. The seed treatment CHR/ZF/PROTI was tested at application rates of 60, 80, and 100 ml per 100 kg of seed. Only the 60 ml/100 kg application rate was directly compared with standard products.

The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* spp. in winter barley

Six field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against *Fusarium* spp. under open-field conditions. Mean disease infestation in the untreated control averaged across the 6 trials was 28.7% (range 12.5 – 60.5%), which provided a sufficient basis for assessment. At a rate of 60 ml/100 kg, CHR/ZF/PROTI achieved significantly lower control of *Fusarium* spp., with a mean efficacy of 56.0%. This was inferior to the mean efficacies of 93.8% and 88.2% achieved by the standard products. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate.

On average across the trials, the 100 ml/100 kg application rate of CHR/ZF/PROTI achieved 89.0% (range: 84.0–97.1%) control of *Fusarium spp.* (20–23 DAA), which was comparable to the efficacy of the standard products at a rate of 60 ml/100 kg. Additional three trials conducted under controlled conditions confirmed that the 100 ml/100 kg rate provided optimal control of *Fusarium spp.* on winter barley.

The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*) in winter barley

Six field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against MONGNI under open-field conditions. The mean disease infestation in the untreated control, averaged across the six trials, was 22.2% (range: 14.0–32.0%), providing a sufficient basis for assessment. At a rate of 60 ml/100 kg, CHR/ZF/PROTI resulted in significantly lower control of MONGNI, with a mean efficacy of 58.2%. This was inferior to the mean efficacies of 87.2% and 92.5% achieved by the standard products. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. On average across the trials, the 100 ml/100 kg application rate of CHR/ZF/PROTI achieved 88.8% control of MONGNI (range: 82.1–96.0%; 146–189 DAA), which was comparable to the efficacy of the standard products at a rate of 60 ml/100 kg. Additional three trials conducted under controlled conditions confirmed that the 100 ml/100 kg rate provided optimal control of MONGNI on winter barley.

The efficacy of CHR/ZF/PROTI in control of PYRNGR *Pyrenophora graminea* in winter barley

Nine field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against PYRNGR under open-field conditions. The mean disease infestation in the untreated control, averaged across the nine trials, was 249.4% (range: 5.6 – 589.5%), providing a sufficient basis for assessment. At a rate of 60 ml/100 kg, CHR/ZF/PROTI resulted in significantly lower control of PYRNGR, with a mean efficacy of 76.2%. This was inferior to the mean efficacies of 98.4% and 93.9% achieved by the standard products. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. On average across the trials, the 100 ml/100 kg application rate of CHR/ZF/PROTI achieved 91.7% control of PYRNGR (range: 81.0 –100%; 230–250 DAA), which was comparable to the efficacy of the standard products at a rate of 60 ml/100 kg. These trials confirmed that the 100 ml/100 kg rate provided optimal control of PYRNGR on winter barley.

The efficacy of CHR/ZF/PROTI in control of PYRNTE *Pyrenophora teres* (anam. *Drechslera teres*) in winter barley

Nine field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against PYRNTE under open-field conditions. The mean disease infestation in the untreated control, averaged across the nine trials, was 12.3% (range: 5.0–25.0%), providing a sufficient basis for assessment. At a rate of 60 ml/100 kg, CHR/ZF/PROTI resulted in significantly lower control of PYRNTE, with a mean efficacy of 50.6%. This was inferior to the mean efficacies of 74.7% and 62.2% achieved by the standard products. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. The data demonstrated that CHR/ZF/PROTI, at the proposed rate of 100 ml/100 kg, provided acceptable (moderate) control of PYRNTE, with a mean efficacy of 69.4% (range: 41.0–94.0%).

The efficacy of CHR/ZF/PROTI in control of USTINH *Ustilago nuda* in winter barley

Nine field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against USTINH under open-field conditions. The mean disease infestation in the untreated control, averaged across the nine trials, was 284.3% (range: 5.2–829.0%), providing a sufficient basis for assessment. At a rate of 60 ml/100 kg, CHR/ZF/PROTI resulted in significantly lower control of USTINH, with a mean efficacy of 62.9%. This was inferior to the mean efficacies of 77.4% and 97.2% achieved by the standard products. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. On average across the trials, the 100 ml/100 kg application rate of CHR/ZF/PROTI achieved 86.4% control of USTINH (range: 71.0 –100%), which was comparable to the efficacy of the standard products at a rate of 60 ml/100 kg. These trials confirmed that the 100 ml/100 kg rate provided optimal control of USTINH on winter barley.

SOUTH EAST zone

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials).

A total of 21 trials were conducted, including 9 trials in winter wheat and 12 winter barley, during the 2023/24 season. The seed treatment CHR/ZF/PROTI was tested at application rates of 60, 80, and 100 ml per 100 kg of seed.

The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium* spp. in winter wheat

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Three field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against *Fusarium* spp. under open-field conditions. The mean disease incidence in the untreated control averaged 22.9% (range: 4.8–59.8%) across the three trials, providing a sufficient basis for assessment.

At a rate of 60 ml/100 kg, CHR/ZF/PROTI achieved an average efficacy of 75.7% against *Fusarium* spp., which was significantly lower than the 95.0% and 98.2% efficacies recorded for the standard products Premis 025 FS and Redigo Pro 170 FS, respectively. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. On average across the trials, CHR/ZF/PROTI at 100 ml/100 kg achieved 97.6% control of *Fusarium* spp. (range: 92.4 –100%), which was comparable to the efficacy of the standard products applied at 60 ml/100 kg.

Based on the provided data, the efficacy of CHR/ZF/PROTI against *Fusarium* spp. at the proposed rate is deemed acceptable. However, the number of trials conducted in the South-East is below the minimum of six required by EPPO standard PP 1/226. Member States belonging to the South-East EPPO zone are therefore kindly requested to decide whether they accept the limited data from this zone.

The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*) in winter wheat

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

According to the applicant, one efficacy trials were conducted on wheat with sufficient disease incidence. EPPO guideline PP1/226 (3), which advises on the 'Number of efficacy trials', states that a number of 10 (6-15) trials for a major pathogen in a major crop and 3 (2-6) trials for minor uses are required to demonstrate adequate efficacy.

Although some acceptable results were presented, the overall evidence is considered limited and insufficient to demonstrate the efficacy of CHR/ZF/PROTI at the claimed dose rate of 100 ml/100 kg for the effective control of *MONGNI* on wheat.

The efficacy of CHR/ZF/PROTI in control of TILLCA *Tilletia caries* in winter wheat

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Three field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against *TILLCA* under open-field conditions. The mean disease incidence in the untreated control averaged 36.8%

(range: 27.4 –41.6%) across the three trials, providing a sufficient basis for assessment.

At a rate of 60 ml/100 kg, CHR/ZF/PROTI achieved an average efficacy of 93.8% against TILLCA, which was comparable to the 96.2% and 98.2% efficacies recorded for the standard products Premis 025 FS and Redigo Pro 170 FS, respectively. Increasing the application rate to 100 ml/100 kg improved disease control compared to the 60 ml/100 kg rate. On average across the trials, CHR/ZF/PROTI at 100 ml/100 kg achieved 98.4% control of TILLCA (range: 95.4 –100%), which was comparable to the efficacy of the standard products applied at 60 ml/100 kg.

Based on the provided data, the efficacy of CHR/ZF/PROTI against TILLCA at the proposed rate is deemed acceptable. However, the number of trials conducted in the South-East is below the minimum of six required by EPPO standard PP 1/226. Member States belonging to the South-East EPPO zone are therefore kindly requested to decide whether they accept the limited data from this zone.

The efficacy of CHR/ZF/PROTI in control of FUSASP *Fusarium spp.* in winter barley

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Three field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against *Fusarium spp.* under open-field conditions. The seed treatment, tested at the proposed dose of 100 ml/100 kg, demonstrated a very high level of control, with an average efficacy of 96.9% (range: 90.2 – 100%). Overall, the evidence indicates that CHR/ZF/PROTI demonstrated very good activity against *Fusarium spp.* The number of trials (three) conducted in the south-east EPPO zone is below the minimum required by EPPO Standard PP 1/226 (Number of efficacy trials). Therefore, concerned Member States should consider whether the number of trials submitted for this use is sufficient to support authorisation. Additionally, cMS may consider the acceptability of extrapolating data from the North-East zone.

The efficacy of CHR/ZF/PROTI in control of MONGNI *Monographella nivalis* (anam. *Microdochium nivale*) in winter barley

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Two efficacy trials were conducted on winter barley under conditions with sufficient disease incidence. CHR/ZF/PROTI, applied at the proposed rate of 100 mL/100 kg seed, demonstrated consistently high efficacy against *Monographella nivalis*, with mean control reaching 97.11% (range: 93.05–100%). While these results indicate very high fungicidal activity, it should be noted that the number of valid trials is below the minimum requirement set by EPPO Standard PP 1/226 (Number of efficacy trials). Therefore, concerned Member States should consider whether the number of trials submitted for this use is sufficient to support authorisation. Additionally, cMS may consider the acceptability of extrapolating data from the North-East zone.

The efficacy of CHR/ZF/PROTI in control of PYRNGR *Pyrenophora graminea* in winter barley

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Three field trials were conducted to evaluate the efficacy of the CHR/ZF/PROTI seed treatment against *Pyrenophora graminea* under open-field conditions. The seed treatment, tested at the proposed rate of 100 mL/100 kg, demonstrated a very high level of control, with an average efficacy of 98.5% (range: 95.6–100%). While these results suggest that the product provides very high fungicidal activity against *Pyrenophora graminea*, it should be noted that the number of trials (three) is below the minimum requirement set by

EPPO Standard PP 1/226 (Number of efficacy trials). Therefore, concerned Member States should consider whether the number of trials submitted for this use is sufficient to support authorisation. Additionally, cMS may consider the acceptability of extrapolating data from the North-East zone.

The efficacy of CHR/ZF/PROTI in control of PYRNT *Pyrenophora teres* (anam. *Drechslera teres*) in winter barley

The presented data correspond to the requirements of the EPPO Standards PP 1/152 (3) Design and analysis of efficacy evaluation trials, PP 1/181 (3) Conduct and reporting of efficacy evaluation trials including good experimental practice, PP 1/135 (3) Phytotoxicity assessment, PP 1/19 (5) Seed-borne cereal fungi and PP 1/226 (Number of efficacy trials). In these trials only the 60 ml/100 kg application rate was directly compared with standard products.

Three efficacy trials were conducted on winter barley under conditions of sufficient disease incidence. CHR/ZF/PROTI, applied at a rate of 60 mL/100 kg seed, showed lower efficacy compared to the standard products. When applied at the proposed rate of 100 mL/100 kg seed, the treatment demonstrated consistently high efficacy against *Pyrenophora teres*, with mean control reaching 94.6% (range: 87.8–98.2%). While these results indicate acceptable fungicidal activity, it should be noted that the number of valid trials is below the minimum requirement set by EPPO Standard PP 1/226 (Number of efficacy trials).

Therefore, concerned Member States should consider whether the number of trials submitted for this use is sufficient to support authorisation. Additionally, cMS may consider the acceptability of extrapolating data from the North-East zone.

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

The mode of action of prothioconazole is stated to be demethylation inhibition (DMI). Resistance to DMI fungicides has been found for several pathogens including *Erysiphe graminis tritici*. The applicant considers the risk of resistance developing is high for powdery mildew, moderate for leaf spots (*Septoria tritici*, *Pyrenophora teres*, *Rhynchosporium secalis*) and eyespot (*Pseudocercospora herpotrichoides*) for DMI fungicides including prothioconazole. A series of sensitivity studies has been carried out throughout Europe to establish the baseline sensitivity of cereal mildew, net blotch, leaf spot and eyespot. In addition a study was conducted to demonstrate crossresistance between prothioconazole and a DMI fungicide tebuconazole for a range of cereal diseases. Prothioconazole could be applied as a seed treatment and as a foliar spray to the same crop. However, the dose of prothioconazole applied in the seed treatment is low and would not be expected to produce significant selection of less sensitive strains of leaf, stem and ear diseases of cereals proposed for the spray formulation. *Fusarium* is the only pathogen targeted by both the foliar spray and seed treatment. There is no evidence of resistance developing in the target organism. In addition, *fusarium* species are considered to be low risk pathogens. This is because they affect crops late in the season and they are unlikely to be the target of more than one spray of a DMI fungicide.

Conclusion - Resistance

Prothioconazole, a member of the DMI fungicides, belongs to the Sterol Biosynthesis Inhibitors (SBIs). Prothioconazole is a triazole fungicide classified under FRAC Group 3, known as Demethylation Inhibitors (DMIs). These fungicides inhibit sterol biosynthesis in fungi, disrupting cell membrane formation and function. Prothioconazole as a seed treatment is classified as low to medium risk for resistance development, primarily because it is applied only once per season (at sowing) and targets early, uniform pathogen populations. However, prolonged use and repeated solo applications across seasons may select for resistant strains—especially if the same DMI (e.g., prothioconazole) is used later in the season as a foliar spray.

3.4 Adverse effects on treated crops (KCP 6.4)

North-East Zone - Poland

99 efficacy trials in total: winter wheat (8 field trials, 6 laboratory trials), winter triticale (6 field trials, 6 laboratory trials), winter rye (15 field trials, 6 laboratory trials), winter barley (33 field trials, 6 laboratory trials) and 24 selectivity trials (winter wheat 6 field trials, winter triticale 6 field trials, winter rye 6 field trials, winter barley 6 field trials) were carried out in Poland in season 2020/21, 2021/22 2023/24 on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard. In the course of studies carried out in Poland in the season of 2020/2021, 2021/22 2023/24 on product CHR/ZF/PROTI seed treatment has not been observed to have any significant influence on yield. The product may be used in seed crops of winter cereals.

North-East Zone – Latvia, Lithuania

9 selectivity trials in total: winter wheat (3 field trials), winter triticale (3 field trials), winter rye (3 field trials) were carried out in Latvia, Lithuania in season 2023/24, on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard. In the course of studies carried out in Latvia, Lithuania in the season of 2023/24 on product CHR/ZF/PROTI seed treatment has not been observed to have any significant influence on yield. The product may be used in seed crops of winter cereals

South East Zone - Hungary

21 efficacy trials in total: winter wheat (9 field trials), winter barley (12 field trials) and 6 selectivity trials (winter wheat 3 field trials, winter barley 3 field trials) were carried out in Hungary in season 2023/24, on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard. In the course of studies carried out in Hungary in the season of 2023/24 on product CHR/ZF/PROTI seed treatment has not been observed to have any significant influence on yield. The product may be used in seed crops of winter cereals.

Table 3.4-1: Presentation of trials selectivity trials

Crop*	Country	Type of trial**	Number of trials		Years	GEP, non-GEP, official***	Comments (any other relevant information)
			North-East Zone	South East Zone			
winter wheat	Poland	S + Y + Q	6		2020	GEP	
	Latvia	S + Y + Q	2		2023	GEP	
	Lithuania	S + Y + Q	1		2023	GEP	
	Hungary	S + Y + Q		3	2023	GEP	
winter triticale	Poland	S + Y + Q	6		2020	GEP	
	Latvia	S + Y + Q	2		2023	GEP	
	Lithuania	S + Y + Q	1		2023	GEP	
winter rye	Poland	S + Y + Q	6		2020	GEP	
	Latvia	S + Y + Q	2		2023	GEP	
	Lithuania	S + Y + Q	1		2023	GEP	
winter barley	Poland	S + Y + Q	6	1	2023	GEP	
	Hungary	S + Y + Q	1	3	2023	GEP	
TOTAL	-	-	33	6	-	-	

- * According to the GAP table
** S = selectivity trial, Y = trial with yield assessment, Q = trial with quality assessment, T = trial on the basis of the study of impact on transformation process (TP: Physical transformation, TF: transformation involving microbial fermentation), P = trial with assessment of impact on propagation
*** Official: carried out by a national official organisation

Table 3.4-2: Presentation of reference standards used in selectivity 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	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg 300 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg 150 ml/100 kg	tested/ reference product
winter triticale	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg 300 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg 150 ml/100 kg	tested/ reference product
winter rye	Premis 025 FS	Poland	R-223/2020b - 18.09.2020r.	triticonazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg 300 ml/100 kg	-
	Redigo 100 FS	Czech Republic	R-223/2020b - 18.09.2020r.	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg 150 ml/100 kg	tested/ reference product
winter barley	Redigo Pro 170 FS	Poland	R – 177/2023b - 12.09.2023	prothioconazole	FS - suspension concentrates	150 g/l	66,7 ml/100 kg	66,7 ml/100 kg	-
				tebuconazole		20 g/l		100,05 ml/100 kg	
	Redigo 100 FS	Czech Republic	R – 177/2023b - 12.09.2023	prothioconazole	FS - suspension concentrates	100 g/l	100 ml/100 kg	100 ml/100 kg 150 ml/100kg	tested/reference
winter wheat, winter barley	Premis 025 FS	Hungary	46825/2004 FVM	triticonazole	FS - suspension concentrates	25 g/l	150 ml/100 kg	150 ml/100 kg 225 ml/100 kg	-
	Redigo Pro 170 FS	Hungary	6300/1531-1/2021	prothioconazole	FS - suspension concentrates	150 g/l	66,7 ml/100 kg	66,7 ml/100 kg	-
				tebuconazole		20 g/l		100,05 ml/100 kg	
winter wheat, winter triticale, winter rye	Celest Trio 060 FS	Lithuania	0395B/10	difenconazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg	-
				fludioxonil		25 g/l		300 ml/100 kg	
				tebuconazole		10 g/l			
winter wheat, winter triticale, winter rye	Celest Trio 060 FS	Latvia	0380	difenconazole	FS - suspension concentrates	25 g/l	200 ml/100 kg	200 ml/100 kg	-
				fludioxonil		25 g/l		300 ml/100 kg	
				tebuconazole		10 g/l			

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

3.4.1 Phytotoxicity to host crop (KCP 6.4.1)

North-East Zone Poland

Materials and methods

The applicant submitted 24 reports (in total) showing the results in research into product selectivity carried out in season 2020/21 and 2023/24 in winter wheat (6 trials), winter triticale (6 trials), winter rye (6 trials) winter barley (6 trials). List of these reports is contained in Appendix 1

Site

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

Testing units

Efficacy studies on fungicide CHR/ZF/PROTI were performed in 2020/2021 and 2023/24 by:

1. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department
ul. Wojska Polskiego 28, 60-637 Poznań, Poland

2. Staphyt Sp. z o. o., ul. Poznańska 62/53, 60-853 Poznań
Poland

3. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, ul. Gliwicka 29, 44-153 Sońnicowice, Poland

Experimental details

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

- PP 1/135 (4) Phytotoxicity assessment
- PP 1/152 (4) Design and analysis of efficacy evaluation trials
- PP 1/181 (5) Conduct and reporting of efficacy evaluation trials including good experimental practice
- PP 1/19(5) Seed-borne cereal fungi

They were carried out on the field in the conditions of natural agrofag infestation.

Assessment methods

Statistical Analysis

In case of statistical analysis, data were analysed using a two way analysis of variance (ANOVA). The probability of no significant differences occurring between treatment means is calculated as the F probability value (Prob(F)). Student-Newman-Keuls test was then applied to separate any treatment differences that may be implied by the ANOVA TEST (Prob(F)<0.05) and these are indicated by the LSD-value and by a letter-test.

In case of statistical analysis, data were analysed using a two way analysis of variance (ANOVA). The probability of no significant differences occurring between treatment means is calculated as the F probability value (Prob(F)). Duncan New MRT test was then applied to separate any treatment differences that may be implied by the ANOVA TEST (Prob(F)<0.05) and these are indicated by the LSD-value and by a letter-test.

Assessment of phytotoxicity

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). The assessment date was determined by the speed of action and period of efficacy of the test substances.

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). Visual emergence uniformity was assessed by visual estimation in relation to untreated check on an overall plot basis on a percentage scale 0-100 % (100=untreated check) The assessment date was determined by the crop development stage

Harvest

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content. If quality indices are made, they will be recorded.

Applications methods and rates

The applications were carried out by a laboratory seed treatment Hege 11, SETRDR.

The product CHR/ZF/PROTI has been used:

in winter wheat, winter triticale, winter rye, winter barley at the following rates of:

- 100 ml/100 kg/ seed,
- 150 ml/100 kg/seed

Premis 025 FS was used as a reference product in winter cereals.

Redigo 100 FS was used as a tested/reference product in winter cereals.

Redigo Pro 170 FS was used as a reference product in winter barley.

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

Experiment pattern:

Winter cereals (winter wheat, winter triticale, winter rye) season 2020/21

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	rate a.s. [g/ha] (max)	Appl code	Growth Stage
1	Untreated Check					
2	CHR/ZF/PROTI 100 FS	100	10	18,0	1N	BBCH 00
3	CHR/ZF/PROTI 100 FS	150	15	27,0	1.5 N	BBCH 00
4	Premis 025 FS	200	5	9,0	1N	BBCH 00
5	Premis 025 FS	300	7,5	13,5	1.5 N	BBCH 00
6	Redigo 100 FS	100	10	18,0	1N	BBCH 00
7	Redigo 100 FS	150	15	27,0	1.5 N	BBCH 00

Winter barley season 2023/24

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check				
2	CHR/ZF/PROTI 100 FS	100	10	1N	BBCH 00
3	CHR/ZF/PROTI 100 FS	150	15	1.5 N	BBCH 00
4	Redigo Pro 170 FS	66,7	10,005 + 1,334	1N	BBCH 00
5	Redigo Pro 170 FS	100,05	15,0075 + 2,001	1.5 N	BBCH 00
6	Redigo 100 FS	100	10	1N	BBCH 00
7	Redigo 100 FS	150	15	1.5 N	BBCH 00

Details of experiments

winter wheat

Report code	AH/20/PO/32/Zi/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02
Location	Złotniki / Poland	Gorzyń / Poland	Sośnicowice / Poland	Łany Wielkie / Poland	Kajkowo / Poland	Jasiona / Poland
Plant /cultivar	winter wheat / Bogatka	winter wheat / Opal	winter wheat / Opoka	winter wheat / Pokusa	winter wheat / Bilanz	winter wheat / Mewa
Seeding date	01.10.2020	30.09.2020	06.10.2020	08.10.2020	09.10.2020	08.10.2020
Seeding rate	180 kg/ha	176 kg/ha	233 kg/ha	233 kg/ha	180 kg/ha	180 kg/ha
Forecrop	winter rape	FFFLE	winter rye	potato	winter rape	winter rape
Type of sprayer	SEDRLA	SEDRLA	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	01.10.2020	30.09.2020	25.09.2020	25.09.2020	30.09.2020	01.10.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	5,8	6,4	6,2	6,1	5,6	7,2
Water volume (ml/100 kg)	700	700	700	700	700	700

winter triticale

Report code	AF/20/PszO/32/Zl/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04
Location	Złotniki / Poland	Gorzyń / Poland	Sierakowice / Poland	Sośnicowice / Poland	Kajkowo / Poland	Łaźniki / Poland
Plant /cultivar	winter triticale / Alik	winter triticale / Twingo	winter triticale / Trismart	winter triticale / Rotondo	winter triticale / Bereniko	winter triticale / Boro-wik
Seeding date	01.10.2020	30.09.2020	09.10.2020	24.09.2020	09.10.2020	07.10.2020
Seeding rate	180 kg/ha	164 kg/ha	180 kg/ha	150 kg/ha	180 kg/ha	180 kg/ha
Forecrop	winter rape	FFFLE	winter rye	winter wheat	winter rape	maize
Type of sprayer	SEDRLA	SEDRLA	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	01.10.2020	30.09.2020	24.09.2020	24.09.2020	30.09.2020	29.09.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy clay loam	sandy loam	sandy loam
Soil pH	5,8	6,4	6,3	6,07	5,6	7,4
Water volume (ml/100 kg)	700	700	700	700	700	700

winter rye

Report code	AF/20/ŻO/32/Zl/b/05	AF/20/ŻO/32/Gr/b/06	APK-20-47776-PL05	APK-20-47776-PL06	24 F/2021	25 F/2021
Location	Złotniki / Poland	Gorzyń / Poland	Wilkowyja / Poland	Wólka Krosnowska / Poland	Sośnicowice / Poland	Sierakowice / Poland
Plant /cultivar	winter rye / Diamant	winter rye / Poznańskie	winter rye / Dańkowskie Turkus	winter rye / Dańkowskie Amber	winter rye / Dukato	winter rye / Su Forsetti
Seeding date	01.10.2020	30.09.2020	30.09.2020	05.10.2020	07.10.2020	09.10.2020
Seeding rate	150 kg/ha	108 kg/ha	180 kg/ha	180 kg/ha	118 kg/ha	113 kg/ha
Forecrop	winter rape	FFFLE	potato	winter wheat	winter rape	winter triticale
Type of sprayer	SEDRLA	SEDRLA	HEGE 11	HEGE 11	HEGE 11	HEGE 11
Date of treatment	01.10.2020	30.09.2020	29.09.2020	30.09.2020	01.10.2020	01.10.2020
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam	sandy loam
Soil pH	5,8	6,4	5,4	7,2	6	5,9
Water volume (ml/100 kg)	700	700	700	700	700	700

Winter barley

Report code	16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03
Location	Field No. 12/24 of Łany Wielkie	Field No. 12/24 of Łany Wielkie	Field No. 12/24 of Łany Wielkie	Brody / Poland	Przybroda/ Poland	Dębno / Poland
Plant /cultivar	winter barley / Return	winter barley / Jeanie	winter barley / Jakubus	winter barley / Su Jule	winter barley / Bordeaux	winter barley / Gloria
Seeding date	20.09.2023	20.09.2023	20.09.2023	21.09.2023	20.09.2023	28.09.2023
Seeding rate	180 kg/ha	180 kg/ha	180 kg/ha	190 kg/ha	210 kg/ha	165 kg/ha
Forecrop	winter wheat	winter wheat	winter wheat	spring barley	winter wheat	winter wheat
Type of sprayer	HEGE 11	HEGE 11	HEGE 11	SEDRLA	SEDRLA	SEDRLA
Date of treatment	19.09.2023	19.09.2023	19.09.2023	21.09.2023	20.09.2023	28.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00	BBCH 00
Soil type	sandy loam	sandy loam	sandy loam	loamy sand	loamy sand	loamy sand
Soil pH	6,5	6,5	6,5	6,8	6	6,3
Water volume (ml/100 kg)	700	700	700	700	700	700
Plot size	15 m ²	15 m ²	15 m ²	1,5x9=13,5m ²	1,5x10=15m ²	3,0x8,0=24m ²

North-East Zone - Latvia, Lithuania

Materials and methods

The applicant submitted 9 reports (in total) showing the results in research into product selectivity carried out in season 2023/2024 in winter wheat (3 trials), winter triticale (3 trials), winter rye (3 trials). List of these reports is contained in Appendix 1

Site

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

Testing units

Efficacy studies on fungicide CHR/ZF/PROTI were performed in 2023/2024 by:

1. UAB Agrolab Baltic, Bugeniai village, LT-89452 Mažeikiai district, Lithuania
2. SIA Agrolab Baltic, Kuldigas iela 86, LV-3801, Saldus, Latvia.

Experimental details

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

- PP 1/135 (4) Phytotoxicity assessment
- PP 1/152 (4) Design and analysis of efficacy evaluation trials
- PP 1/181 (5) Conduct and reporting of efficacy evaluation trials including good experimental practice
- PP 1/19(5) Seed-borne cereal fungi

They were carried out on the field in the conditions of natural agrofag infestation.

Assessment methods

Statistical Analysis

Assessment data have been tested with Bartlett's test for homogeneity of variance to ensure that the variance was homogeneous. For data which were not homogeneous according to P (Bartlett's X^2) $< 0,05$ the Student-Newman-Keuls letter test should be treated with care

Assessment data were analysed using a two-way analysis of variance (ANOVA) on the untransformed and transformed data. All assessment data were tested with Student-Newman-Keuls letter test for significant differences between treatments at the 5% level. Analysis details included in the result tables for each trial are:

LSD least significant difference

SD standard deviation

CV co-efficient of variance

Bartlett's test for homogeneity

Assessment of phytotoxicity

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). The assessment date was determined by the speed of action and period of efficacy of the test substances.

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). Visual emergence uniformity was assessed by visual estimation in relation to untreated check on an overall plot basis on a percentage scale 0-100 % (100=untreated check) The assessment date was determined by the crop development stage

Harvest

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content. If quality indices are made, they will be recorded.

Applications methods and rates

The applications were carried out by a laboratory seed treatment E704 Hege 11, SEDRLA.

The product CHR/ZF/PROTI has been used:

in winter wheat, winter triticale, winter rye at the following rates of:

- 100 ml/100 kg/ seed,
- 150 ml/100 kg/seed

Celest Trio 060 FS was used as a reference product in winter cereals.

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

Experiment pattern:

Winter cereals

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check				
2	CHR/ZF/PROTI 100 FS	100	10	1N	BBCH 00
3	CHR/ZF/PROTI 100 FS	150	15	1.5 N	BBCH 00
4	Celest Trio 060 FS	200	12	1N	BBCH 00
5	Celest Trio 060 FS	300	18	1.5 N	BBCH 00

Details of experiments

winter wheat

Report code	195 24 02-04-LV	195 24 02-05-LV	195 24 02-06LT
Location	Lutriņi / Latvia	Jaunlutriņi / Latvia	Žemalė / Lithuania
Plant /cultivar	winter wheat/ Edvins	winter wheat/ Fredis	winter wheat / KWS Extase
Seeding date	25.09.2023	26.09.2023	28.09.2023
Seeding rate	245 kg/ha	285 kg/ha	500 s/m ²
Forecrop	winter oilseed rape	spring barley	pisum sativum
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	20.09.2023	22.09.2023	22.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	loam	sandy loam	loam
Soil pH	7,83	5,16	7,6
Water volume (ml/100 kg)	700	700	700
Plot size	1,15x10=11,5 m ²	1,15x10=11,5 m ²	1,15x10=11,5 m ²

winter triticale

Report code	195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT
Location	Lutriņi /Latvia	Jaunlutriņi / Latvia	Žemalė / Lithuania
Plant /cultivar	winter triticale/ Ruja	winter triticale/Trivalan	winter triticale/Cappricia
Seeding date	25.09.2023	26.09.2023	20.09.2023
Seeding rate	188 kg/ha	277 kg/ha	550 s/m ²
Forecrop	winter oilseed rape	spring barley	pisum sativum
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	20.09.2023	22.09.2023	22.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	loam	sandy loam	loam
Soil pH	7,83	5,16	7,67
Water volume (ml/100 kg)	700	700	700
Plot size	1,15x10=11,5 m ²	1,15x10=11,5 m ²	1,15x10=11,5 m ²

winter rye

Report code	195 24 02-01-LV	195 24 02-02-LV	195 24 02-03LT
Location	Lutriņi /Latvia	Jaunlutriņi/Latvia	Žemalė/Lithuania
Plant /cultivar	winter rye / Kaupo	winter rye/ Jethro	winter rye / Rubin
Seeding date	25.09.2023	26.09.2023	28.09.2023
Seeding rate	228 kg/ha	172 kg/ha	550 s/m ²
Forecrop	winter oilseed rape	spring barley	pisum sativum
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	20.09.2023	22.09.2023	22.09.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	loam	sandy loam	loam
Soil pH	7,83	5,16	7,67
Water volume (ml/100 kg)	700	700	700
Plot size	1,15x10=11,5 m ²	1,15x10=11,5 m ²	1,5x10=15 m ²

South-East Zone - Hungary

Materials and methods

The applicant submitted 6 reports (in total) showing the results in research into product selectivity carried out in season 2023/24 in winter wheat (3 trials), winter barley (3 trials). List of these reports is contained in Appendix 1

Site

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

Testing units

Efficacy studies on fungicide CHR/ZF/PROTI were performed in 2023/2024 by:

1. CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary

Experimental details

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

- PP 1/135 (4) Phytotoxicity assessment
- PP 1/152 (4) Design and analysis of efficacy evaluation trials
- PP 1/181 (5) Conduct and reporting of efficacy evaluation trials including good experimental practice

They were carried out on the field in the conditions of natural agrofag infestation.

Assessment methods

Statistical Analysis

Software for analysis of the results was ARM Revision 2024.2 from Gylling Data Management. Data were analysed using analysis of variance (ANOVA) on untransformed data and on transformed ones when the Levene's test indicated so. Regardless of the result of the Levene's test, the transformation was performed only if requested and approved in advance by the client. If transformation did not improve the distribution, original values were used and therefore significant differences reported should be interpreted with caution. The probability of no significant differences occurring between treatment means was calculated as the F probability value (Treatment Prob(F)). Student-Newman-Keuls (S-N-K) tests were applied when treatment differences were identified on the basis of the ANOVA test. Mean comparison performed only when AOV Treatment P(F) is significant at level selected. Results obtained were indicated by a letter-treatment means with no letters in common are significantly different in accordance with a S-N-K conducted at a 95% confidence level. Where data have been transformed, letters are included in the transformed data.

Assessment of phytotoxicity

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). The assessment date was determined by the speed of action and period of efficacy of the test substances.

Phytotoxicity (chlorosis and necrosis), stunting and thinning were assessed by visual estimation of the intensity on an overall plot basis on a percentage scale 0-100 % (0=no damage). Visual emergence uniformity was assessed by visual estimation in relation to untreated check on an overall plot basis on a percentage scale 0-100 % (100=untreated check) The assessment date was determined by the crop development stage

Harvest

A plot combine for intermixing-free grain-harvest in field trials was used for harvesting the centre of the plot. The total yield is given in unit/ha adjusted to a fixed moisture content. If quality indices are made, they will be recorded.

Applications methods and rates

The applications were carried out by a laboratory seed treatment Hege 11, SETRDR.

The product CHR/ZF/PROTI has been used:

in winter wheat, winter triticale, winter rye at the following rates of:

- 100 ml/100 kg/ seed,
- 150 ml/100 kg/seed

Premis 025 FS and Redigo 170 FS were used as a reference product in winter cereals.

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

Experiment pattern: Winter cereals

No.	Name	rate ml/100 kg seed	other rate a.s./100 kg seed [g]	Appl code	Growth Stage
1	Untreated Check				
2	CHR/ZF/PROTI 100 FS	100	10	1N	BBCH 00
3	CHR/ZF/PROTI 100 FS	150	15	1.5 N	BBCH 00
4	Premis 025 FS	150	3,75	1N	BBCH 00
5	Premis 025 FS	225	5,625	1.5 N	BBCH 00
6	Redigo Pro 170 FS	66,7	10,005 + 1,334	1N	BBCH 00
7	Redigo Pro 170 FS	100,05	15,0075 + 2,001	1.5 N	BBCH 00

Details of experiments winter wheat

Report code	CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS
Location	Szombathely / Hungary	Zákány / Hungary	Hódmezővásárhely / Hungary
Plant /cultivar	winter wheat/ KWS Exotic	winter wheat/ NS 46	winter wheat/ GK Csillag
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter barley	winter triticale	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	6,35	5,81	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m2	5,4 m2	5,4 m2

winter barley

Report code	CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS
Location	Szombathely / Hungary	Porrog / Hungary	Hódmezővásárhely / Hungary
Plant /cultivar	winter barley/ KWS Donau	winter barley/ GK Judy	winter barley/ KWS Daxor
Seeding date	09.11.2023	18.11.2023	01.11.2023
Seeding rate	200 kg/ha	200 kg/ha	200 kg/ha
Forecrop	winter wheat	spring wheat	Helianthus annuus
Type of sprayer	HEGE 11	HEGE 11	HEGE 11
Date of treatment	27.10.2023	27.10.2023	27.10.2023
Plant development phase	BBCH 00	BBCH 00	BBCH 00
Soil type	clay loam	clay loam	silty clay
Soil pH	6,35	5,72	7,1
Water volume (ml/100 kg)	700	700	700
Plot size	5,4 m2	5,4 m2	5,4 m2

North-East Zone - Poland

18 trials were carried out on winter cereals in Poland in season 2020/2021 on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard in trials.

Winter cereals (winter wheat, winter triticale, winter rye)

Number of trials with		Selectivity trials (18)						Efficacy trials (57)		
		CHR/ZF/PROTI 100 FS		Premis 025 FS		Redigo 100 FS (tested/reference product)		CHR/ZF/PROTI 100 FS	Premis 025 FS	Redigo 100 FS (tested/reference product)
		N	1,5 N	N	1,5 N	N	1,5 N	N	N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	-	-	-	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-	-	-	-
Level of symptoms at the last assessments	0% to 5%	-	-	-	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-	-	-	-

Winter barley seed treatment application.

6 trials were carried out on winter cereals in Poland in season 2023/24 on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard in trials.

Winter barley

[illegible]

North-East Zone - Latvia, Lithuania

Winter wheat, winter triticale, winter rye seed treatment application.

9 trials were carried out on winter cereals in Latvia, Lithuania in season 2023/24 on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard in trials.

Number of trials with		Selectivity trials (9)				Efficacy trials (0)	
		CHR/ZF/PROTI 100 FS		Celest Trio 060 FS		n/a	n/a
		N	1,5 N	N	1,5 N	N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-
Level of symptoms at the last assessments	0% to 5%	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-

South-East Zone - Hungary

Winter wheat and winter barley seed treatment application.

6 trials were carried out on winter cereals in Hungary in season 2023/24 on a wide range of commercially grown varieties. There were not observed any phytotoxicity symptoms on tested product and standard in trials.

Number of trials with		Selectivity trials (6)						Efficacy trials (21)		
		CHR/ZF/PROTI 100 FS		Premis 025 FS		Redigo Pro 170 FS		CHR/ZF/PROTI 100 FS	Premis 025 FS	Redigo 100 FS (tested/reference product)
		N	1,5 N	N	1,5 N	N	1,5 N	N	N	N
Maximum of phytotoxicity recorded during the trials	0% to 5%	-	-	-	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-	-	-	-
Level of symptoms at the last assessments	0% to 5%	-	-	-	-	-	-	-	-	-
	>5% to 10%	-	-	-	-	-	-	-	-	-
	>10% to 15%	-	-	-	-	-	-	-	-	-
	>15 %	-	-	-	-	-	-	-	-	-

Conclusion - Phytotoxicity to host crop

The presented data correspond with the requirements of the EPPO Standard PP 1/135 (4). The selectivity trials were conducted in the North-East zone on winter barley (6), and in the South-East zone on winter wheat (3) and winter barley (3).

The zRMS considers that a sufficient number of trials have been conducted in HORVW in the north-east zone. However, the number of trials in TRZAW and HORVW conducted in the South-East EPPO zone is below the minimum requirement set by EPPO Standard PP 1/226 (Number of efficacy trials). EPPO 1/226

indicates that typically at least 8 specific crop safety trials per major crop are required, to cover the range of conditions of use, including soil types and weather conditions that are likely to be encountered. However, EPPO PP 1/226 also mentions that the number of trials may be reduced when there are clearly no adverse effects or if safety to additional related crops has been demonstrated.

In specific selectivity trials CHR/ZF/PROTI was applied at N and 1,5 N of the maximum application dose: 100 ml/100 kg/ seed (1N); and 150 ml/ 100 kg seed (1.5 N). In these trials, commercial reference products were applied Redigo 100 FS, Redigo Pro 170 FS and Premis 025 FS. Furthermore, the phytotoxicity of CHR/ZF/PROTI was evaluated in all efficacy trials. As can be seen from the data, CHR/ZF/PROTI was completely selective and had no negative effect on the emergence. According to the presented data, it can be concluded that seed treatment CHR/ZF/PROTI at dose rates of 100 ml/100 kg/ seed is safe to winter wheat and winter barley when applied according to the label recommendations.

cMS belonging to the South-East EPPO zone should consider whether the number of trials submitted for each crop is sufficient for an authorisation of these uses. Additionally, cMS may consider the acceptability of the extrapolation data from the north-east to support a reduced number of trials in winter barley.

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

North-East Zone - Poland

Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 18 field experiments in Poland in 2020/21 and 6 field experiments in winter barley in Poland in 2023/24. There weren't difference between the treatment objects and standard.

North-East Zone - Latvia, Lithuania

Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 9 field experiments in Latvia, Lithuania in 2023/24 in winter wheat, winter triticale, winter rye. There weren't difference between the treatment objects and standard.

South-East Zone - Hungary

Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 6 field experiments in Hungary in 2023/24 in winter wheat, winter barley. There weren't difference between the treatment objects and standard.

North-East Zone - Poland

Winter wheat

table 3.4.2.1-1 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter wheat Yield (t/ha)								
report code			AH/20/PO/32/Zl/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02			
BBCH crop			298 DA-A	295 DA-A	321 DA-A	321 DA-A	318 DA-A	316 DA-A			
date			26.07.2021	22.07.2021	12.08.2021	12.08.2021	14.08.2021	13.08.2021	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		9,30	6,80	8,60	8,60	6,81	5,66	7,628	5,66	9,30
2	CHR/ZF/PROTI 100 FS	100,00	9,10	6,30	8,60	8,70	6,70	6,51	7,652	6,30	9,10
3	CHR/ZF/PROTI 100 FS	150,00	9,20	7,00	8,80	8,80	6,44	7,04	7,880	6,44	9,20
4	Premis 025 FS	200,00	9,10	7,10	8,90	8,70	6,60	6,98	7,897	6,60	9,10
5	Premis 025 FS	300,00	9,10	7,00	8,80	8,70	6,51	7,30	7,902	6,51	9,10
6	Redigo 100 FS	100,00	9,30	6,80	8,70	9,10	6,44	6,94	7,880	6,44	9,30
7	Redigo 100 FS	150,00	9,20	6,70	8,80	9,00	6,35	7,07	7,853	6,35	9,20
LSD (P=.05)			0,43	0,92	0,54	0,46	0,359	0,374			

Winter triticale

table 3.4.2.1-2 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter triticale Yield (t/ha)								
report code			AF/20/PszO/32/Zl/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04			
BBCH crop			298 DA-A	294 DA-A	327 DA-A	326 DA-A	318 DA-A	316 DA-A			
date			26.07.2021	21.07.2021	14.08.2021	13.08.2021	14.08.2021	11.08.2021	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		5,10	6,70	4,38	4,40	6,01	5,12	5,285	4,380	6,700
2	CHR/ZF/PROTI 100 FS	100,00	5,30	6,50	4,49	4,10	6,04	5,55	5,330	4,100	6,500
3	CHR/ZF/PROTI 100 FS	150,00	5,70	6,40	4,46	4,10	5,99	5,53	5,363	4,100	6,400
4	Premis 025 FS	200,00	5,30	6,10	4,58	4,40	6,21	5,5	5,348	4,400	6,210
5	Premis 025 FS	300,00	5,30	6,10	4,55	4,10	6,18	5,42	5,275	4,100	6,180
6	Redigo 100 FS	100,00	6,10	6,70	4,93	4,20	5,97	5,38	5,547	4,200	6,700
7	Redigo 100 FS	150,00	5,70	6,20	4,57	4,10	5,95	5,04	5,260	4,100	6,200
LSD (P=.05)			1,73	1,1	0,349	0,63	0,424	0,848			

Winter rye

table 3.4.2.1-3 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter rye Yield (t/ha)								
report code			AF/20/ŽO/32/Zl/b/05	AF/20/ŽO/32/Gr/b/06	24 F/2021	25 F/2021	APK-20-47776-PL05	APK-20-47776-PL06			
BBCH crop			298 DA-A	307 DA-A	317 DA-A	317 DA-A	309 DA-A	318 DA-A			
date			26.07.2021	03.08.2021	14.08.2021	14.08.2021	04.08.2021	14.08.2021	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		5,40	6,30	4,51	7,52	5,81	6,13	5,945	4,510	7,520
2	CHR/ZF/PROTI 100 FS	100,00	5,30	6,30	4,58	7,55	5,90	6,68	6,052	4,580	7,550
3	CHR/ZF/PROTI 100 FS	150,00	5,50	6,40	5,04	7,62	5,86	6,00	6,070	5,040	7,620
4	Premis 025 FS	200,00	5,00	6,00	4,66	7,55	5,79	6,53	5,922	4,660	7,550
5	Premis 025 FS	300,00	5,00	5,90	4,85	7,69	5,66	6,18	5,880	4,850	7,690
6	Redigo 100 FS	100,00	5,20	6,00	4,47	7,55	5,73	7,53	6,080	4,470	7,550
7	Redigo 100 FS	150,00	5,20	6,00	4,49	7,70	5,82	7,21	6,070	4,490	7,700
LSD (P=.05)			1,22	0,95	0,671	0,971	0,695	1,33			

Winter barley

table 3.4.2.1-4 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter barley Yield (t/ha)								
report code			16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03			
BBCH crop			BBCH 89	BBCH 89	BBCH 89	BBCH 89	BBCH 89	BBCH 89			
DA-A			290 DA-A	290 DA-A	290 DA-A	282 DA-A	281 DA-A	277 DA-A			
date			05.07.2024	05.07.2024	05.07.2024	29.06.2024	27.06.2024	01.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		3,49	3,67	3,71	8,60	6,10	5,80	5,23	3,49	8,60
2	CHR/ZF/PROTI 100 FS	100,00	3,87	3,72	3,90	8,30	6,60	5,90	5,38	3,72	8,30
3	CHR/ZF/PROTI 100 FS	150,00	3,65	3,98	3,86	8,60	6,40	6,00	5,42	3,65	8,60
4	Redigo Pro 170 FS	66,70	3,62	3,99	3,90	8,50	6,40	6,00	5,40	3,62	8,50
5	Redigo Pro 170 FS	100,05	3,64	3,89	3,82	8,50	6,50	6,00	5,39	3,64	8,50
6	Redigo 100 FS	100,00	3,62	3,88	3,85	8,60	6,50	6,00	5,41	3,62	8,60
7	Redigo 100 FS	150,00	3,55	3,92	3,76	8,60	6,20	6,20	5,37	3,55	8,60
LSD (P=.05)			0,223	0,238	0,312	0,400	0,390	0,400			

North-East Zone - Latvia, Lithuania
Winter wheat

table 3.4.2.1-5 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter wheat Yield (t/ha)					
report code			195 24 02-04-LV	195 24 02-05-LV	195 24 02-06LT			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			327 DA-A	322 DA-A	326 DA-A			
date			12.08.2024	09.08.2024	13.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		3,70	7,30	5,06	5,35	3,70	7,30
2	CHR/ZF/PROTI 100 FS	100,00	3,70	7,00	5,37	5,36	3,70	7,00
3	CHR/ZF/PROTI 100 FS	150,00	3,90	7,10	5,17	5,39	3,90	7,10
4	Celest Trio 060 FS	200,00	4,30	7,40	5,70	5,80	4,30	7,40
5	Celest Trio 060 FS	300,00	3,60	7,00	5,00	5,20	3,60	7,00
LSD (P=.05)			0,740	0,830	0,482			

Winter triticale

table 3.4.2.1-6 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter triticale Yield (t/ha)					
report code			195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			327 DA-A	325 DA-A	326 DA-A			
date			12.08.2024	05.07.2024	05.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		4,00	5,20	5,55	4,92	4,00	5,55
2	CHR/ZF/PROTI 100 FS	100,00	3,80	5,30	5,25	4,78	3,80	5,30
3	CHR/ZF/PROTI 100 FS	150,00	4,20	5,40	5,42	5,01	4,20	5,42
4	Celest Trio 060 FS	200,00	3,80	5,10	5,71	4,87	3,80	5,71
5	Celest Trio 060 FS	300,00	4,00	5,50	5,56	5,02	4,00	5,56
LSD (P=.05)			0,460	0,910	0,375			

Winter rye

table 3.4.2.1-7 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter rye Yield (t/ha)					
report code			195 24 02-01-LV	195 24 02-02-LV	195 24 02-03LT			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			372 DA-A	322 DA-A	326 DA-A			
date			12.08.2024	09.08.2024	13.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		8,80	7,20	1,98	5,99	1,98	8,80
2	CHR/ZF/PROTI 100 FS	100,00	9,10	6,70	2,53	6,11	2,53	9,10
3	CHR/ZF/PROTI 100 FS	150,00	8,80	7,30	1,95	6,02	1,95	8,80
4	Celest Trio 060 FS	200,00	8,80	7,30	2,26	6,12	2,26	8,80
5	Celest Trio 060 FS	300,00	8,80	7,30	2,19	6,10	2,19	8,80
LSD (P=.05)			0,840	0,750	0,347			

South-East Zone - Hungary

Winter wheat

table 3.4.2.1-8 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter wheat Yield (t/ha)					
report code			CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			257 DA-A	258 DA-A	241 DA-A			
date			10.07.2024	11.07.2024	24.06.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		5,11	5,34	4,28	4,91	4,28	5,34
2	CHR/ZF/PROTI 100 FS	100,00	5,20	5,43	4,40	5,01	4,40	5,43
3	CHR/ZF/PROTI 100 FS	150,00	5,20	5,46	4,43	5,03	4,43	5,46
4	Premis 025 FS	150,00	5,25	5,34	4,52	5,04	4,52	5,34
5	Premis 025 FS	225,00	5,06	5,34	4,55	4,98	4,55	5,34
6	Redigo Pro 170 FS	66,70	5,27	5,25	4,40	4,97	4,40	5,27
7	Redigo Pro 170 FS	100,05	5,15	5,35	4,48	4,99	4,48	5,35
LSD (P=.05)			0,338	0,377	0,295			

Winter barley

table 3.4.2.1-9 The influence of the CHR/ZF/PROTI on yield quantity [t/ha]

crop code			winter barley Yield (t/ha)					
report code			CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			237 DA-A	237 DA-A	241 DA-A			
date			20.06.2024	20.06.2024	24.06.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		3,85	4,55	4,19	4,20	3,85	4,55
2	CHR/ZF/PROTI 100 FS	100,00	4,15	4,56	4,20	4,30	4,15	4,56
3	CHR/ZF/PROTI 100 FS	150,00	3,80	4,46	4,30	4,19	3,80	4,46
4	Premis 025 FS	150,00	3,97	4,49	4,28	4,25	3,97	4,49
5	Premis 025 FS	225,00	3,94	4,61	4,27	4,27	3,94	4,61
6	Redigo Pro 170 FS	66,70	4,18	4,55	4,32	4,35	4,18	4,55
7	Redigo Pro 170 FS	100,05	4,24	4,52	4,29	4,35	4,24	4,52
LSD (P=.05)			0,364	0,366	0,246			

Table 3.4-2: Relationship between phytotoxicity and yield.

North-East Zone - Poland

Not applicable.

There were not observed any phytotoxicity symptoms on tested product and standard in trials. This effects didn't have any negative effect on the yield of winter wheat, winter triticale, winter rye, winter barley.

North-East Zone - Latvia, Lithuania

Not applicable.

There were not observed any phytotoxicity symptoms on tested product and standard in trials. This effects didn't have any negative effect on the yield of winter wheat, winter triticale, winter rye.

South-East Zone – Hungary

Not applicable.

There were not observed any phytotoxicity symptoms on tested product and standard in trials. This effects didn't have any negative effect on the yield of winter wheat, winter barley.

Conclusion - Effects on the yield

Selectivity trials in north-eastern and south-eastern zones showed that CHR/ZF/PROTI seed treatment had no adverse effect on winter wheat or barley yields at any application rate. Reference products also demonstrated no negative impact.

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

North-East Zone - Poland

18 studies conducted in 2020/21 in winter whet, winter triticale, winter rye in Poland, and 6 field experiments in winter barley in Poland in 2023/24. There weren't difference between the treatment objects and standard in Poland on winter cereals had no negative impact of CHR/ZF/PROTI on quality of plants. Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 18 field experiments in Poland in 2020/21 and 6 field experiments in winter barley in Poland in 2023/24. There weren't difference between the treatment objects and standard. Details of the data shows tables below

table 3.4.3.1-1 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat (HLW = weight 100 Ltr (hl))

crop code			winter wheat/HLW = weight 100 Ltr (hl)								
report code			AH/20/PO/32/Zl/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02			
BBCH crop			305 DA-A	302 DA-A	332 DA-A	360 DA-A	318 DA-A	320 DA-A			
date			02.08.2021	29.07.2021	23.08.2021	20.09.2021	14.08.2021	17.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		81,28	78,28	70,43	69,10	74,18	69,23	73,75	69,10	81,28
2	CHR/ZF/PROTI 100 FS	100,00	80,08	79,00	70,65	70,03	71,81	68,51	73,35	68,51	80,08
3	CHR/ZF/PROTI 100 FS	150,00	80,43	78,38	70,85	71,03	72,28	69,36	73,72	69,36	80,43
4	Premis 025 FS	200,00	80,50	78,65	70,18	70,13	72,22	68,83	73,42	68,83	80,50
5	Premis 025 FS	300,00	81,18	78,78	70,5	70,45	71,82	69,07	73,63	69,07	81,18
6	Redigo 100 FS	100,00	81,28	79,55	69,93	70,88	73,66	69,72	74,17	69,72	81,28
7	Redigo 100 FS	150,00	74,85	79,33	70,35	70,45	72,63	69,60	72,87	69,60	79,33
LSD (P=.05)			4,576	2,483	1,396	1,4	3,087	2,48			

table 3.4.3.1-2 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale (HLW = weight 100 Ltr (hl))

crop code			winter triticale/HLW = weight 100 Ltr (hl)								
report code			AF/20/PszO/32/Zl/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04			
BBCH crop			306 DA-A	301 DA-A	344 DA-A	343 DA-A	318 DA-A	316 DA-A			
date			03.08.2021	28.07.2021	31.08.2021	30.08.2021	14.08.2021	11.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		62,568	55,70	55,725	69,160	65,81	59,49	61,41	55,70	69,16
2	CHR/ZF/PROTI 100 FS	100,00	58,725	56,08	55,863	68,980	68,24	59,91	61,30	55,86	68,98
3	CHR/ZF/PROTI 100 FS	150,00	59,675	55,78	54,938	69,230	68,24	58,80	61,11	54,94	69,23
4	Premis 025 FS	200,00	56,950	55,30	54,900	70,245	65,63	59,00	60,34	54,90	70,25
5	Premis 025 FS	300,00	59,225	55,50	55,363	69,410	67,69	59,00	61,03	55,36	69,41
6	Redigo 100 FS	100,00	59,700	56,25	56,163	68,220	68,28	59,29	61,32	56,16	68,28
7	Redigo 100 FS	150,00	59,733	55,40	56,350	68,530	69,09	58,25	61,23	55,40	69,09
LSD (P=.05)			3,4317	2,065	1,4865	1,0266	1,975	1,79			

table 3.4.3.1-3 The influence of the CHR/ZF/PROTI on quality of yield
winter rye (HLW = weight 100 Ltr (hl))

crop code			winter rye/HLW = weight 100 Ltr (hl)								
report code			AF/20/ŽO/32/Zl/b/05	AF/20/ŽO/32/Gr/b/06	24 F/2021	25 F/2021	APK-20-47776-PL05	APK-20-47776-PL06			
BBCH crop			313 DA-A	314 DA-A	344 DA-A	344 DA-A	309 DA-A	318 DA-A			
date			10.08.2021	10.08.2021	10.09.2021	10.08.2021	04.08.2021	14.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		74,55	69,93	70,225	69,750	60,15	70,68	69,21	60,15	74,55
2	CHR/ZF/PROTI 100 FS	100,00	74,28	70,63	70,600	70,738	61,80	69,48	69,59	61,80	74,28
3	CHR/ZF/PROTI 100 FS	150,00	73,30	70,38	70,713	70,525	60,55	70,05	69,25	60,55	73,30
4	Premis 025 FS	200,00	74,38	70,93	70,263	70,425	61,40	70,69	69,68	61,40	74,38
5	Premis 025 FS	300,00	71,00	70,95	70,300	70,288	60,30	69,50	68,72	60,30	71,00
6	Redigo 100 FS	100,00	73,55	70,53	70,625	70,075	61,20	70,00	69,33	61,20	73,55
7	Redigo 100 FS	150,00	73,88	69,93	71,013	70,175	62,68	70,05	69,62	62,68	73,88
LSD (P=.05)			3,673	1,646	1,0368	0,609	2,376	1,84			

table 3.4.3.1-4 The influence of the CHR/ZF/PROTI on quality of yield
winter barley (HLW = weight 100 Ltr (hl))

crop code			winter barley/HLW (kg)								
report code			16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03			
BBCH crop			BBCH 99	BBCH 99	BBCH 99	BBCH 99	BBCH 99	BBCH 99			
DA-A			310 DA-A	310 DA-A	310 DA-A	282 DA-A	281 DA-A	377 DA-A			
date			25.07.2024	25.07.2024	25.07.2024	29.06.2024	27.06.2024	01.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		55,74	58,85	57,15	63,10	54,45	64,63	58,99	54,45	64,63
2	CHR/ZF/PROTI 100 FS	100,00	55,98	58,26	57	63,45	54,4	65,25	59,06	54,40	65,25
3	CHR/ZF/PROTI 100 FS	150,00	54,66	58,63	56,68	64,8	54,28	64,15	58,87	54,28	64,80
4	Redigo Pro 170 FS	66,70	55,59	58,38	56,87	64,03	54,18	65,62	59,11	54,18	65,62
5	Redigo Pro 170 FS	100,05	55,96	58,53	57,19	64,58	54,73	64,54	59,26	54,73	64,58
6	Redigo 100 FS	100,00	55,21	58,41	56,79	64,25	54,1	66,08	59,14	54,10	66,08
7	Redigo 100 FS	150,00	56,01	58,81	57,42	66,15	54,7	65,02	59,69	54,70	66,15

LSD (P=.05)										
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table 3.4.3.1-5 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat moisture content

crop code			winter wheat MOICON - moisture content (%)								
report code			AH/20/PO/32/ZI/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02			
BBCH crop			305 DA-A	295 DA-A	321 DA-A	321 DA-A	318 DA-A	316 DA-A			
date			02.08.2021	22.07.2021	12.08.2021	12.08.2021	14.08.2021	13.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		11,60	15,25	13,08	14,48	13,12	14,01	13,59	11,60	15,25
2	CHR/ZF/PROTI 100 FS	100,00	11,75	15,35	12,95	14,33	13,18	14,19	13,63	11,75	15,35
3	CHR/ZF/PROTI 100 FS	150,00	11,70	15,30	13,85	14,50	13,18	14,29	13,80	11,70	15,30
4	Premis 025 FS	200,00	11,63	15,33	13,10	14,23	13,36	14,32	13,66	11,63	15,33
5	Premis 025 FS	300,00	11,60	15,38	12,98	14,35	13,18	14,28	13,63	11,60	15,38
6	Redigo 100 FS	100,00	11,55	15,33	13,25	13,98	13,43	14,12	13,61	11,55	15,33
7	Redigo 100 FS	150,00	11,68	15,33	13,40	14,15	13,07	14,11	13,62	11,68	15,33
LSD (P=.05)			0,239	0,331	0,699	0,54	0,204	0,267			

table 3.4.3.1-6 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale moisture content

crop code			winter triticale MOICON - moisture content (%)								
report code			AF/20/PszO/32/ZI/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04			
BBCH crop			298 DA-A	294 DA-A	327 DA-A	326 DA-A	318 DA-A	316 DA-A			
date			26.07.2021	21.07.2021	14.08.2021	13.08.2021	14.08.2021	11.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		9,968	7,00	13,13	11,33	12,90	15,14	11,58	7,00	15,14
2	CHR/ZF/PROTI 100 FS	100,00	9,825	7,00	12,80	10,88	13,35	15,18	11,51	7,00	15,18
3	CHR/ZF/PROTI 100 FS	150,00	9,850	7,00	13,25	10,90	13,03	14,90	11,49	7,00	14,90
4	Premis 025 FS	200,00	9,875	7,00	13,03	11,93	12,98	14,95	11,63	7,00	14,95
5	Premis 025 FS	300,00	10,025	7,00	12,30	11,28	13,45	14,97	11,50	7,00	14,97
6	Redigo 100 FS	100,00	10,075	7,05	13,00	10,80	13,10	15,15	11,53	7,05	15,15

7	Redigo 100 FS	150,00	10,125	7,00	13,08	11,28	13,13	14,98	11,60	7,00	14,98
LSD (P=.05)			0,2947	0,056	0,778	0,997	0,435	0,27			

table 3.4.3.1-7 The influence of the CHR/ZF/PROTI on quality of yield
winter rye moisture content

crop code			winter rye MOICON - moisture content (%)								
report code			AF/20/ŽO/32/Zl/b/05	AF/20/ŽO/32/Gr/b/06	24 F/2021	25 F/2021	APK-20-47776-PL05	APK-20-47776-PL06			
BBCH crop			298 DA-A	307 DA-A	317 DA-A	317 DA-A	309 DA-A	318 DA-A			
date			26.07.2021	03.08.2021	14.08.2021	14.08.2021	04.08.2021	14.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		11,53	13,58	13,25	14,25	11,99	13,09	12,95	11,53	14,25
2	CHR/ZF/PROTI 100 FS	100,00	11,68	13,90	12,65	13,80	12,13	12,96	12,85	11,68	13,90
3	CHR/ZF/PROTI 100 FS	150,00	11,40	13,68	12,63	14,33	12,43	13,28	12,96	11,40	14,33
4	Premis 025 FS	200,00	11,88	13,75	12,85	13,78	12,59	13,53	13,06	11,88	13,78
5	Premis 025 FS	300,00	10,93	13,55	13,48	14,03	12,56	13,08	12,94	10,93	14,03
6	Redigo 100 FS	100,00	11,48	13,55	12,65	13,68	12,58	13,57	12,92	11,48	13,68
7	Redigo 100 FS	150,00	11,75	13,68	13,08	14,38	12,50	13,09	13,08	11,75	14,38
LSD (P=.05)			0,68	0,412	0,732	1,129	1,029	0,616			

table 3.4.3.1-8 The influence of the CHR/ZF/PROTI on quality of yield
winter barley moisture content

crop code			winter barley/MOICON (%)								
report code			16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03			
BBCH crop			BBCH 99	BBCH 99	BBCH 99	BBCH 99	BBCH 89	BBCH 89			
DA-A			290 DA-A	290 DA-A	290 DA-A	282 DA-A	281 DA-A	277 DA-A			
date			05.07.2024	05.07.2024	05.07.2024	29.06.2024	27.06.2024	01.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		13,40	12,45	12,90	11,48	12,35	8,25	11,81	8,25	13,40
2	CHR/ZF/PROTI 100 FS	100,00	13,10	12,35	12,70	11,55	12,35	8,58	11,77	8,58	13,10
3	CHR/ZF/PROTI 100 FS	150,00	13,35	12,38	12,85	11,40	12,63	8,30	11,82	8,30	13,35
4	Redigo Pro 170 FS	66,70	13,33	12,65	12,95	11,95	13,33	8,58	12,13	8,58	13,33
5	Redigo Pro 170 FS	100,05	13,48	12,40	12,90	11,00	12,53	8,40	11,79	8,40	13,48
6	Redigo 100 FS	100,00	13,13	12,45	12,78	11,25	12,70	8,70	11,84	8,70	13,13
7	Redigo 100 FS	150,00	13,43	12,35	12,88	10,18	12,50	8,25	11,60	8,25	13,43
LSD (P=.05)			0,611	0,550	0,438	0,400	0,635	0,442			

table 3.4.3.1-9 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat protein content

crop code			winter wheat PROCON - protein content %								
report code			AH/20/PO/32/ZI/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02			
BBCH crop			326 DA-A	327 DA-A	343 DA-A	346 DA-A	334 DA-A	333 DA-A			
date			23.08.2021	23.08.2021	03.09.2021	06.09.2021	30.08.2021	30.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		15,80	12,60	10,05	10,31	11,97	13,75	12,41	10,05	15,80
2	CHR/ZF/PROTI 100 FS	100,00	14,90	12,20	9,76	11,000	12,3	13,73	12,32	9,76	14,90
3	CHR/ZF/PROTI 100 FS	150,00	15,40	12,60	10,32	11,000	12,17	13,83	12,55	10,32	15,40
4	Premis 025 FS	200,00	14,90	12,80	10,03	10,73	12,05	14,00	12,42	10,03	14,90
5	Premis 025 FS	300,00	14,50	12,60	9,80	11,07	12,39	13,85	12,37	9,80	14,50
6	Redigo 100 FS	100,00	14,20	12,40	10,35	10,13	12,57	13,78	12,24	10,13	14,20
7	Redigo 100 FS	150,00	14,20	12,80	10,20	10,69	12,47	13,85	12,37	10,20	14,20
LSD (P=.05)					0,768	0,728	0,613-0,614	0,306			

table 3.4.3.1-10 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale protein content

crop code			winter triticale PROCON - protein content %								
report code			AF/20/PszO/32/ZI/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04			
BBCH crop			326 DA-A	327 DA-A	332 DA-A	332 DA-A	333 DA-A	335 DA-A			
date			23.08.2021	23.08.2021	19.08.2021	19.08.2021	29.08.2021	30.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		13,00	11,60	12,293	11,105	11,33	12,70	12,00	11,11	13,00
2	CHR/ZF/PROTI 100 FS	100,00	13,20	11,40	12,998	10,813	11,10	12,80	12,05	10,81	13,20
3	CHR/ZF/PROTI 100 FS	150,00	12,30	11,70	12,688	10,953	10,90	12,93	11,91	10,90	12,93
4	Premis 025 FS	200,00	13,10	11,60	11,788	10,688	11,23	12,75	11,86	10,69	13,10
5	Premis 025 FS	300,00	12,60	11,40	12,495	10,825	11,35	12,80	11,91	10,83	12,80
6	Redigo 100 FS	100,00	12,90	11,70	12,430	10,608	10,80	12,85	11,88	10,61	12,90
7	Redigo 100 FS	150,00	13,20	11,60	12,670	11,085	11,05	13,28	12,15	11,05	13,28
LSD (P=.05)					0,9098	0,6448	0,881	0,37			

table 3.4.3.1-11 The influence of the CHR/ZF/PROTI on quality of yield
winter rye protein content

crop code			winter rye PROCON - protein content %								
report code			AF/20/ZO/32/ZI/b/05	AF/20/ZO/32/Gr/b/06	24 F/2021	25 F/2021	APK-20-47776-PL05	APK-20-47776-PL06			
BBCH crop			326 DA-A	327 DA-A	340 DA-A	340 DA-A	322 DA-A	333 DA-A			
date			23.08.2021	23.08.2021	06.09.2021	06.09.2021	17.08.2021	29.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		12,40	11,10	8,690	7,438	9,08	12,98	10,28	7,44	12,98
2	CHR/ZF/PROTI 100 FS	100,00	13,00	11,40	8,780	7,543	9,18	12,95	10,48	7,54	13,00
3	CHR/ZF/PROTI 100 FS	150,00	13,20	11,20	8,710	7,500	9,18	12,78	10,43	7,50	13,20
4	Premis 025 FS	200,00	13,70	11,10	9,093	7,453	9,13	12,80	10,55	7,45	13,70
5	Premis 025 FS	300,00	13,00	10,90	9,170	7,468	9,23	12,78	10,42	7,47	13,00
6	Redigo 100 FS	100,00	13,50	11,10	8,810	7,445	8,98	13,00	10,47	7,45	13,50
7	Redigo 100 FS	150,00	13,00	11,00	8,678	7,52	9,13	12,83	10,36	7,52	13,00
LSD (P=.05)					0,5149	0,3738	0,327	0,465			

table 3.4.3.1-12 The influence of the CHR/ZF/PROTI on quality of yield
winter barley protein content

crop code			winter barley/PROCON %								
report code			16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03			
BBCH crop			BBCH 99	BBCH 99	BBCH 99	BBCH 99	BBCH 99	BBCH 99			
DA-A			325 DA-A	324 DA-A	328 DA-A	319 DA-A	320 DA-A	312 DA-A			
date			09.08.2024	08.08.2024	12.08.2024	05.08.2024	05.08.2024	05.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		13,05	12,72	13,48	11,60	13,00	13,00	12,81	11,60	13,48
2	CHR/ZF/PROTI 100 FS	100,00	12,81	12,98	13,61	11,50	13,50	13,50	12,98	11,50	13,61
3	CHR/ZF/PROTI 100 FS	150,00	12,68	12,85	13,47	11,70	13,40	13,40	12,92	11,70	13,47
4	Redigo Pro 170 FS	66,70	12,56	12,88	13,54	11,50	13,10	13,10	12,78	11,50	13,54
5	Redigo Pro 170 FS	100,05	12,51	12,50	13,32	11,60	13,50	13,50	12,82	11,60	13,50
6	Redigo 100 FS	100,00	13,12	12,60	13,33	12,20	13,00	13,00	12,88	12,20	13,33
7	Redigo 100 FS	150,00	12,50	12,96	13,55	11,90	12,60	12,60	12,69	11,90	13,55
LSD (P=.05)			0,804	0,787	0,676						

table 3.4.3.1-13 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat thousand weight grain

crop code			winter wheat TGW (g)								
report code			AH/20/PO/32/Zt/b/01	AF/20/PO/32/Gr/b/02	20 F/2021	21 F/2021	APK-20-47776-PL01	APK-20-47776-PL02			
BBCH crop			305 DA-A	302 DA-A	334 DA-A	348 DA-A	318 DA-A	320 DA-A			
date			02.08.2021	29.07.2021	25.08.2021	08.09.2021	14.08.2021	17.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		40,91	45,90	39,89	36,47	40,10	37,55	40,14	36,47	45,90
2	CHR/ZF/PROTI 100 FS	100,00	41,64	45,55	39,91	35,90	40,95	38,26	40,37	35,90	45,55
3	CHR/ZF/PROTI 100 FS	150,00	40,425	45,83	39,82	36,88	41,52	39,52	40,67	36,88	45,83
4	Premis 025 FS	200,00	40,62	45,08	39,72	36,58	42,19	39,05	40,54	36,58	45,08
5	Premis 025 FS	300,00	40,665	46,40	40,48	36,24	42,03	39,34	40,86	36,24	46,40
6	Redigo 100 FS	100,00	41,61	46,43	39,92	37,88	41,83	38,51	41,03	37,88	46,43
7	Redigo 100 FS	150,00	41,095	46,50	40,00	38,49	40,82	39,22	41,02	38,49	46,50
LSD (P=.05)			1,859	2,798	1,535	1,981	0,681	1,195			

table 3.4.3.1-14 The influence of the CHR/ZF/PROTI on quality of yield
winter tritcale thousand weight grain

crop code			winter tritcale TGW (g)								
report code			AF/20/PszO/32/Zt/b/03	AF/20/PszO/32/Gr/b/04	13 F/2021	14 F/2021	APK-20-47776-PL03	APK-20-47776-PL04			
BBCH crop			306 DA-A	301 DA-A	337 DA-A	339 DA-A	318 DA-A	344 DA-A			
date			03.08.2021	28.07.2021	24.08.2021	26.08.2021	14.08.2021	08.09.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		29,748	37,18	25,510	36,565	35,15	38,92	33,85	25,51	38,92
2	CHR/ZF/PROTI 100 FS	100,00	28,855	37,13	25,135	36,915	36,07	39,39	33,92	25,14	39,39
3	CHR/ZF/PROTI 100 FS	150,00	29,890	37,10	26,930	37,270	36,36	40,75	34,72	26,93	40,75
4	Premis 025 FS	200,00	29,155	36,93	26,895	37,770	37,21	40,24	34,70	26,90	40,24
5	Premis 025 FS	300,00	30,810	36,53	25,550	36,835	35,81	39,34	34,15	25,55	39,34
6	Redigo 100 FS	100,00	30,940	38,03	26,425	36,765	36,84	40,15	34,86	26,43	40,15
7	Redigo 100 FS	150,00	30,520	36,20	24,725	36,345	36,53	40,20	34,09	24,73	40,20
LSD (P=.05)			2,0028	2,254	1,5504	1,4946	1,175	0,782			

table 3.4.3.1-15 The influence of the CHR/ZF/PROTI on quality of yield
winter rye thousand weight grain

crop code			winter rye TGW (g)								
report code			AF/20/ŽO/32/ZI/b/05	AF/20/ŽO/32/Gr/b/06	24 F/2021	25 F/2021	APK-20-47776-PL05	APK-20-47776-PL06			
BBCH crop			306 DA-A	314 DA-A	336 DA-A	342 DA-A	322 DA-A	335 DA-A			
date			03.08.2021	10.08.2021	02.09.2021	08.09.2021	17.08.2021	31.08.2021	Average	min.	max.
No.	Name	Rate ml/100 kg seed)									
1	Untreated Check		27,690	32,80	30,500	31,445	30,38	39,31	32,02	27,69	39,31
2	CHR/ZF/PROTI 100 FS	100,00	28,030	32,60	30,965	32,205	30,88	40,80	32,58	28,03	40,80
3	CHR/ZF/PROTI 100 FS	150,00	26,870	32,35	31,330	31,605	29,93	40,83	32,15	26,87	40,83
4	Premis 025 FS	200,00	28,020	33,63	30,725	32,415	31,20	40,60	32,77	28,02	40,60
5	Premis 025 FS	300,00	28,555	33,43	31,825	31,700	30,00	40,63	32,69	28,56	40,63
6	Redigo 100 FS	100,00	26,275	32,23	31,425	31,545	30,73	40,40	32,10	26,28	40,40
7	Redigo 100 FS	150,00	28,950	33,38	31,965	32,605	30,30	40,04	32,87	28,95	40,04
LSD (P=.05)			2,6404	2,4	2,0979	1,8754	1,769	1,202			

table 3.4.3.1-16 The influence of the CHR/ZF/PROTI on quality of yield
winter barley thousand weight grain

crop code			winter barley/TKW (g)								
report code			16 F/2024	17 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03			
BBCH crop			BBCH 99	BBCH 99	BBCH 99	BBCH 89	BBCH 99	BBCH 99			
DA-A			310 DA-A	315 DA-A	316 DA-A	282 DA-A	285 DA-A	312 DA-A			
date			30.07.2024	30.07.2024	31.07.2024	29.06.2024	01.07.2024	05.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		33,37	36,61	36,68	43,10	41,48	49,02	40,04	33,37	49,02
2	CHR/ZF/PROTI 100 FS	100,00	33,71	36,88	37,70	43,45	41,33	49,10	40,36	33,71	49,10
3	CHR/ZF/PROTI 100 FS	150,00	33,45	36,82	38,34	44,80	47,35	48,21	41,50	33,45	48,21
4	Redigo Pro 170 FS	66,70	33,35	36,44	37,38	44,03	42,22	49,36	40,46	33,35	49,36
5	Redigo Pro 170 FS	100,05	33,74	37,21	36,86	44,58	39,81	48,88	40,18	33,74	48,88
6	Redigo 100 FS	100,00	32,54	37,75	37,84	44,25	41,69	50,09	40,69	32,54	50,09
7	Redigo 100 FS	150,00	33,43	36,57	37,30	46,15	40,38	49,55	40,56	33,43	49,55
LSD (P=.05)			1,394	1,567	1,205	2,700	4,356	2,394			

table 3.4.3.1-17 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat germination energy/ability

Selectivity trials
winter wheat - germination energy/ability after 4 and 8 days

Crop code			winter wheat germination energy/ability					
study code			20 F/2021	20 F/2021	21 F/2021	21 F/2021	AH/20/PO/32/Zi/b/01	AH/20/PO/32/Zi/b/01
after days			4	8	4	8	4	8
date			23.10.2020	27.10.2020	23.10.2020	27.10.2020	23.08.2021	27.08.2021
No.	Name	rate ml/100 kg seed						
1	Untreated Check		100,00	100,00	75,00	92,50	83,80	93,30
2	CHR/ZF/PROTI 100 FS	100	99,00	100,00	71,50	92,50	93,00	97,00
3	CHR/ZF/PROTI 100 FS	150	96,50	98,00	71,00	91,00	91,50	96,30
4	Premis 025 FS	200	100,00	100,00	70,00	92,50	92,00	96,50
5	Premis 025 FS	300	99,50	99,50	74,50	91,00	91,00	96,50
6	Redigo 100 FS	100	99,50	99,50	80,50	91,00	90,80	96,50
7	Redigo 100 FS	150	99,50	99,50	75,50	91,50	90,00	96,50
LSD P=.05			2,73	1,52	10,33	5,08	2,64	1,99

Selectivity trials
winter wheat - germination energy/ability after 4 and 8 days

Crop code			winter wheat germination energy/ability					
study code			AF/20/PO/32/Gr/b/02	AF/20/PO/32/Gr/b/02	APK-20-47776-PL01	APK-20-47776-PL01	APK-20-47776-PL02	APK-20-47776-PL02
after days			4	8	4	8	4	8
date			23.08.2021	27.08.2021	04.10.2020	08.10.2020	05.10.2020	09.10.2020
No.	Name	rate ml/100 kg seed						
1	Untreated Check		91,80	94,80	65,80	97,30	71,00	100,00
2	CHR/ZF/PROTI 100 FS	100	89,30	96,80	66,30	98,80	68,00	100,00
3	CHR/ZF/PROTI 100 FS	150	91,00	97,00	64,80	99,30	65,00	98,00
4	Premis 025 FS	200	91,00	98,00	66,80	96,80	69,00	95,00
5	Premis 025 FS	300	89,50	98,00	65,80	98,00	70,00	99,00
6	Redigo 100 FS	100	90,00	98,30	63,50	96,80	68,00	97,00
7	Redigo 100 FS	150	89,50	97,80	66,30	99,00	67,00	98,00
LSD P=.05			2,73	1,31	4,22	2,56	-	-

table 3.4.3.1-18 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale germination energy/ability

Selectivity trials

winter triticale - germination energy/ability after 4 and 8 days

Crop code			winter triticale germination energy/ability					
study code			13 F/2021	13 F/2021	14 F/2021	14 F/2021	AF/20/PszO/32/ZI/b/03	AF/20/PszO/32/ZI/b/03
after days			4	8	4	8	4	8
date			19.10.2020	23.10.2020	19.10.2020	23.10.2020	23.08.2021	27.08.2021
No.	Name	rate ml/100 kg seed						
1	Untreated Check		85,50	88,50	89,00	91,50	91,80	94,80
2	CHR/ZF/PROTI 100 FS	100	90,00	92,00	90,00	91,00	89,30	96,80
3	CHR/ZF/PROTI 100 FS	150	88,00	91,00	93,00	95,00	91,00	97,00
4	Premis 025 FS	200	89,50	91,50	92,50	92,50	91,00	98,00
5	Premis 025 FS	300	85,00	88,50	90,50	96,00	89,50	98,00
6	Redigo 100 FS	100	88,00	91,50	92,50	94,00	90,00	98,30
7	Redigo 100 FS	150	89,00	92,00	93,50	94,00	89,50	97,80
LSD P=.05			6,137	6,053	6,024	5,606	2,73	1,31

Selectivity trials

winter triticale - germination energy/ability after 4 and 8 days

Crop code			winter triticale germination energy/ability					
study code			AF/20/PszO/32/Gr/b/04	AF/20/PszO/32/Gr/b/04	APK-20-47776-PL03	APK-20-47776-PL03	APK-20-47776-PL04	APK-20-47776-PL04
after days			4	8	4	8	4	8
date			23.08.2021	27.08.2021	04.10.2020	08.10.2020	03.10.2020	07.10.2020
No.	Name	rate ml/100 kg seed						
1	Untreated Check		90,30	97,80	65,80	96,80	82,00	99,00
2	CHR/ZF/PROTI 100 FS	100	90,50	97,00	65,80	98,30	74,00	100,00
3	CHR/ZF/PROTI 100 FS	150	91,00	96,50	64,80	98,50	79,00	98,00
4	Premis 025 FS	200	90,30	97,50	64,30	99,30	81,00	100,00
5	Premis 025 FS	300	90,50	96,80	67,00	97,50	69,00	99,00
6	Redigo 100 FS	100	91,00	97,00	65,50	97,00	75,00	97,00
7	Redigo 100 FS	150	91,80	96,80	64,30	99,00	76,00	98,00
LSD P=.05			1,68	1,08	4,29	2,62		

table 3.4.3.1-19 The influence of the CHR/ZF/PROTI on quality of yield
winter rye germination energy/ability

Selectivity trials

winter rye - germination energy/ability after 4 and 7 , 8 days

Crop code			winter rye germination energy/ability					
study code			24 F/2021	24 F/2021	25 F/2021	25 F/2021	AF/20/ŽO/32/ZI/b/05	AF/20/ŽO/32/ZI/b/05
after days			4	7	4	7	4	7
date			20.10.2020	23.10.2020	19.10.2020	22.10.2020	23.08.2021	26.08.2021
No.	Name	rate ml/100 kg seed						
1	Untreated Check		94,00	96,00	89,00	90,00	87,00	94,00
2	CHR/ZF/PROTI 100 FS	100	94,00	96,50	90,00	93,00	95,30	97,50
3	CHR/ZF/PROTI 100 FS	150	96,50	98,50	89,00	94,00	96,00	97,80
4	Premis 025 FS	200	93,50	96,00	84,50	89,50	95,00	97,30
5	Premis 025 FS	300	97,00	99,00	89,00	91,50	93,50	96,80
6	Redigo 100 FS	100	96,50	97,50	90,50	93,50	93,30	97,30
7	Redigo 100 FS	150	95,50	96,50	92,00	94,50	93,80	97,30
LSD P=.05			5,571	3,762	7,285	6,353	2,55	1,17

Selectivity trials

winter rye - germination energy/ability after 4 and 7 , 8 days

Crop code			winter rye germination energy/ability					
study code			AF/20/ŽO/32/Gr/b/06	AF/20/ŽO/32/Gr/b/06	APK-20-47776-PL05	APK-20-47776-PL05	APK-20-47776-PL06	APK-20-47776-PL06
after days			4	7	4	8	4	8
date			23.08.2021	26.08.2021	03.10.2020	07.10.2020	04.10.2020	08.10.2020
No.	Name	rate ml/100 kg seed						
1	Untreated Check		90,80	95,80	76,50	99,00	67,00	97,50
2	CHR/ZF/PROTI 100 FS	100	89,00	97,30	73,30	99,80	67,00	98,80
3	CHR/ZF/PROTI 100 FS	150	90,30	97,30	74,30	98,50	66,30	97,00
4	Premis 025 FS	200	91,30	97,30	73,00	98,80	68,00	96,80
5	Premis 025 FS	300	88,80	97,30	71,80	98,50	67,30	98,80
6	Redigo 100 FS	100	91,00	97,30	72,30	99,30	64,80	97,30

7	Redigo 100 FS	150	89,30	97,30	72,50	99,30	66,30	98,50
LSD P=.05			2,82	1,13	3,41	1,62	4,21	2,48

table 3.4.3.1-20 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat germination energy/ability

Selectivity trials
winter wheat - germination energy/ability after 12 months

Crop code			winter wheat germination energy/ability - after 12 months			
study code			20 F/2021	20 F/2021	21 F/2021	21 F/2021
after days			4	8	4	8
date			11.10.2021	15.10.2021	11.10.2021	15.10.2021
No.	Name	rate ml/100 kg seed				
1	Untreated Check		96,00	98,50	94,00	97,50
2	CHR/ZF/PROTI 100 FS	100	96,00	100,00	96,00	98,00
3	CHR/ZF/PROTI 100 FS	150	97,00	100,00	96,50	98,50
4	Premis 025 FS	200	97,00	99,50	96,50	99,00
5	Premis 025 FS	300	96,50	99,50	95,50	98,00
6	Redigo 100 FS	100	97,00	99,00	95,50	98,00
7	Redigo 100 FS	150	97,00	99,50	94,00	97,50
LSD P=.05			3,913	1,350	2,292	1,184

table 3.4.3.1-21 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale germination energy/ability

Selectivity trials
winter triticale - germination energy/ability after 12 months

Crop code			winter triticale germination energy/ability - after 12 months			
study code			13 F/2021	13 F/2021	14 F/2021	14 F/2021
after days			4	8	4	8
date			08.10.2021	12.10.2021	11.10.2021	15.10.2021
No.	Name	rate ml/100 kg seed				
1	Untreated Check		89,00	91,00	89,00	90,00
2	CHR/ZF/PROTI 100 FS	100	83,00	86,00	95,50	96,00
3	CHR/ZF/PROTI 100 FS	150	82,50	85,50	95,50	97,50
4	Premis 025 FS	200	84,50	87,00	88,50	89,00
5	Premis 025 FS	300	84,50	89,00	87,50	94,00
6	Redigo 100 FS	100	87,00	89,50	93,50	94,00

7	Redigo 100 FS	150	85,00	89,50	89,00	95,00
LSD P=.05			9,249	8,755	7,697	6,593

table 3.4.3.1-22 The influence of the CHR/ZF/PROTI on quality of yield
winter rye germination energy/ability

Selectivity trials

winter rye - germination energy/ability after 12 months

Crop code			winter rye germination energy/ability - after 12 months			
study code			24 F/2021	24 F/2021	25 F/2021	25 F/2021
after days			4	7	4	7
date			08.10.2021	11.10.2021	08.10.2021	11.10.2021
No.	Name	rate ml/100 kg seed				
1	Untreated Check		97,00	97,00	94,00	94,50
2	CHR/ZF/PROTI 100 FS	100	93,50	96,50	95,00	95,50
3	CHR/ZF/PROTI 100 FS	150	93,50	96,00	94,50	96,00
4	Premis 025 FS	200	88,50	95,00	92,50	94,00
5	Premis 025 FS	300	94,50	96,50	93,00	94,00
6	Redigo 100 FS	100	92,50	94,50	93,50	95,50
7	Redigo 100 FS	150	94,00	97,50	94,50	95,50
LSD P=.05			6,519	4,218	3,743	3,431

table 3.4.3.1-23 The influence of the CHR/ZF/PROTI on quality of yield
winter barley germination energy/ability

Selectivity trials

winter barley - germination energy/ability after 12 months

Crop code			winter barley germination energy/ability - after 12 months											
study code			16 F/2024	16 F/2024	17 F/2024	17 F/2024	18 F/2024	18 F/2024	AF/23/JO/34/Br/01	AF/23/JO/34/Br/01	AF/23/JO/34/Pr/02	AF/23/JO/34/Pr/02	AF/23/JO/34/De/03	AF/23/JO/34/De/03
after days			4	7	4	7	4	7	4	7	4	7	4	7
date			24.09.2024	27.09.2024	24.09.2024	27.09.2024	24.09.2024	27.09.2024	16.09.2024	23.09.2024	16.09.2024	23.09.2024	16.09.2024	23.09.2024
No.	Name	rate ml/100 kg seed												
1	Untreated Check		84,00	85,50	92,00	93,50	88,50	95,00	90,00	94,00	90,00	94,00	89,00	93,00
2	CHR/ZF/PROTI 100 FS	100	80,00	87,50	84,00	91,50	86,50	94,00	90,00	95,00	90,00	94,00	90,00	94,00
3	CHR/ZF/PROTI 100 FS	150	80,00	86,00	84,50	90,50	86,00	91,00	90,00	95,00	91,00	94,00	89,00	93,00
4	Redigo Pro 170 FS	66,7	79,50	89,00	79,00	88,50	90,50	96,00	93,00	96,00	91,00	95,00	90,00	95,00
5	Redigo Pro 170 FS	100,05	82,00	87,50	83,50	89,00	78,00	89,00	91,00	95,00	91,00	95,00	90,00	94,00
6	Redigo 100 FS	100	82,50	86,50	88,00	92,00	95,50	97,00	90,00	95,00	90,00	95,00	89,00	95,00
7	Redigo 100 FS	150	80,50	85,00	87,50	92,00	90,50	95,00	93,00	95,00	90,00	95,00	90,00	95,00
LSD P=,05			6,856	7,335	10,183	6,998	10,043	5,775						

table 3.4.3.1-24 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat germination energy/ability

Efficacy trials

winter wheat - germination energy/ability after 4, 8 days

Crop code			winter wheat germination energy/ability							
study code			APK-20-47775-PL01	APK-20-47775-PL01	APK-20-47775-PL02	APK-20-47775-PL02	APK-20-47775-PL03	APK-20-47775-PL03	APK-20-47891-PL01	APK-20-47891-PL01
after days			4	8	4	8	4	8	4	8
date			03.10.2020	07.10.2020	04.10.2020	08.10.2020	03.10.2020	07.10.2020	04.10.2020	08.10.2020
No.	Name	rate ml/100 kg seed								
1	Untreated Check		63,30	97,80	64,30	99,30	66,00	99,50	73,80	99,30
2	CHR/ZF/PROTI 100 FS	60	64,00	97,00	64,50	97,30	64,50	98,00	73,30	97,30
3	CHR/ZF/PROTI 100 FS	80	65,80	97,50	64,50	96,30	64,80	96,50	75,50	98,30
4	CHR/ZF/PROTI 100 FS	100	65,30	96,80	63,50	97,00	64,00	97,50	72,30	95,50
5	Premis 025 FS	200	61,80	96,30	63,80	96,80	65,30	96,80	75,50	96,50
6	Redigo 100 FS	100	64,00	97,80	63,50	98,30	66,80	99,00	75,00	97,30
LSD P=.05			3,18	2,26	3,95	1,57	3,25	2,28	4,57	2,08

Efficacy trials

winter wheat - germination energy/ability after 4, 8 days

Crop code			winter wheat germination energy/ability							
study code			APK-20-47891-PL02	APK-20-47891-PL02	APK-20-47891-PL03	APK-20-47891-PL03	AF/20/PO/32/Br/01	AF/20/PO/32/Br/01	AF/20/PO/32/Pr/02	AF/20/PO/32/Pr/02
after days			4	8	4	8	4	8	4	8
date			05.10.2020	09.10.2020	03.10.2020	07.10.2020	02.08.2021	06.08.2021	04.08.2021	08.08.2021
No.	Name	rate ml/100 kg seed								
1	Untreated Check		67,00	100,00	66,00	99,50	59,80	98,80	74,00	99,40
2	CHR/ZF/PROTI 100 FS	60	65,00	95,00	64,50	98,00	58,50	98,50	74,30	99,90
3	CHR/ZF/PROTI 100 FS	80	69,00	94,00	64,80	96,50	59,80	98,30	73,50	99,90
4	CHR/ZF/PROTI 100 FS	100	71,00	98,00	64,00	97,50	59,00	98,00	71,80	98,90
5	Premis 025 FS	200	68,00	100,00	65,30	96,80	60,80	97,80	73,00	99,90
6	Redigo 100 FS	100	73,00	100,00	66,80	99,00	58,80	98,50	72,30	99,90
LSD P=.05					3,25	2,28	7,37	2,48	5,12	1,07-1,4

Efficacy trials

winter wheat - germination energy/ability after 4, 8 days

Crop code			winter wheat germination energy/ability					
study code			AF/20/PO/32/Gr/03	AF/20/PO/32/Gr/03	AF/20/PO/32/Zl/04	AF/20/PO/32/Zl/04	AF/20/PO/32/Br/05	AF/20/PO/32/Br/05
after days			4	8	4	8	4	8
date			02.08.2021	02.06.2021	04.08.2021	08.08.2021	10.08.2021	14.08.2021
No.	Name	rate ml/100 kg seed						
1	Untreated Check		69,50	97,80	47,50	95,80	61,30	98,30
2	CHR/ZF/PROTI 100 FS	60	68,80	98,50	49,80	97,80	62,30	99,00
3	CHR/ZF/PROTI 100 FS	80	69,00	98,00	45,80	96,50	61,30	96,50
4	CHR/ZF/PROTI 100 FS	100	67,00	97,50	51,30	97,50	61,00	97,00
5	Premis 025 FS	200	66,80	97,30	48,00	96,50	61,50	98,50
6	Redigo 100 FS	100	67,50	98,80	45,00	96,00	62,30	97,50
LSD P=.05			3,98	1,39	4,87	1,86	4,54	2,02

table 3.4.3.1-25 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale germination energy/ability

Efficacy trials

winter triticale - germination energy/ability after 4, 7 or 8 days

Crop code			winter triticale germination energy/ability							
study code			APK-20-47891-PL04	APK-20-47891-PL04	APK-20-47891-PL05	APK-20-47891-PL05	APK-20-47891-PL06	APK-20-47891-PL06	AF/20/PszO/32/Pr/06	AF/20/PszO/32/Pr/06
after days			4	8	4	8	4	8	4	8
date			03.10.2020	07.10.2020	04.10.2020	08.10.2020	03.10.2020	07.10.2020	17.08.2021	21.08.2021
No.	Name	rate ml/100 kg seed								
1	Untreated Check		63,30	97,50	70,80	98,50	79,00	100,00	54,50	97,00
2	CHR/ZF/PROTI 100 FS	60	65,00	99,50	67,80	99,30	78,00	98,00	55,00	96,80
3	CHR/ZF/PROTI 100 FS	80	65,00	97,50	70,30	98,30	71,00	95,00	55,80	96,50
4	CHR/ZF/PROTI 100 FS	100	65,50	98,50	68,80	99,30	69,00	98,00	54,30	96,30
5	Premis 025 FS	200	64,80	97,00	67,50	98,50	68,00	95,00	54,80	95,50
6	Redigo 100 FS	100	65,80	99,00	68,50	98,80	69,00	100,00	53,50	95,30

LSD P=.05	2,85	2,93	5,52	2,36			4,52	1,86
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table 3.4.3.1-26 The influence of the CHR/ZF/PROTI on quality of yield
winter rye germination energy/ability

Efficacy trials

winter rye - germination energy/ability after 4, 7 or 8 days

Crop code			winter rye germination energy/ability						
study code			APK-20-47891-PL07	APK-20-47891-PL07	APK-20-47891-PL08	APK-20-47891-PL08	APK-20-47891-PL09	APK-20-47891-PL09	AF/20/ŽO/32/Br/07
after days			4	8	4	8	4	8	4
date			03.10.2020	07.10.2020	03.10.2020	07.10.2020	04.10.2020	08.10.2020	13.08.2021
No.	Name	rate ml/100 kg seed							
1	Untreated Check		72,30	97,50	74,80	99,80	70,80	97,80	57,80
2	CHR/ZF/PROTI 100 FS	60	70,50	98,00	68,80	99,50	70,50	97,80	59,00
3	CHR/ZF/PROTI 100 FS	80	68,80	98,00	69,00	99,50	69,80	99,50	57,00
4	CHR/ZF/PROTI 100 FS	100	70,30	98,50	69,00	99,00	70,50	98,50	58,30
5	Premis 025 FS	200	69,80	97,30	70,00	98,30	73,50	98,50	59,00
6	Redigo 100 FS	100	70,80	97,00	68,80	99,00	72,00	98,00	58,30
LSD P=.05			4,21	2,79	4,02-4,1	1,61	4,00	2,15	5,04

Efficacy trials

winter rye - germination energy/ability after 4, 7 or 8 days

Crop code			winter rye germination energy/ability						
study code			AF/20/ŽO/32/Br/07	AF/20/ŽO/32/Pr/08	AF/20/ŽO/32/Pr/08	AF/20/ŽO/32/Gr/09	AF/20/ŽO/32/Gr/09	AF/20/ŽO/32/Zl/10	AF/20/ŽO/32/Zl/10
after days			7	4	7	4	7	4	7
date			16.08.2021	13.08.2021	16.08.2021	12.08.2021	15.08.2021	11.08.2021	14.08.2021
No.	Name	rate ml/100 kg seed							
1	Untreated Check		99,30	64,00	100,00	65,00	98,80	56,00	98,50
2	CHR/ZF/PROTI 100 FS	60	98,80	64,30	99,00	63,30	98,00	53,30	97,80
3	CHR/ZF/PROTI 100 FS	80	98,80	61,50	99,50	61,80	98,80	54,50	98,30
4	CHR/ZF/PROTI 100 FS	100	98,80	62,30	99,30	64,00	98,30	57,50	97,50
5	Premis 025 FS	200	97,80	61,00	99,00	64,00	99,50	54,80	99,30
6	Redigo 100 FS	100	98,30	63,00	98,80	63,50	98,50	55,30	98,50
LSD P=.05			1,54	5,53	1,23	4,35	1,09	6,51	1,86

North-East Zone - Latvia, Lithuania

9 studies conducted in 2023/24 in Latvia, Lithuania on winter cereals had no negative impact of CHR/ZF/PROTI on quality of plants.

Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 9 field experiments in Latvia, Lithuania in 2023/24. There weren't difference between the treatment objects and standard. Details of the data shows tables below

table 3.4.3.1-27 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat (HLW = weight 100 Ltr (hl))

crop code			winter wheat/HLW (kg)
report code			195 24 02-06LT
BBCH crop			BBCH 89
DA-A			326 DA-A
date			13.08.2024
No.	Name	Rate (ml/100 kg)	
1	Untreated Check		67.23
2	CHR/ZF/PROTI 100 FS	100,00	68.66
3	CHR/ZF/PROTI 100 FS	150,00	67.97
4	Celest Trio 060 FS	200,00	68.32
5	Celest Trio 060 FS	300,00	66.60
LSD (P=.05)			2,335

table 3.4.3.1-28 The influence of the CHR/ZF/PROTI on quality of yield
winter triticales (HLW = weight 100 Ltr (hl))

crop code			winter triticales/HLW (kg)
report code			195 24 02-09LT
BBCH crop			BBCH 99
DA-A			326 DA-A
date			13.08.2024
No.	Name	Rate (ml/100 kg)	
1	Untreated Check		68.13
2	CHR/ZF/PROTI 100 FS	100,00	65.92
3	CHR/ZF/PROTI 100 FS	150,00	66.57
4	Celest Trio 060 FS	200,00	67.84
5	Celest Trio 060 FS	300,00	65.94
LSD (P=.05)			1,391

table 3.4.3.1-29 The influence of the CHR/ZF/PROTI on quality of yield
winter rye (HLW = weight 100 Ltr (hl))

crop code			winter rye/HLW (kg)
report code			195 24 02-03LT
BBCH crop			BBCH 99
DA-A			326 DA-A
date			13.08.2024
No.	Name	Rate (ml/100 kg)	
1	Untreated Check		68.36
2	CHR/ZF/PROTI 100 FS	100,00	70.41
3	CHR/ZF/PROTI 100 FS	150,00	68.06
4	Celest Trio 060 FS	200,00	68.64
5	Celest Trio 060 FS	300,00	70.11
LSD (P=.05)			1,49

table 3.4.3.1-30 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat moisture content

crop code			winter wheat/MOICON (%)					
report code			195 24 02-04-LV	195 24 02-05-LV	195 24 02-06LT			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			327 DA-A	322 DA-A	326 DA-A			
date			12.08.2024	09.08.2024	13.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		20,35	18,48	17,27	18,70	17,27	20,35
2	CHR/ZF/PROTI 100 FS	100,00	20,38	18,30	16,87	18,52	16,87	20,38
3	CHR/ZF/PROTI 100 FS	150,00	20,25	18,38	17,12	18,58	17,12	20,25
4	Celest Trio 060 FS	200,00	20,30	18,45	17,32	18,69	17,32	20,30
5	Celest Trio 060 FS	300,00	20,43	18,70	17,66	18,93	17,66	20,43
LSD (P=.05)			0,523	0,659	0,342			

table 3.4.3.1-31 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale moisture content

crop code			winter triticale/MOICON (%)					
report code			195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			327 DA-A	325 DA-A	326 DA-A			
date			12.08.2024	12.08.2024	13.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		20,75	20,23	16,48	19,15	16,48	20,75
2	CHR/ZF/PROTI 100 FS	100,00	20,88	20,58	16,71	19,39	16,71	20,88
3	CHR/ZF/PROTI 100 FS	150,00	20,98	20,35	16,69	19,34	16,69	20,98
4	Celest Trio 060 FS	200,00	20,80	20,60	16,42	19,27	16,42	20,80
5	Celest Trio 060 FS	300,00	20,85	20,28	16,84	19,32	16,84	20,85
LSD (P=.05)			0,217	0,245	0,382			

table 3.4.3.1-32 The influence of the CHR/ZF/PROTI on quality of yield
winter rye moisture content

crop code			winter rye/MOICON (%)					
report code			195 24 02-01-LV	195 24 02-02-LV	195 24 02-03LT			
BBCH crop			BBCH 89	BBCH 99	BBCH 99			
DA-A			327 DA-A	322 DA-A	326 DA-A			
date			12.08.2024	09.08.2024	13.08.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		19,35	18,33	16,74	18,14	16,74	19,35
2	CHR/ZF/PROTI 100 FS	100,00	19,65	18,68	15,98	18,10	15,98	19,65
3	CHR/ZF/PROTI 100 FS	150,00	19,70	18,53	16,88	18,37	16,88	19,70
4	Celest Trio 060 FS	200,00	19,63	18,43	16,42	18,16	16,42	19,63
5	Celest Trio 060 FS	300,00	19,23	18,35	13,69	17,09	13,69	19,23
LSD (P=.05)			0,665	0,664	2,021			

table 3.4.3.1-33 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat protein content

crop code			winter wheat/PROCON %					
report code			195 24 02-04-LV	195 24 02-05-LV	195 24 02-06LT			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			377 DA-A	375 DA-A	371 DA-A			
date			01.10.2024	01.10.2024	27.09.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		12,26	13,26	9,530	12,76	12,26	13,26
2	CHR/ZF/PROTI 100 FS	100,00	12,23	14,13	9,810	13,18	12,23	14,13
3	CHR/ZF/PROTI 100 FS	150,00	12,25	13,89	9,660	13,07	12,25	13,89
4	Celest Trio 060 FS	200,00	11,93	13,23	10,150	12,58	11,93	13,23
5	Celest Trio 060 FS	300,00	12,67	14,20	10,11	12,33	10,11	14,20
LSD (P=.05)								

table 3.4.3.1-34 The influence of the CHR/ZF/PROTI on quality of yield
winter triticale protein content

crop code			winter triticale/PROCON %					
report code			195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			377 DA-A	375 DA-A	374 DA-A			
date			01.10.2024	01.10.2024	30.09.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		11,82	11,22	10.510	11,52	11,22	11,82
2	CHR/ZF/PROTI 100 FS	100,00	11,75	11,32	10.880	11,54	11,32	11,75
3	CHR/ZF/PROTI 100 FS	150,00	12,90	11,07	10.760	11,99	11,07	12,90
4	Celest Trio 060 FS	200,00	11,99	11,42	10.210	11,71	11,42	11,99
5	Celest Trio 060 FS	300,00	11,75	10,82	10,47	11,01	10,47	11,75
LSD (P=.05)								

table 3.4.3.1-35 The influence of the CHR/ZF/PROTI on quality of yield
winter rye protein content

crop code			winter triticale/PROCON %					
report code			195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			377 DA-A	375 DA-A	374 DA-A			
date			01.10.2024	01.10.2024	30.09.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		11,82	11,22	10.510	11,52	11,22	11,82
2	CHR/ZF/PROTI 100 FS	100,00	11,75	11,32	10.880	11,54	11,32	11,75
3	CHR/ZF/PROTI 100 FS	150,00	12,90	11,07	10.760	11,99	11,07	12,90
4	Celest Trio 060 FS	200,00	11,99	11,42	10.210	11,71	11,42	11,99
5	Celest Trio 060 FS	300,00	11,75	10,82	10,47	11,01	10,47	11,75
LSD (P=.05)								

table 3.4.3.1-36 The influence of the CHR/ZF/PROTI on quality of yield

winter wheat germination ability

Selectivity trials

winter wheat - germination ability after after 12 months

Crop code			winter wheat germination ability - after 12 months		
study code			195 24 02-04-LV	195 24 02-05-LV	195 24 02-06LT
after days			8	8	8
date			22.10.2024	22.10.2024	22.10.2024
No.	Name	rate ml/100 kg seed			
1	Untreated Check		94,00	93,00	97,80
2	CHR/ZF/PROTI 100 FS	100	92,00	94,00	96,00
3	CHR/ZF/PROTI 100 FS	150	92,00	92,00	95,80
4	Celest Trio 060 FS	200	92,00	94,00	95,00
5	Celest Trio 060 FS	300	91,00	93,00	94,80
LSD P=.05			4,100	2,800	0,780

table 3.4.3.1-37 The influence of the CHR/ZF/PROTI on quality of yield

winter triticales germination ability

Selectivity trials

winter triticales - germination ability after 12 months

Crop code			winter triticales germination ability - after 12 months		
study code			195 24 02-07-LV	195 24 02-08-LV	195 24 02-09LT
after days			8	8	8
date			22.10.2024	22.10.2024	22.10.2024
No.	Name	rate ml/100 kg seed			
1	Untreated Check		85,00	83,00	91,30
2	CHR/ZF/PROTI 100 FS	100	83,00	76,00	89,00
3	CHR/ZF/PROTI 100 FS	150	79,00	76,00	93,00
4	Celest Trio 060 FS	200	76,00	75,00	90,30
5	Celest Trio 060 FS	300	77,00	71,00	89,50
LSD P=.05			5,600	5,800	1,570

table 3.4.3.1-38 The influence of the CHR/ZF/PROTI on quality of yield

winter rye germination ability

Selectivity trials

winter rye - germination ability after 12 months

Crop code			winter rye germination ability - after 12 months		
study code			195 24 02-01-LV	195 24 02-02-LV	195 24 02-03LT
after days			7	7	7
date			22.10.2024	22.10.2024	22.10.2024
No.	Name	rate ml/100 kg seed			
1	Untreated Check		91,00	96,00	94,00
2	CHR/ZF/PROTI 100 FS	100	89,00	96,00	91,00
3	CHR/ZF/PROTI 100 FS	150	90,00	94,00	89,80
4	Celest Trio 060 FS	200	89,00	93,00	87,00
5	Celest Trio 060 FS	300	87,00	94,00	84,80
LSD P=.05			2,800	3,800	2,170

South-East Zone - Hungary

6 studies conducted in 2023/24 in Hungary on winter cereals had no negative impact of CHR/ZF/PROTI on quality of plants. Influence of CHR/ZF/PROTI on the yield of grains was evaluated in selectivity research. The yield was evaluated on the basis of harvested grains quantity from one hectare (t/ha). The influence of the tested product on quantity of grain was evaluated in 6 field experiments in Hungary in 2023/24. There weren't difference between the treatment objects and standard. Details of the data shows tables below

table 3.4.3.1-39 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat (HLW = weight 100 Ltr (hl))

crop code			winter wheat/HLW (kg)					
report code			CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			257 DA-A	359 DA-A	255 DA-A			
date			10.07.2024	12.07.2024	08.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		66,20	74,42	80,78	73,80	66,20	80,78
2	CHR/ZF/PROTI 100 FS	100,00	65,86	74,52	81,28	73,89	65,86	81,28
3	CHR/ZF/PROTI 100 FS	150,00	68,50	74,56	81,15	74,74	68,50	81,15
4	Premis 025 FS	150,00	64,93	74,34	80,98	73,42	64,93	80,98
5	Premis 025 FS	225,00	65,47	74,37	80,80	73,55	65,47	80,80
6	Redigo Pro 170 FS	66,70	65,83	74,81	80,65	73,76	65,83	80,65
7	Redigo Pro 170 FS	100,05	67,05	74,36	81,33	74,25	67,05	81,33
LSD (P=.05)			4,436	1,068	1,114			

table 3.4.3.1-40 The influence of the CHR/ZF/PROTI on quality of yield
winter barley (HLW = weight 100 Ltr (hl))

crop code			winter barley/HLW (kg)					
report code			CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			381 DA-A	238 DA-A	255 DA-A			
date			20.06.2024	21.06.2024	08.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		66,95	55,91	67,95	63,60	55,91	67,95
2	CHR/ZF/PROTI 100 FS	100,00	66,53	56,35	68,83	63,90	56,35	68,83
3	CHR/ZF/PROTI 100 FS	150,00	66,70	57,24	67,93	63,96	57,24	67,93
4	Premis 025 FS	150,00	66,48	57,2	67,5	63,73	57,20	67,50
5	Premis 025 FS	225,00	66,65	56,43	68,73	63,94	56,43	68,73
6	Redigo Pro 170 FS	66,70	67,40	57,09	67	63,83	57,09	67,40
7	Redigo Pro 170 FS	100,05	66,85	56,58	67,40	63,61	56,58	67,40
LSD (P=.05)			1,435	2,460	1,957			

table 3.4.3.1-41 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat moisture content

crop code			winter wheat/MOICON (%)					
report code			CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 89	BBCH 99	BBCH 99			
DA-A			257 DA-A	258 DA-A	241 DA-A			
date			10.07.2024	11.07.2024	24.06.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		11,58	12,10	12,63	12,10	11,58	12,63
2	CHR/ZF/PROTI 100 FS	100,00	11,78	12,10	12,40	12,09	11,78	12,40
3	CHR/ZF/PROTI 100 FS	150,00	11,80	12,00	12,25	12,02	11,80	12,25
4	Premis 025 FS	150,00	11,93	12,10	12,45	12,16	11,93	12,45
5	Premis 025 FS	225,00	11,78	12,10	12,55	12,14	11,78	12,55
6	Redigo Pro 170 FS	66,70	11,88	12,00	12,53	12,14	11,88	12,53
7	Redigo Pro 170 FS	100,05	11,83	12,10	12,28	12,07	11,83	12,28
LSD (P=.05)			0,465	0,400	0,451			

table 3.4.3.1-42 The influence of the CHR/ZF/PROTI on quality of yield
winter barley moisture content

crop code			winter barley/MOICON (%)					
report code			CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 89	BBCH 89	BBCH 89			
DA-A			237 DA-A	237 DA-A	241 DA-A			
date			20.06.2024	20.06.2024	24.06.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		13,03	12,30	13,25	12,86	12,30	13,25
2	CHR/ZF/PROTI 100 FS	100,00	13,05	12,30	13,60	12,98	12,30	13,60
3	CHR/ZF/PROTI 100 FS	150,00	13,18	12,30	12,83	12,77	12,30	13,18
4	Premis 025 FS	150,00	13,13	12,20	12,85	12,73	12,20	13,13
5	Premis 025 FS	225,00	13,13	12,40	12,88	12,80	12,40	13,13
6	Redigo Pro 170 FS	66,70	13,15	12,30	13,30	12,92	12,30	13,30
7	Redigo Pro 170 FS	100,05	12,93	12,30	13,08	12,77	12,30	13,08
LSD (P=.05)			0,453	0,330	0,645			

table 3.4.3.1-43 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat protein content

crop code			winter wheat/PROCON %					
report code			CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			257 DA-A	359 DA-A	328 DA-A			
date			10.07.2024	12.07.2024	08.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		12,24	10,40	12,88	11,84	10,40	12,88
2	CHR/ZF/PROTI 100 FS	100,00	12,05	10,40	13,55	12,00	10,40	13,55
3	CHR/ZF/PROTI 100 FS	150,00	11,22	10,50	13,53	11,75	10,50	13,53
4	Premis 025 FS	150,00	11,98	10,50	13,18	11,89	10,50	13,18
5	Premis 025 FS	225,00	12,79	10,40	13,28	12,16	10,40	13,28
6	Redigo Pro 170 FS	66,70	11,73	10,30	13,6	11,88	10,30	13,60
7	Redigo Pro 170 FS	100,05	12,30	10,40	13,38	12,03	10,40	13,38
LSD (P=.05)			1,281	0,44	0,768			

table 3.4.3.1-44 The influence of the CHR/ZF/PROTI on quality of yield
winter barley protein content

crop code			winter barley/PROCON %					
report code			CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 99	BBCH 99	BBCH 99			
DA-A			237 DA-A	238 DA-A	255 DA-A			
date			20.06.2024	21.06.2024	08.07.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		10,46	11,10	10,90	10,82	10,46	11,10
2	CHR/ZF/PROTI 100 FS	100,00	10,88	11,10	11,10	11,03	10,88	11,10
3	CHR/ZF/PROTI 100 FS	150,00	10,83	11,00	11,20	11,01	10,83	11,20
4	Premis 025 FS	150,00	10,86	10,80	11,30	10,99	10,80	11,30
5	Premis 025 FS	225,00	10,42	11,00	11,18	10,87	10,42	11,18
6	Redigo Pro 170 FS	66,70	10,86	11,30	11,13	11,10	10,86	11,30
7	Redigo Pro 170 FS	100,05	10,97	11,00	11,03	11,00	10,97	11,03
LSD (P=.05)			0,865	0,46	0,408			

table 3.4.3.1-45 The influence of the CHR/ZF/PROTI on quality of yield

winter wheat germination energy/ability tested soon after treatment

Selectivity trials

winter wheat - germination energy/ability after 4 and 8 days - tested soon after treatment

crop code			winter wheat - germination energy/ability tested soon after treatment								
report code			CPRHU23-1083-025FS	CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 07	BBCH 10	BBCH 09	BBCH 10	BBCH 09	BBCH 10			
DA-A			8 DA-A	12 DA-A	34 DA-A	38 DA-A	15 DA-A	19 DA-A			
after days			4	8	4	8	4	8			
date			04.11.2023	08.11.2023	30.11.2023	04.12.2023	11.11.2023	15.11.2023	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		72,78	99,38	88,50	92,10	63,50	88,64	86,42	63,50	99,38
2	CHR/ZF/PROTI 100 FS	100,00	68,52	97,76	89,30	92,40	63,50	89,05	86,40	63,50	97,76
3	CHR/ZF/PROTI 100 FS	150,00	71,04	96,46	88,30	91,10	62,75	87,08	85,14	62,75	96,46
4	Premis 025 FS	150,00	71,51	98,54	89,50	91,90	64,25	88,76	86,59	64,25	98,54
5	Premis 025 FS	225,00	71,35	96,81	88,80	91,20	63,50	88,23	85,71	63,50	96,81
6	Redigo Pro 170 FS	66,70	76,53	99,27	89,50	91,60	64,75	88,45	86,71	64,75	99,27
7	Redigo Pro 170 FS	100,05	74,26	98,34	88,30	91,10	63,50	88,74	86,00	63,50	98,34
LSD (P=.05)			3,566-3,747	2,296 - 2,608	3,350	3,16 - 3,55	1,402-1,407	5,537-6,410			

table 3.4.3.1-46 The influence of the CHR/ZF/PROTI on quality of yield
winter wheat germination energy/ability

Selectivity trials
winter wheat - germination energy/ability after 12 months

crop code			winter wheat - germination energy/ability after 12 months								
report code			CPRHU23-1083-025FS	CPRHU23-1083-025FS	CPRHU23-1084-025FS	CPRHU23-1084-025FS	CPRHU23-1085-025FS	CPRHU23-1085-025FS			
BBCH crop			BBCH 06	BBCH 11	BBCH 09	BBCH 10	BBCH 09	BBCH 09			
DA-A			377 DA-A	381 DA-A	371 DA-A	375 DA-A	366 DA-A	370 DA-A			
after days			4	8	4	8	4	8			
date			07.11.2024	11.11.2024	01.11.2024	05.11.2024	27.10.2024	31.10.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		67,56	94,55	89,30	93,30	59,54	89,48	82,29	59,54	94,55
2	CHR/ZF/PROTI 100 FS	100,00	64,03	95,57	90,00	93,30	59,57	85,73	81,37	59,57	95,57
3	CHR/ZF/PROTI 100 FS	150,00	68,03	96,03	90,80	94,30	59,79	86,45	82,57	59,79	96,03
4	Premis 025 FS	150,00	67,89	95,81	89,30	93,00	57,79	87,28	81,85	57,79	95,81
5	Premis 025 FS	225,00	68,84	95,57	90,30	94,30	59,56	85,75	82,39	59,56	95,57
6	Redigo Pro 170 FS	66,70	66,79	93,78	90,00	93,80	57,82	83,60	80,97	57,82	93,80
7	Redigo Pro 170 FS	100,05	68,33	96,29	89,80	93,30	59,31	84,82	81,98	59,31	96,29
LSD (P=.05)			6,075-6,133	1,447-1,594	3,39	3,03	9,978-10,280	10,540-12,696			

table 3.4.3.1-47 The influence of the CHR/ZF/PROTI on quality of yield

winter barley germination energy/ability tested soon after treatment

Selectivity trials

winter barley - germination energy/ability after 4 and 7 days - tested soon after treatment

crop code			winter barley - germination energy/ability tested soon after treatment								
report code			CPRHU23-1086-025FS	CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 07	BBCH 11	BBCH 09	BBCH 10	BBCH 09	BBCH 10			
DA-A			9 DA-A	12 DA-A	35 DA-A	38 DA-A	16 DA-A	19 DA-A			
after days			4	7	4	7	4	7			
date			05.11.2023	08.11.2023	01.12.2023	04.12.2023	12.11.2023	15.11.2023	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		76,02	99,27	88,50	91,60	65,01	92,48	87,37	65,01	99,27
2	CHR/ZF/PROTI 100 FS	100,00	71,53	98,92	90,00	92,40	65,26	93,29	87,97	65,26	98,92
3	CHR/ZF/PROTI 100 FS	150,00	69,03	98,92	89,30	92,40	64,76	91,14	87,30	64,76	98,92
4	Premis 025 FS	150,00	68,55	98,34	88,30	91,40	65,26	91,29	86,92	65,26	98,34
5	Premis 025 FS	225,00	71,84	99,08	88,80	91,60	63,76	93,52	87,35	63,76	99,08
6	Redigo Pro 170 FS	66,70	70,82	98,87	89,50	92,60	64,76	94,89	88,12	64,76	98,87
7	Redigo Pro 170 FS	100,05	70,79	99,27	88,80	91,60	64,76	89,80	86,85	64,76	99,27
LSD (P=.05)			4,190-4,343	1,444 - 2,083	4,24	3,37 - 3,87	3,009-3,039	5,293-5,374			

table 3.4.3.1-48 The influence of the CHR/ZF/PROTI on quality of yield
winter barley germination energy/ability

Selectivity trials
winter barley - germination energy/ability after 12 months

crop code			winter barley - germination energy/ability after 12 months								
report code			CPRHU23-1086-025FS	CPRHU23-1086-025FS	CPRHU23-1087-025FS	CPRHU23-1087-025FS	CPRHU23-1088-025FS	CPRHU23-1088-025FS			
BBCH crop			BBCH 07	BBCH 11	BBCH 09	BBCH 10	BBCH 09	BBCH 09			
DA-A			378 DA-A	381 DA-A	371 DA-A	374 DA-A	366 DA-A	369 DA-A			
after days			4	7	4	7	4	7			
date			08.11.2024	11.11.2024	01.11.2024	04.11.2024	27.10.2024	30.10.2024	Average	min.	max.
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		65,79	95,36	89,80	93,80	63,26	85,83	82,31	63,26	95,36
2	CHR/ZF/PROTI 100 FS	100,00	64,79	96,03	91,30	94,80	61,27	82,54	81,79	61,27	96,03
3	CHR/ZF/PROTI 100 FS	150,00	64,83	97,31	90,30	93,30	59,30	82,60	81,27	59,30	97,31
4	Premis 025 FS	150,00	61,48	96,81	90,50	94,00	59,76	81,29	80,64	59,76	96,81
5	Premis 025 FS	225,00	64,81	97,31	91,00	94,30	63,53	85,20	82,69	63,53	97,31
6	Redigo Pro 170 FS	66,70	67,39	96,39	90,00	94,30	61,53	84,08	82,28	61,53	96,39
7	Redigo Pro 170 FS	100,05	65,83	97,04	90,80	94,80	61,08	82,50	82,01	61,08	97,04
LSD (P=.05)			7,538-7,619	1,524-1,605	3,200	3,370	6,320-6,385	6,465-6,809			

Conclusion - Effects on the quality of plants or plant products

Five parameters assessing the quality of plants and plant products were evaluated: thousand kernel weight (TKW), hectolitre weight (HLW), moisture content, protein content, and germination energy. All parameters were measured consistently across trials. No adverse effects on quality were observed at either 100 mL/100 kg seed (1N) or 150 mL/100 kg seed (1.5N) on winter wheat or barley yields in the North-East or South-East zones.

3.4.4 Effects on transformation processes (KCP 6.4.4)

Fungicides are usually considered with regards to their potential effect on transformation processes if applied close to harvest EPPO PP 1/243 (1) Effects of plant protection products on transformation processes. The residue data Part B, Section 7 demonstrate that at the proposed application rates of CHR/ZF/PROTI residues above the LOQ are found in winter cereals.

According to Commission Regulation (EU) No 284/2013 the study is required while using fungicide close to the harvest, when occurrence of adverse effect on yeast or lactic bacteria is possible.

The product CHR/ZF/PROTI is applied as a fungicide seed treatment at the BBCH 00 (long time to the harvest) therefore not expected that the active substance are transferred to the grains.

Conclusion - Effects on transformation processes

The case presented by the applicant is acceptable and no further data are required.

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

There is no information available pointing to presence of any limitations to using of approved prothioconazole in crops of winter cereals.

In the course of studies carried out in Poland in the season of 2020/2021, 2021/22 and 2023/24 on product CHR/ZF/PROTI the seed treatment has not been observed to have any significant influence on yield, grain density, 1000 grains weight, protein content and emergence. Except the fact of influence of seed treatment for all rates in comparison to untreated check. What is more, there have been no phytotoxicity symptoms accounted for in various cultivars of winter cereals.

The seed treatments products used in the trial had no adverse effect on germination parameters (both shortly after the mortar and after a 12-month storage period). The product may be used in crops of winter cereals.

Conclusion - Impact on treated plants or plant products to be used for propagation

The case presented by the applicant is acceptable and no further data are required.

Summary and conclusion

This document summarises the information related to the efficacy of the plant protection product CHR/ZF/PROTI. The formulation of this product is a flowable concentrate for seed treatment (FS) and it comprises active prothioconazole (100 g/l). CHR/ZF/PROTI is a seed treatment in winter cereals.

The active substance prothioconazole is included in the Annex I of Directive 91/414 (now: Commission Implementing Regulation (EU) No 540/2011 of 25 May 2011) by Commission Directive 2006/64/CE of 18 July 2006 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards the list of approved active substances.

The active substance prothioconazole which was included into Annex I of Directive 91/414 by Commission Directive 2008/69/EC of 1st July 2008

North-East Zone - Poland

This documents summarises 99 (in total) showing the results in research into product efficacy carried out in 2020/21, 2021/22, 2023/24 in winter wheat (21 field trials, 6 laboratory trials), winter triticale (6 field trials, 6 laboratory trials), winter rye (15 field trials, 6 laboratory trials), winter barley (33 field trials, 6 laboratory trials) and 24 reports showing the results in research into product selectivity carried out in 2020/21 and 2023/24 in winter wheat (6 field trials), winter triticale (6 field trials), winter rye (6 field trials), winter barley (6 field trials) (list of these reports is contained in Appendix 1). All efficacy trials were designed, conducted and reported according to the following EPPO guidelines: PP 1/135 (4) Phytotoxicity assessment, PP 1/152 (4) Design and analysis of efficacy evaluation trials and PP 1/181 (5). Conduct and reporting of efficacy evaluation trials including good experimental practice and PP 1/19 (5) Seed-borne cereal fungi

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

On the basis of submitted research the seed treatment CHR/ZF/PROTI was effectively against of pathogens. The efficacy of the tested seed treatment was higher or comparable to the standard product

The obtained data in performed trials show that CHR/ZF/PROTI provides benefits against the most important fungal in winter cereals as shown in the table below:

≥ 80%	E- Effective
60-80 %	M- Medium sensitive
40-60 %	R - Reduction of diseases

winter wheat – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	16, 49, 52, 169, 181, 183	PRINFC 100, MIXED	42,67	L
	FUSASP	<i>Fusarium sp. autumn assessment</i>	16, 49, 52	PRINFC 100, MIXED	25,37	L
	FUSASP	<i>Fusarium sp. spring assessment</i>	169, 181, 183	PRINFC 100, MIXED	59,97	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	153, 169, 181, 183, 188	PRINFC 100, MIXED	57,92	L
	TILLCA	<i>Tilletia caries</i>	247, 251, 281, 284, 293, 302	PRINFC 100, MIXED	89,99	E
	USTINT	<i>Ustilago tritici</i>	245, 266	MIXED	96,35	E
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	16, 49, 52, 169, 181, 183	PRINFC 100, MIXED	61,35	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	16, 49, 52	PRINFC 100, MIXED	50,40	L
	FUSASP	<i>Fusarium sp. spring assessment</i>	169, 181, 183	PRINFC 100, MIXED	72,30	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	153, 169, 181, 183, 188	PRINFC 100, MIXED	76,13	ME
	TILLCA	<i>Tilletia caries</i>	247, 251, 281, 284, 293, 302	PRINFC 100, MIXED	96,36	E
	USTINT	<i>Ustilago tritici</i>	245, 266	MIXED	100,00	E
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	16, 49, 52, 169, 181, 183	PRINFC 100, MIXED	73,28	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	16, 49, 52	PRINFC 100, MIXED	67,00	ME
	FUSASP	<i>Fusarium sp. spring assessment</i>	169, 181, 183	PRINFC 100, MIXED	79,57	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	153, 169, 181, 183, 188	PRINFC 100, MIXED	83,35	E
	TILLCA	<i>Tilletia caries</i>	247, 251, 281, 284, 293, 302	PRINFC 100, MIXED	100,00	E
	USTINT	<i>Ustilago tritici</i>	245, 266	MIXED	100,00	E

winter wheat – laboratory trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8, 18	FUSASP D	42,83	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8, 16	MONGNI D	26,22	L
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8, 18	FUSASP D	62,05	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8, 16	MONGNI D	41,88	L
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8, 18	FUSASP D	72,77	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8, 16	MONGNI D	65,97	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8, 16	MONGNI D	53,50	L

winter triticale – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	20, 29, 49, 175, 183, 184	MIXED	38,02	L
	FUSASP	<i>Fusarium sp. autumn assessment</i>	20, 29, 49	MIXED	30,60	L
	FUSASP	<i>Fusarium sp. spring assessment</i>	175, 183, 184	MIXED	45,43	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	157, 183, 184	MIXED	49,85	L
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	20, 29, 49, 175, 183, 184	MIXED	63,85	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	20, 29, 49	MIXED	63,77	ME
	FUSASP	<i>Fusarium sp. spring assessment</i>	175, 183, 184	MIXED	63,93	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	157, 183, 184	MIXED	73,15	ME
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp. summary (autumn and spring)</i>	20, 29, 49, 175, 183, 184	MIXED	79,87	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	20, 29, 49	MIXED	80,07	E
	FUSASP	<i>Fusarium sp. spring assessment</i>	175, 183, 184	MIXED	79,67	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	157, 183, 184	MIXED	85,55	E

winter triticale – laboratory trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	9, 21	FUSASP D	52,05	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7, 15	MONGNI D	35,85	L
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	9, 21	FUSASP D	64,17	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7, 15	MONGNI D	73,25	ME
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	9, 21	FUSASP D	75,27	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7, 15	MONGNI D	81,75	E

winter rye – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	35, 39, 167, 182, 184	MIXED, PRINFC 100	50,78	L
	FUSASP	<i>Fusarium sp. autumn assessment</i>	35, 39	MIXED	64,13	ME
	FUSASP	<i>Fusarium sp. spring assessment</i>	167, 182, 184	PRINFC 100	37,43	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	147, 167, 182, 184	MIXED, PRINFC 100	61,15	ME
	UROCOC	<i>Urocystis occulta</i>	251, 254, 257	MIXED, PRINFC 100	94,90	E
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	35, 39, 167, 182, 184	MIXED, PRINFC 100	71,40	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	35, 39	MIXED	90,13	E
	FUSASP	<i>Fusarium sp. spring assessment</i>	167, 182, 184	PRINFC 100	52,67	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	147, 167, 182, 184	MIXED, PRINFC 100	86,32	E
	UROCOC	<i>Urocystis occulta</i>	251, 254, 257	MIXED, PRINFC 100	99,00	E
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	35, 39, 167, 182, 184	MIXED, PRINFC 100	79,72	ME
	FUSASP	<i>Fusarium sp. autumn assessment</i>	35, 39	MIXED	95,50	E
	FUSASP	<i>Fusarium sp. spring assessment</i>	167, 182, 184	PRINFC 100	63,93	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	147, 167, 182, 184	MIXED, PRINFC 100	92,75	E
	UROCOC	<i>Urocystis occulta</i>	251, 254, 257	MIXED, PRINFC 100	100,00	E

winter rye – laboratory trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8,18	FUSASP D	44,32	L
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8,16	MONGNI D	53,60	L
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8,18	FUSASP D	62,52	ME
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8,16	MONGNI D	71,38	ME
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	8,18	FUSASP D	81,97	E
	MONGNI	<i>Monographella nivalis (anam. Microdochium nivale)</i>	8,16	MONGNI D	75,53	ME

winter barley – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	20-24	PRINFC; 100, MIXED	56,02	L
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	146-194	PRINFC; 100, MIXED	58,25	L
	PYRNGR	<i>Pyrenophora graminea</i>	230-250	MIXED	76,22	ME
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	28-196	MIXED	50,56	L
	USTINH	<i>Ustilago nuda</i>	237-263	MIXED	62,89	ME
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	20-24	PRINFC; 100, MIXED	76,67	ME
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	146-194	PRINFC; 100, MIXED	73,85	ME
	PYRNGR	<i>Pyrenophora graminea</i>	230-250	MIXED	86,78	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	28-196	MIXED	61,00	ME
	USTINH	<i>Ustilago nuda</i>	237-263	MIXED	78,22	ME
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	20-24	PRINFC; 100, MIXED	89,02	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	146-194	PRINFC; 100, MIXED	88,80	E
	PYRNGR	<i>Pyrenophora graminea</i>	230-250	MIXED	91,67	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	28-196	MIXED	69,41	ME
	USTINH	<i>Ustilago nuda</i>	237-263	MIXED	86,44	E
Redigo Pro 170 FS 66,7 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	20-24	PRINFC; 100, MIXED	93,78	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	146-194	PRINFC; 100, MIXED	92,53	E
	PYRNGR	<i>Pyrenophora graminea</i>	230-250	MIXED	98,44	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	28-196	MIXED	74,69	ME
Redigo Pro 170 FS 50 ml/100 kg	USTINH	<i>Ustilago nuda</i>	237-263	MIXED	97,22	E
Redigo 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	20-24	MIXED	88,22	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	146-194	PRINFC; 100	87,18	E
	PYRNGR	<i>Pyrenophora graminea</i>	230-250	PRINFC; 100	93,89	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	28-196	MIXED	62,24	ME
	USTINH	<i>Ustilago nuda</i>	237-263	MIXED	77,44	ME

winter barley – laboratory trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	7-16	PRINFC; 100	70,62	ME
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7-16	PRINFC; 100	61,40	ME
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	7-16	PRINFC; 100	80,12	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7-16	PRINFC; 100	70,22	ME
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	7-16	PRINFC; 100	88,50	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7-16	PRINFC; 1050	80,73	E
Redigo Pro 170 FS 66,7 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	7-16	PRINFC; 100	82,95	E
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7-16	PRINFC; 100	74,02	ME
Redigo 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	7-16	PRINFC; 100, MIXED	82,75	ME
	MICDMA	<i>Monographella nivalis (anam. Microdochium nivale)</i>	7-16	PRINFC; 100, MIXED	71,60	ME

Conclusions on the biological efficacy

The seed treatment CHR/ZF/PROTI has demonstrated excellent crop tolerance to cereals. Therefore concluded that CHR/ZF/PROTI is safe usage at proposed rate and this support the label claim for the field use in: winter wheat, winter triticale, winter rye and winter barley.

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

According to the above, the plant protection product CHR/ZF/PROTI can be approved to the market and use in Poland, Czech Republic according to proposed range of use – GAP (Appendix -2)

Based on submitted data the following regulation on the label for field use is proposed in Poland and Czech Republic:

Winter wheat, winter triticale, winter rye, winter barley:

Recommended dose:

Seed treatment 100 ml/100 kg seed

Undiluted Water: 700 ml/ 100 kg seed

South East Zone - Hungary

This documents summarises 21 (in total) showing the results in research into product efficacy carried out in 2023/24 in winter wheat (9 field trials), winter barley (12 field trials) and 6 reports showing the results in research into product selectivity carried out in 2023/24 in winter wheat (3 field trials), winter barley (3 field trials) (list of these reports is contained in Appendix 1). All efficacy trials were designed, conducted and reported according to the following EPPO guidelines: PP 1/135 (4) Phytotoxicity assessment, PP 1/152 (4) Design and analysis of efficacy evaluation trials and PP 1/181 (5). Conduct and reporting of efficacy evaluation trials including good experimental practice and PP 1/19 (5) Seed-borne cereal fungi

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

On the basis of submitted research the seed treatment CHR/ZF/PROTI was effectively against of pathogens. The efficacy of the tested seed treatment was higher or comparable to the standard product

The obtained data in performed trials show that CHR/ZF/PROTI provides benefits against the most important fungal in winter cereals as shown in the table below:

≥ 80%	E- Effective
60-80 %	M- Medium sensitive
40-60 %	R - Reduction of diseases

winter wheat – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	75,71	ME
	MICDMA	<i>Microdochium majus</i>	123-146	MIXED, PRINFC; 100	55,71	L
	TILLCA	<i>Tilletia caries</i>	226-242	MIXED, PRINFC; 100	93,87	E
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	91,01	E
	MICDMA	<i>Microdochium majus</i>	123-146	MIXED, PRINFC; 100	82,47	E
	TILLCA	<i>Tilletia caries</i>	226-242	MIXED, PRINFC; 100	98,01	E
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	97,59	E
	MICDMA	<i>Microdochium majus</i>	123-146	MIXED, PRINFC; 100	85,58	E
	TILLCA	<i>Tilletia caries</i>	226-242	MIXED, PRINFC; 100	98,38	E
Premis 025 FS 150 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	95,09	E
	MICDMA	<i>Microdochium majus</i>	123-146	MIXED, PRINFC; 100	80,85	E
	TILLCA	<i>Tilletia caries</i>	226-242	MIXED, PRINFC; 100	96,18	E
Redigo Pro 170 FS 66,7 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	98,28	E
	MICDMA	<i>Microdochium majus</i>	123-146	MIXED, PRINFC; 100	86,84	E
	TILLCA	<i>Tilletia caries</i>	226-242	MIXED, PRINFC; 100	98,26	E

winter barley – field trials

Product dose ml/100 kg	EPPO code	Scientific name	DA-A	Pest stage	Average	Efficacy
CHR/ZF/PROTI 100 FS 60 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	83,62	E
	MICDMA	<i>Microdochium majus</i>	87-146	MIXED, PRINFC; 100	86,49	E
	PYRNGR	<i>Pyrenophora graminea</i>	182-192	PRINFC; 100, MIXED	84,36	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	129-146	PRINFC; 100, MIXED	76,53	ME
CHR/ZF/PROTI 100 FS 80 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	95,29	E
	MICDMA	<i>Microdochium majus</i>	87-146	MIXED, PRINFC; 100	92,98	E
	PYRNGR	<i>Pyrenophora graminea</i>	182-192	PRINFC; 100, MIXED	96,94	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	129-146	PRINFC; 100, MIXED	91,14	E
CHR/ZF/PROTI 100 FS 100 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	96,97	E
	MICDMA	<i>Microdochium majus</i>	87-146	MIXED, PRINFC; 100	97,11	E
	PYRNGR	<i>Pyrenophora graminea</i>	182-192	PRINFC; 100, MIXED	98,55	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	129-146	PRINFC; 100, MIXED	94,57	E
Premis 025 FS 150 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	95,84	E
	MICDMA	<i>Microdochium majus</i>	87-146	MIXED, PRINFC; 100	95,95	E
	PYRNGR	<i>Pyrenophora graminea</i>	182-192	PRINFC; 100, MIXED	98,33	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	129-146	PRINFC; 100, MIXED	93,59	E
Redigo Pro 170 FS 66,7 ml/100 kg	FUSASP	<i>Fusarium sp.</i>	49-146	MIXED, PRINFC; 100	96,60	E
	MICDMA	<i>Microdochium majus</i>	87-146	MIXED, PRINFC; 100	96,74	E
	PYRNGR	<i>Pyrenophora graminea</i>	182-192	PRINFC; 100, MIXED	98,85	E
	PYRNTE	<i>Pyrenophora teres (anam. Drechslera teres)</i>	129-146	PRINFC; 100, MIXED	95,00	E

Conclusions on the biological efficacy

The seed treatment CHR/ZF/PROTI has demonstrated excellent crop tolerance to cereals. Therefore concluded that CHR/ZF/PROTI is safe usage at proposed rate and this support the label claim for the field use in: winter wheat, winter barley.

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

According to the above, the plant protection product CHR/ZF/PROTI can be approved to the market and use in Hungary according to proposed range of use – GAP (Appendix -2)

Based on submitted data the following regulation on the label for field use is proposed in Poland and Czech Republic:

Winter wheat, winter barley:

Recommended dose:

Seed treatment 100 ml/100 kg seed

Undiluted Water: 700 ml/ 100 kg seed

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

3.5.1 Impact on succeeding crops (KCP 6.5.1)

In the field study, symptoms of phytotoxicity to cultivated plants were not observed. Therefore, according to EPPO PP 1/207 no separate studies have been carried out concerning the influence of product CHR/ZF/PROTI on succeeding plants. The owner of the product CHR/ZF/PROTI and of its registration documentation is referring to available sources in literature treating on fungicide prothioconazole.

Prothioconazole has a short half-life (2.8 Days) in soil. Glasshouse screening studies indicate a low potential for damage from pre-emergence use and therefore it is considered that adverse effects to succeeding crops from unlikely to occur. Consideration was also given of the possibility of the metabolite prothioconazole-desthio causing phytotoxic effects to following crops. In glasshouse screening studies the metabolite would have been present within a 21-day period at high levels and therefore be a severe test as in practice a longer period would elapse between treatment and sowing a following crop. Therefore, no waiting period is required and there is no restriction on the choice of succeeding crops.

Prothioconazole_DAR_03_Vol 3_B1-5_public.pdf

According to *EFSA Scientific Report (2007) 106, 1-98*, no significant residues were found in both cereal and rapeseed crops in the northern and southern regions. Using foliar prothioconazole, the residues in wheat and barley grains were below the LOQ of 0.01 mg/kg. In straw the residues were in the range 0.08 mg/kg to 1.1 mg/kg. In rape, the residues in the seeds were in the range from below LOQ 0.01 mg/kg to 0.02 mg/kg. In the straw, the highest residual value was 0.20 mg/kg. For the prothioconazole-desthio metabolite, the values for cereals were in the range below the LOQ of 0,85 mg/kg.

In succeeding crops, the residue pattern is similar to that observed in primary crops. The residue definitions proposed for primary crops are evenly valid. Under the experimental conditions of the submitted confined rotational crop study, residues of prothioconazole-desthio were present in edible part of Swiss chard and turnip at the level of 0.01 mg/kg, when these plants were sowed 28 and 146 days after application of the highest possible annual dose of prothioconazole on bare soil. The total amount of all metabolites containing the prothioconazole-desthio common structural moiety was around 0.03 mg/kg for the same time intervals. Therefore, under practical conditions of use of prothioconazole according to the representative uses and considering that a fraction of the applied rate is intercepted by the cereal crop, no residue of any metabolite above 0.01 mg/kg is expected in rotational crops and no plant back restriction needs to be proposed. No information is available as far as the uptake of triazole derivative metabolites by rotational crops is concerned, given that no study was conducted with radiolabelling in the triazole ring.

EFSA Scientific Report (2007) 106, 1-98

Considering available data dealing with nature of residue, no study regarding magnitude of residues in succeeding crops is needed.

Table 3.5-1: Waiting periods before planting succeeding crops

Waiting period before planting succeeding crops		Overall waiting period proposed by zRMS for CHR/ZF/PROTI
Crop group	Led by prothioconazole	
Leafy vegetables	Not relevant for seed treatment	Not relevant for seed treatment
Root and tuber vegetables	Not relevant for seed treatment	Not relevant for seed treatment
Cereals	Not relevant for seed treatment	Not relevant for seed treatment

Table 3.5-2: PEC-values and TER-calculation of test product CHR/ZF/PROTI (active substance) based on EC10-values.

Not applicable for seed treatment.

Table 3.5-3: Results of field trials: Effects of test product CHR/ZF/PROTI on succeeding crops.

Not applicable for seed treatment.

Conclusion - Impact on succeeding crops No phytotoxicity was recorded in any of the trials in which CHR/ZF/PROTI was applied as a seed treatment to cereal grains. As the prothioconazole in CHR/ZF/PROTI lacks herbicidal activity, and based on experience with this active substance, it is considered highly unlikely that CHR/ZF/PROTI will have a negative impact on succeeding crops if applied at the proposed rate of 100 ml per 100 kg of seed. Therefore, the recommendation to apply no restrictions to following crops after the application of CHR/ZF/PROTI is justified.

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

As was written in COMMISSION REGULATION (EU) No 284/2013 of 1 March 2013: Data are not required, where exposure is negligible, for example in the case of rodenticides, active substances used for wound protection or seed treatment, or in the case of active substances used on stored products or in glass-houses where exposure is precluded.

The formulation CHR/ZF/PROTI is a fungicide seed treatment, the risk to non-target terrestrial plants is negligible and no risk mitigation is needed,

Conclusion - Impact on other plants including adjacent crops. CHR/ZF/PROTI is be used as a seed treatment for the control of fungal diseases and hence there will be negligible exposure to the off-field environment. In addition prothioconazole have no herbicidal properties and
--

no impact on non-target or adjacent crop is expected.

No specific assessments of non-target plants were taken in the efficacy and crop safety trials. However no adverse effects were noted when visual observations were made within these field trials sites.

As in general no impact on adjacent crops can be expected from a seed treatment, the recommendation of no restrictions on adjacent crops after application of CHR/ZF/PROTI is justified.

Tank cleaning

Immediately after use, clean the equipment thoroughly. Drain the system completely and rinse mixing tank two to three times with clean water.

No standard method is agreed at present and no standard method will be agreed due to the fact that the procedures for a measurement of the effectiveness is dependent from type of seed treatment application equipment. The remains of the suspension with water which were used for cleaning the seed treatment equipment should be proceed in a way that minimizes the risk of contamination of surface and groundwater:

- The remains should be used during preparing next seed treatment,
- The remains should be degraded using a technical solution to ensure the biological degradation of the active substances of plant protection products, or
- The remains should be degraded in other ways, in accordance with the provisions on waste

Seed treatment equipment should be accurately cleaned and wash according to the instructions of given CHR/ZF/PROTI is non-corrosive to equipment, non-flammable and non-volatile.

Cleaning effectiveness was studied and results of these studies are described in section B1. The active substances in CHR/ZF/PROTI be effectively removed from seed treatment equipment by rinsing with water.

Conclusion - Tank cleaning

The case presented by the applicant is acceptable and no further data are required.

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

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

Conclusion - Effects on beneficial and other non-target organisms

The case presented by the applicant is acceptable and no further data are required.

Compatibility with current management practices including IPM

Not applicable

Summary and conclusion

Not applicable

3.6 Other/special studies

Not performed

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)
Staphyt Sp. z o.o.	ul. Poznańska 62/53, 60-853 Poznań, Poland	Yes
Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department	ul. Gliwicka 29, 44-153 Sońnicowice, Poland	Yes
Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department	ul. Wojska Polskiego 28, 60-637 Poznań, Poland	Yes
CPR Europe Kft.	Török Ignác u. 30., Szombathely, Hungary	Yes
UAB Agrolab Baltic	Bugeniai village, LT-89452 Mažeikiai district, Lithuania	Yes
SIA Agrolab Baltic	Kuldigas iela 86, LV-3801, Saldus, Latvia	Yes

Appendix 1 Lists of data considered in support of the evaluation

List of data submitted by the applicant and relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of herbicide phytotoxicity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AH/20/PO/32/Zł/b/01 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of selectivity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Gr/b/02 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Patrycja Płonka	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 20 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Patrycja Płonka	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 20 F/2021 - annex GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Patrycja Płonka	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 21 F/2021 GEP - yes Unpublished	N	Chemrol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Patrycja Płonka	2021	Biological expertise of selectivity of seed treatment CHR/ZF/PROTI (100 FS) in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 21 F/2021 - annex GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL01 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL02 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/01 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/02 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/03 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/04 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/05 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PO/32/Pn/06 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Ustilago tritici</i> in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 8 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2	Barbara Krzyż- ińska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Ustilago tritici</i> in winter wheat. Institute of Plant Protection - National Research	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4.3			Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 9 F/2021 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Ustilago tritici</i> in winter wheat. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 10 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Szymura	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Fusarium</i> spp. and <i>Monographella nivalis</i> (anam. <i>Microdochium</i> <i>nivale</i>) in winter wheat.). Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 11 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Szymura	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Fusarium</i> spp. and <i>Monographella nivalis</i> (anam. <i>Microdochium</i> <i>nivale</i>) in winter wheat.. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 12 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Patrycja Płonka	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Tilletia caries</i> in winter wheat.). Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 22 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2	Patrycja Płonka	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Tilletia caries</i> in	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			winter wheat.). Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 23 F/2021 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the fight against <i>Tilletia tritici</i> . STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47775-PL01 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the fight against <i>Tilletia tritici</i> . STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47775-PL02 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the fight against <i>Tilletia tritici</i> . STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47775-PL03 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and <i>Fusarium</i> sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL01 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and <i>Fusarium</i> sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL02	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	The biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and Fusarium sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL03 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter wheat. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: AF/20/PO/32/Br/01 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter wheat. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: AF/20/PO/32/Pr/02 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter wheat. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: AF/20/PO/32/Gr/03 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter wheat. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: AF/20/PO/32/ZI/04 GEP - yes	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: AF/20/PO/32/Br/05 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of selectivity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/ZI/b/03 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of selectivity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Gr/b/04 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological expertise of selectivity of seed treatment CHR/ZF/PROTI (100 FS) in winter triticale. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 13 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological expertise of selectivity of seed treatment CHR/ZF/PROTI (100 FS) in winter triticale. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 13 F/2021 - annex GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2	Agnieszka Mączyńska	2021	Biological expertise of selectivity of seed treatment CHR/ZF/PROTI (100 FS) in winter triticale.	N	Chemrol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Veri- brate study Y/N	Owner
KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			le. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 14 F/2021 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter tritica- le. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 14 F/2021 - annex GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejew- ski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL03 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejew- ski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL04 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter tritica- le cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/07 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter tritica- le cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department,	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/08 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter triticales cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/09 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter triticales cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/10 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter triticales cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/11 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter triticales cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/PszO/32/Pn/12 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Fusarium spp. and Monographella nivalis (anam. Microdochium nivale) in winter triticales. Institute of Plant Protection - National Research	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 15 F/2021 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Fusarium spp. and Monographella nivalis (anam. Microdochium nivale) in winter triticales. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 16 F/2021 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	Biological efficacy of selectivity CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and Fusarium Sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL04 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	Biological efficacy of selectivity CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and Fusarium Sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL05 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	Biological efficacy of selectivity CHR/ZF/PROTI 100 FS in the control of Foot rot of cereals and Fusarium Sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL06 GEP - yes Unpublished	N	Chemiról
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter triticales. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland	N	Chemiról

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			Report no.: AF/20/PszO/32/Pr/06 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of selectivity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Ż/b/05 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Beata Szymańska	2021	Study of selectivity CHR/ZF/PROTI 100 FS in cereal winter. Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Gr/b/06 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter rye. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 24 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter rye. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 25 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejew- ski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL05 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1	Łukasz Pędziejew- ski	2021	The selectivity of CHR/ZF/PROTI 100 FS in winter cereals. STAPHYT Sp z o.o.	N	Chemrol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4.2 KCP 6.4.3			Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47776-PL06 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/13 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/14 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/15 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/16 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experimental. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/17 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2021	The evaluation of efficacy and phytotoxicity of product CHR/ZF/PROTI 100 FS in winter wheat cultivation-laboratory experymetal. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pn/18 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Fusarium</i> spp. and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) in winter rye. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 17 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Fusarium</i> spp. and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) in winter rye. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 18 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Agnieszka Mączyńska	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Fusarium</i> spp. and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) in winter rye. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 19 F/2021 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2	Joanna Pietryga	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for <i>Urocystis occulta</i>	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			in winter rye. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 26 F/2021 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Urocystis occulta in winter rye. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 27 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Urocystis occulta in winter rye. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 28 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Urocystis occulta in winter rye. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 29 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Joanna Pietryga	2021	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Urocystis occulta in winter rye. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 30 F/2021 GEP - yes Unpublished	N	Chemrol
KCP 6	Łukasz Pędziejew-	2021	Biological efficacy and selectivity of	N	Chemrol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	ski		CHR/ZF/PROTI 100 FS in the control of Foot rot of cereales and Fusarium sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL07 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	Biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the control of Foot rot of cereales and Fusarium sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL08 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Łukasz Pędziejewski	2021	Biological efficacy and selectivity of CHR/ZF/PROTI 100 FS in the control of Foot rot of cereales and Fusarium sp. STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań Poland Report no.: APK-20-47891-PL09 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter rye. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Br/07 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter rye. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Pr/08 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter rye. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/Gr/09 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2021	Biological assessment of efficacy of seed treatment CHR/ZF/PROTI against of diseases in winter rye. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/20/ŻO/32/ZI/10 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż-ińska	2022	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Ustilago tritici control in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 9 F/2022 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż-ińska	2022	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Ustilago tritici control in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 10 F/2022 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż-ińska	2022	Biological efficacy expertise of seed treatment CHR/ZF/PROTI (100 FS) for Ustilago tritici control in winter wheat. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 11 F/2022 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż-ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora graminea control in winter barley.	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4.3			Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 1 F/2024 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora graminea control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 2 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora graminea control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 3 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora graminea control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 4 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora graminea control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 5 F/2024 GEP - yes Unpublished	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/ZI/03 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pr/04 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Br/05 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/De/06 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Pyrenophora teres</i> (anam. <i>Drechslera</i> <i>teres</i>) control in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 6 F/2024 GEP - yes	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora teres (anam. Drechslera teres) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 7 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora teres (anam. Drechslera teres) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 8 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora teres (anam. Drechslera teres) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 9 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Pyrenophora teres (anam. Drechslera teres) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 10 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department,	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/ZI/11 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pr/12 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Br/13 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/De/14 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Ustilago nuda</i> control in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 11 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Ustilago nuda</i> control in winter bar- ley.	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4.3			Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 12 F/2024 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Ustilago nuda control in winter bar- ley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 13 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Ustilago nuda control in winter bar- ley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 14 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for Ustilago nuda control in winter bar- ley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 15 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzełiński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Zł/07 GEP - yes Unpublished	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pr/08 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Br/09 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeliński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/De/10 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Fusarium spp.</i> and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) control in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 19 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Fusarium spp.</i> and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) control in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Report no.: 20 F/2024 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Fusarium spp.</i> and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 21 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Barbara Krzyż- ińska	2023	Biological expertise of efficacy of fungicides seed treatment CHR/ZF/PROTI (100 FS), Redigo 100 FS for <i>Fusarium spp.</i> and <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>) control in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 22 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeleński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/ZI/01 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Artur Strzeleński	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pr/02 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial.	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4.2 KCP 6.4.3			Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/15 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/16 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial.. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/17 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/18 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agronomy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/19 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4	Angelika Sobczak	2023	The evaluation of efficacy of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultivation – laboratory trial..	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Ver- brate study Y/N	Owner
KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pn/20 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 16 F/2024 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: Annex to Trial Report No.: 16 F/2024 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: 17 F/2024 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland Report no.: Annex to Trial Report No.: 17 F/2024 GEP - yes Unpublished	N	Chemiroł
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sońnicowice Poland	N	Chemiroł

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			Gliwicka 29, 44-153 Sośnicowice Poland Report no.: 18 F/2024 GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Cecylia Dreja	2023	Biological expertise of selectivity of seed treat- ment CHR/ZF/PROTI (100 FS) in winter barley. Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department Gliwicka 29, 44-153 Sośnicowice Poland Report no.: Annex to Trial Report No.: 18 F/2024 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of selectivity of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Br/01 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of selectivity of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/Pr/02 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Angelika Sobczak	2023	The evaluation of selectivity of seed treatment CHR/ZF/PROTI 100 FS in winter barley cultiva- tion – field trial. Poznań University of Life Sciences, Research and Education Center Gorzyń, Agron- omy Department, Wojska Polskiego 28, 60-637 Poznań Poland Report no.: AF/23/JO/34/De/03 GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> <i>sp.</i> on winter wheat in Hungary, 2023/2024. CPR Europe Kft.	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
			Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1062-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> sp. on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1063-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> sp. on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1064-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter wheat in Hungary, 2023/2024. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1065-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1066-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter wheat in Hungary, 2023.	N	Chemiroi

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4.2 KCP 6.4.3			CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1067-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Tilletia caries</i> on winter wheat in Hungary, 2023/2024. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1068-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Tilletia caries</i> on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1069-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Tilletia caries</i> on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1070-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Gábor Wágner	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1083-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1	József Ritecz	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) on winter wheat in Hungary, 2023.	N	Chemiroi

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Vertebrate study Y/N	Owner
KCP 6.4.2 KCP 6.4.3			CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1084-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) on winter wheat in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1085-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> sp. on winter barley in Hungary, 2023/2024. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1071-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> sp. on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1072-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Fusarium</i> sp. on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1073-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter barley in Hungary, 2023/2024.	N	Chemiroi

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4.3			CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1074-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1075-025FE GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Microdochium majus</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1076-025FE GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Pyrenophora graminea</i> on winter barley in Hungary, 2023/2024. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1077-025FE GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Pyrenophora graminea</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1078-025FE GEP - yes Unpublished	N	Chemirol
KCP 6 KCP 6.2	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100	N	Chemirol

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			FS (prothioconazole 100 g/l) against <i>Pyrenophora graminea</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1079-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Sándor Németh	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Pyrenophora teres</i> on winter barley in Hungary, 2023/2024. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1080-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	József Ritecz	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Pyrenophora teres</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1081-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety and efficacy of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) against <i>Pyrenophora teres</i> on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1082-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Gábor Wágner	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1086-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2	József Ritecz	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothioconazole 100 g/l) on winter barley in Hungary, 2023.	N	Chemiroi

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3			zole 100 g/l) on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1087-025FE GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	István Makó	2023	Investigation of crop safety of fungicide seed treatment: CHR/ZF/PROTI 100 FS (prothiocona-zole 100 g/l) on winter barley in Hungary, 2023. CPR Europe Kft. Török Ignác u. 30. Szombathely Hungary Report no.: CPRHU23-1088-025FE GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic, Kuldigas iela 86, LV-3801, Saldus, Latvia Report no.: 195 24 02-01-LV GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic, Kuldigas iela 86, LV-3801, Saldus, Latvia Report no.: 195 24 02-02-LV GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Rūta Žitkutė	2023	The selectivity of CHR/ZF/PROTI in winter cereals. UAB Agrolab Baltic Bugeniai village LT-89452 Mažeikiai district Lithuania Report no.: 195 24 02-03LT GEP - yes Unpublished	N	Chemiroi
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic Kuldigas iela 86 LV-3801, Saldus Latvija Report no.: 195 24 02-04-LV	N	Chemiroi

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Data Verte- brate study Y/N	Owner
			GEP - yes Unpublished		
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic Kuldigas iela 86 LV-3801, Saldus Latvija Report no.: 195 24 02-05-LV GEP - yes Unpublished	N	Chemiroļ
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Rūta Žitkutė	2023	The selectivity of CHR/ZF/PROTI in winter cereals. UAB Agrolab Baltic Bugeniai village LT-89452 Mažeikiai district Lithuania Report no.: 195 24 02-06LT GEP - yes Unpublished	N	Chemiroļ
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic Kuldigas iela 86 LV-3801, Saldus Latvija Report no.: 195 24 02-07-LV GEP - yes Unpublished	N	Chemiroļ
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Kristaps Kārklīš	2023	The selectivity of CHR/ZF/PROTI in winter cereals. SIA Agrolab Baltic Kuldigas iela 86 LV-3801, Saldus Latvija Report no.: 195 24 02-08-LV GEP - yes Unpublished	N	Chemiroļ
KCP 6 KCP 6.2 KCP 6.4 KCP 6.4.1 KCP 6.4.2 KCP 6.4.3	Rūta Žitkutė	2023	The selectivity of CHR/ZF/PROTI in winter cereals. UAB Agrolab Baltic Bugeniai village LT-89452 Mažeikiai district Lithuania Report no.: 195 24 02-09LT GEP - yes Unpublished	N	Chemiroļ

Appendix 2 Additional information provided by the applicant

COMPARISON OF CLIMATIC AND AGRICULTURAL CONDITIONS IN POLAND AND THE CZECH REPUBLIC IN REFERENCE TO REGISTRATION OF PLANT PROTECTION PRODUCT CHR/ZF/PROTI 100 FS

1. Introduction

The purpose of the following document is to compare climatic and agricultural conditions of Poland and the Czech Republic in order to enable data from efficacy and phytotoxicity trials conducted in Poland to be used for registration purposes of a winter wheat, winter triticale, winter rye seed treatment CHR/ZF/PROTI in the Czech Republic. According to the EPPO guidelines PP 1/ 241(1) Guidance on comparable climates, Poland belongs to North-east zone and Czech Republic to Maritime zone.

2. Plant protection products under consideration

2.1. General

The efficacy and phytotoxicity studies were conducted in Poland in 2020/21, 2021/22, 2023/24 on the plant protection product CHR/ZF/PROTI 100 FS and a standard seed treatment:

- Premis 025 FS, Redigo Pro 170 FS were used as a reference product in winter cereals
- Redigo 100 FS were used as a tested/reference product in winter cereals

Total of 99 efficacy: winter wheat (21 field trials, 6 laboratory trials), winter triticale (6 field trials, 6 laboratory trials), winter rye (15 field trials, 6 laboratory trials), winter barley (33 field trials, 6 laboratory trials) and 24 reports showing the results in research into product selectivity carried out in 2020/21, 2021/22, 2023/24 in winter wheat (6 field trials), winter triticale (6 field trials), winter rye (6 field trials), winter barley (6 field trials) GEP trials were carried out to assess the product's efficacy and phytotoxic potential.

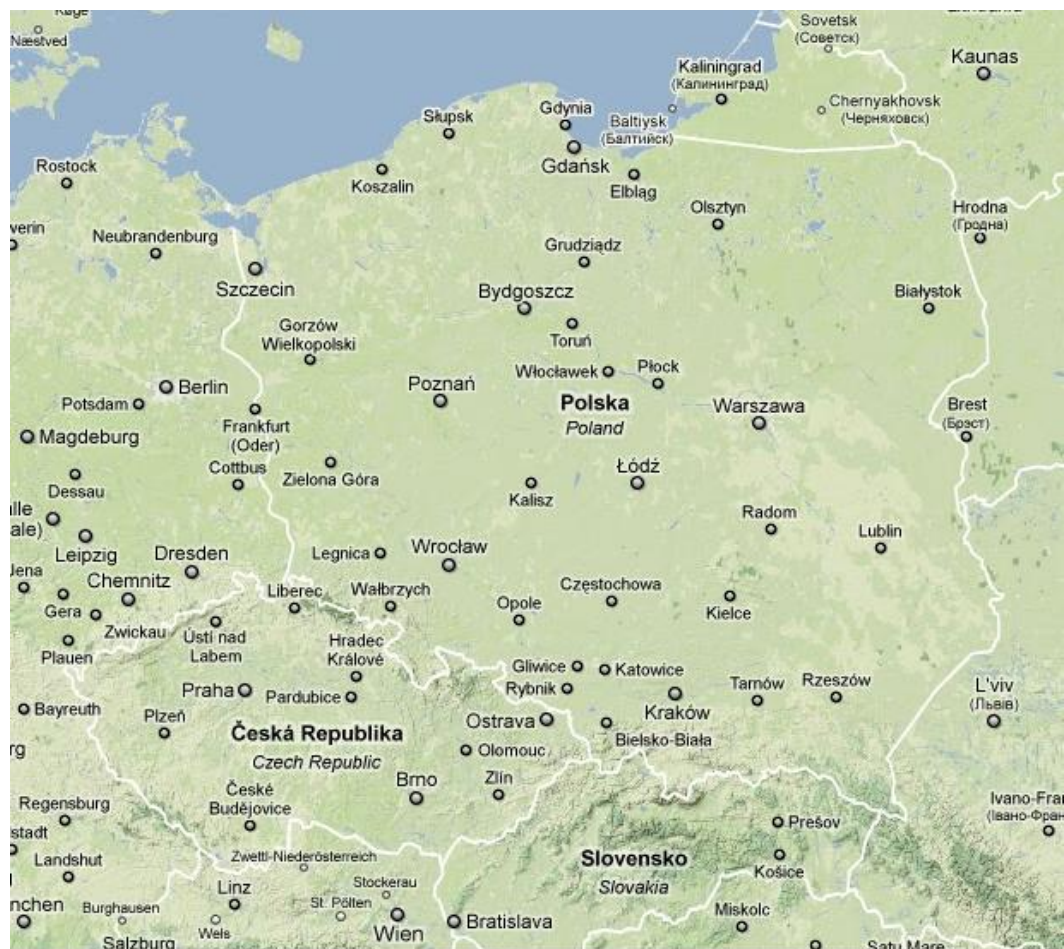
3. Climatic conditions

Poland and the Czech Republic are geographically very close to one another. The geographical coordinates of the Czech Republic are: latitude 49.45°N, longitude 15.30°E. The geographical coordinates of Poland are: latitude 52.00°N, longitude 20.00°E. The two countries share 615 km border.

(ref. CIA World Factbook (<https://www.cia.gov/library/publications/the-world-factbook/index.html>))

The following map (originating from maps.google.com) illustrates the two countries location.

Figure 1. Location of Poland and the Czech Republic



The following sections present and compare particular elements of Polish and Czech climate. The following parameters are compared: average monthly temperature, average maximum monthly temperature, average minimum monthly temperature, and average monthly precipitation sum. To compare data in each country there were selected several locations from which average readings were calculated. The following map presents the location of climate stations included in calculations.

Figure 2. Location of climate stations

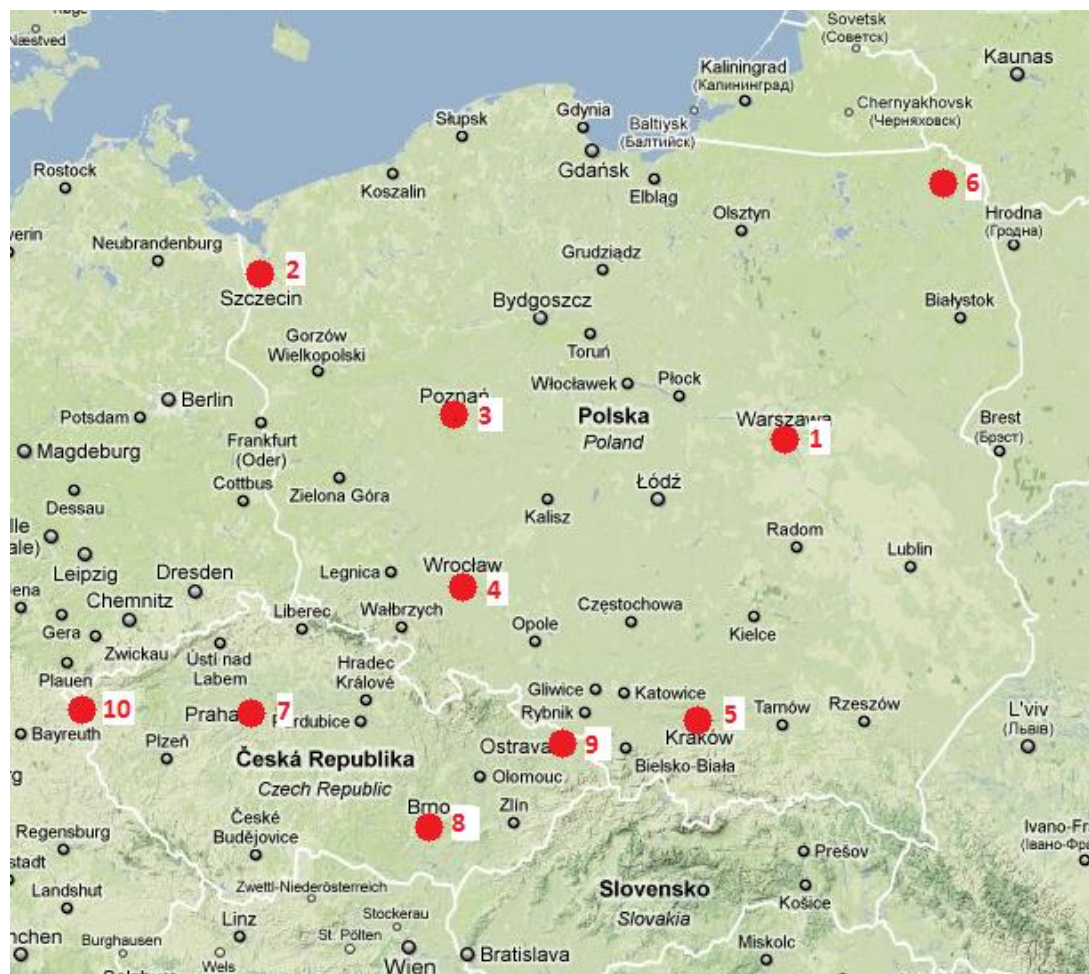


Table 1. Parameters of climate stations

Number on map	Location	Latitude	Longitude	Elevation (meters AMSL)
POLAND				
1.	Warsaw	52,10°N	20,58°E	106
2.	Szczecin	52,35°N	14,54°E	1
3.	Poznan	52,25°N	16,50°E	86
4.	Wroclaw	51,06°N	16,53°E	120
5.	Krakow	50,05°N	19,48°E	237
6.	Suwalki	54,08°N	22,57°E	186
THE CZECH REPUBLIC				
7.	Prague	50,00°N	14,40°E	303
8.	Brno	49,15°N	16,70°E	238
9.	Ostrava	49,68°N	18,10°E	256
10.	Cheb	50,08°N	12,40°E	474

data source: <http://pl.allmetsat.com/klimat/>

Climate stations were selected in a way that ensures their equal distribution throughout the area of each country. Data from Poland was collected from six stations while data from the Czech Republic was collected

from four stations. The number of Czech stations is smaller than that of Polish stations as detailed climatic data was not readily available from a greater number of stations in the Czech Republic. What is more, the authors of this report believe that the number of stations taken into account is sufficient to perform the comparison of climatic conditions and that it is relative to the acreage of each country.

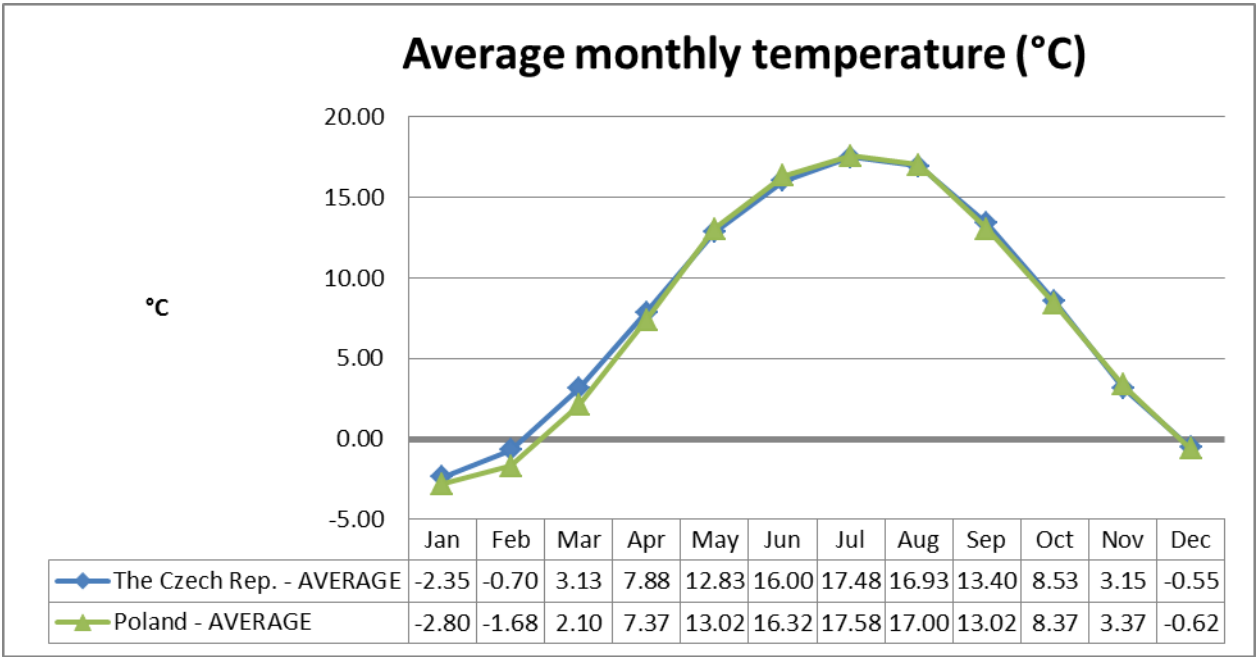
Average monthly temperature

Table 2. Average monthly temperature data

Location	Average monthly temperature (°C)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
The Czech Rep.: Cheb	-2,5	-1,2	2,4	6,7	11,7	15,0	16,5	15,8	12,5	7,8	2,4	-1,0
The Czech Rep.: Prague	-2,0	-0,6	3,1	7,6	12,5	15,6	17,1	16,6	13,2	8,3	3,0	-0,2
The Czech Rep.: Brno	-2,5	-0,3	3,8	9,0	13,9	17,0	18,5	18,1	14,3	9,1	3,5	-0,6
The Czech Rep.: Ostrava	-2,4	-0,7	3,2	8,2	13,2	16,4	17,8	17,2	13,6	8,9	3,7	-0,4
The Czech Rep. - AVERAGE	-2,35	-0,70	3,13	7,88	12,83	16,00	17,48	16,93	13,40	8,53	3,15	-0,55
Poland: Warsaw	-3,3	-2,1	1,9	7,7	13,5	16,7	18,0	17,3	13,1	8,2	3,2	-0,9
Poland: Poznan	-2,0	-1,0	2,7	7,6	13,3	16,7	18,0	17,4	13,4	8,8	3,8	-0,1
Poland: Wroclaw	-1,8	-0,5	3,2	8,0	13,1	16,5	17,7	17,2	13,4	8,9	3,9	0,2
Poland: Krakow	-3,3	-1,6	2,4	7,9	13,1	16,2	17,5	16,9	13,1	8,3	3,2	-1,0
Poland: Szczecin	-1,1	-0,3	3,0	7,4	12,9	16,4	17,7	17,2	13,5	9,2	4,4	0,8
Poland: Suwalki	-5,3	-4,6	-0,6	5,6	12,2	15,4	16,6	16,0	11,6	6,8	1,7	-2,7
Poland - AVERAGE	-2,80	-1,68	2,10	7,37	13,02	16,32	17,58	17,00	13,02	8,37	3,37	-0,62

data source:
<http://www.climate-charts.com/>; NOAA Global Climate Normals 1961-1990; National Oceanic and Atmospheric Administration (NOAA).

Figure 3. Average monthly temperature graph



The table and graph above show that average temperature in Poland and in the Czech Republic is very similar. There are slight differences only in the winter months. The time which is of most importance to the application of product CHR/ZF/PROTI is end of summer/beginning of autumn from September to October and March/April when all symptoms of the fungicide activity are noticeable. The average temperatures is a close correlation between Poland and the Czech Republic.

3.1. Average maximum monthly temperature

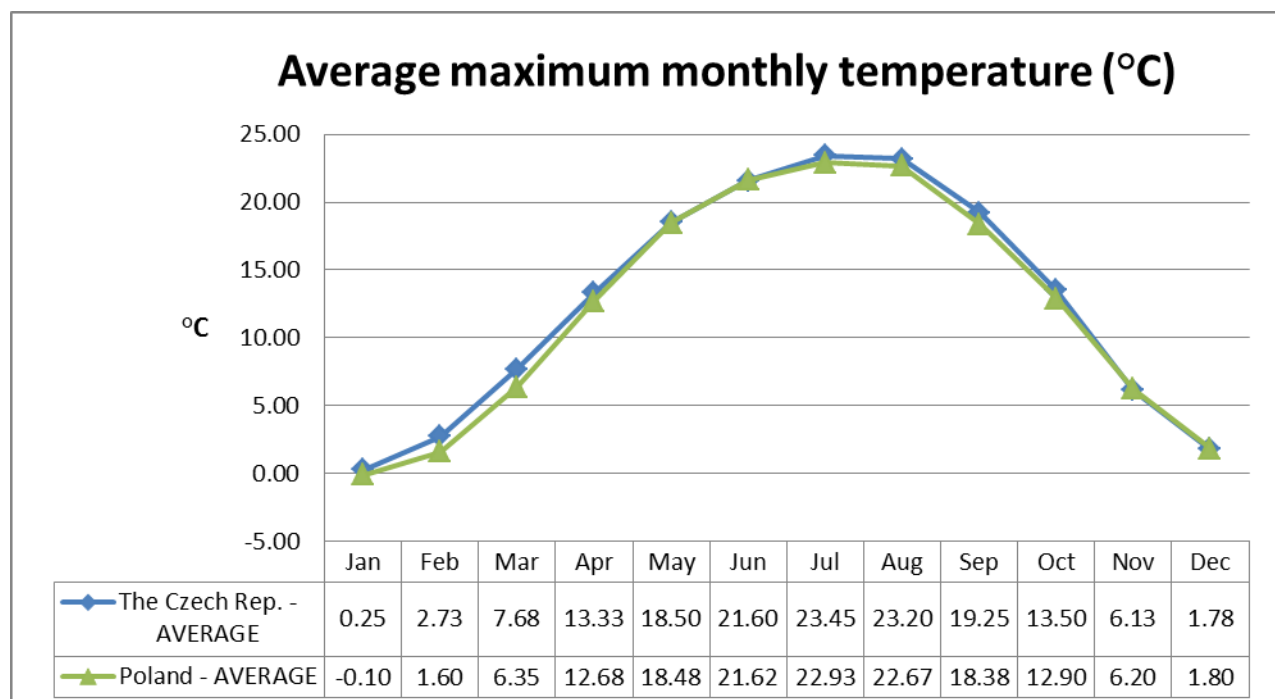
Table 3. Average maximum monthly temperature data

Location	Average maximum monthly temperature (°C)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
The Czech Rep.: Cheb	0,0	2,3	7,0	12,2	17,4	20,6	22,4	22,2	18,5	12,8	5,2	1,3
The Czech Rep.: Prague	0,4	2,7	7,7	13,2	18,3	21,4	23,3	23,0	19,0	13,1	6,0	1,9
The Czech Rep.: Brno	0,2	3,1	8,4	14,4	19,5	22,5	24,5	24,2	20,1	14,1	6,6	1,9
The Czech Rep.: Ostrava	0,4	2,8	7,6	13,5	18,8	21,9	23,6	23,4	19,4	14,0	6,7	2,0
The Czech Rep. - AVERAGE	0,25	2,73	7,68	13,33	18,50	21,60	23,45	23,20	19,25	13,50	6,13	1,78
Poland: Warsaw	-0,7	1,0	6,0	12,9	18,8	22,0	23,3	22,9	18,3	12,7	5,9	1,4
Poland: Poznan	0,5	2,2	6,8	13,0	18,8	22,1	23,5	23,1	18,7	13,1	6,4	2,2
Poland: Wroclaw	1,3	3,2	7,9	13,6	18,8	22,0	23,4	23,2	19,3	14,1	7,4	3,0
Poland: Krakow	-0,1	2,1	7,1	13,5	18,7	21,6	23,0	22,8	18,8	13,8	6,8	1,8
Poland: Szczecin	1,3	2,8	7,2	12,6	18,4	21,6	22,8	22,6	18,6	13,1	6,9	3,0
Poland: Suwalki	-2,9	-1,7	3,1	10,5	17,4	20,4	21,6	21,4	16,6	10,6	3,8	-0,6
Poland - AVERAGE	-0,10	1,60	6,35	12,68	18,48	21,62	22,93	22,67	18,38	12,90	6,20	1,80

data source:

<http://www.climate-charts.com/>; NOAA Global Climate Normals 1961-1990; National Oceanic and Atmospheric Administration (NOAA).

Figure 4. Average maximum monthly temperature graph



The table and graph above present the average maximum temperature in each month. It is clear that maximum temperature in Poland and in the Czech Republic is very similar.

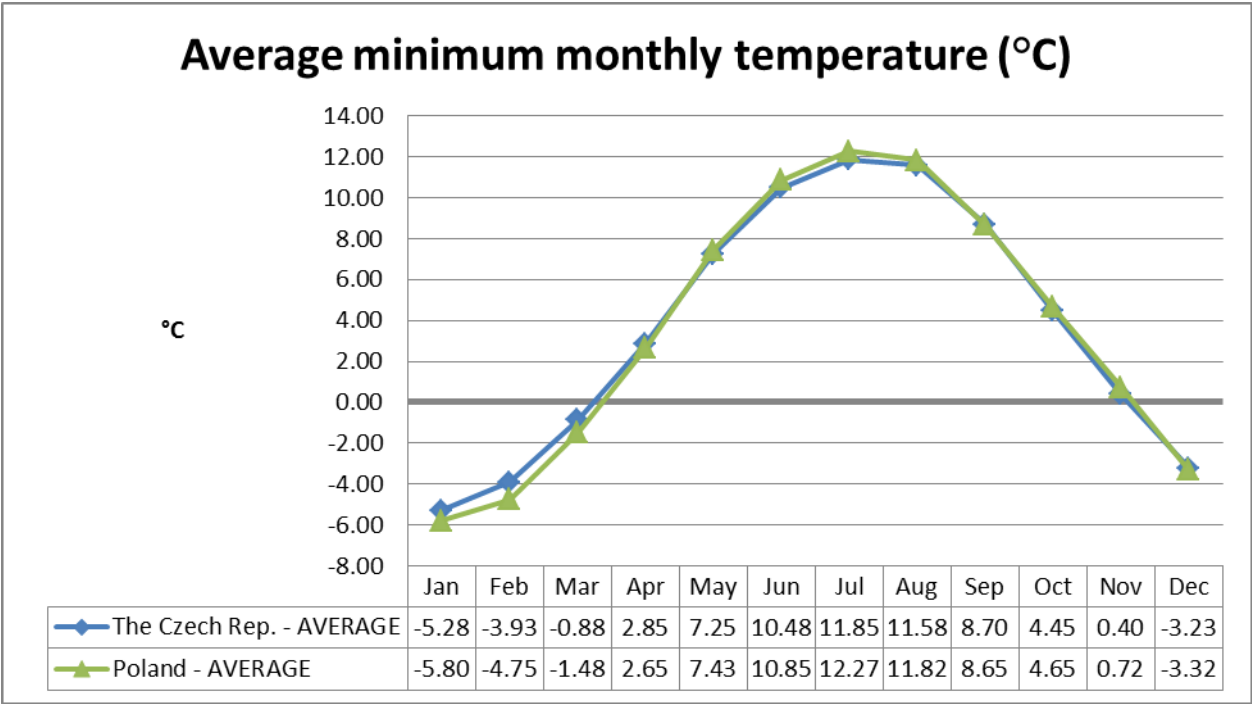
1.1. Average minimum monthly temperatures

Table 4. Average minimum monthly temperature data

Location	Average minimum monthly temperature (°C)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
The Czech Rep.: Cheb	-5,0	-4,1	-1,2	2,1	6,3	9,6	11,0	10,6	8,0	4,1	0,0	-3,3
The Czech Rep.: Prague	-5,3	-4,2	-1,3	2,4	7,1	10,4	11,8	11,5	8,6	4,0	-0,2	-3,4
The Czech Rep.: Brno	-5,2	-3,3	-0,2	3,9	8,3	11,3	12,7	12,6	9,5	5,0	0,9	-3,0
The Czech Rep.: Ostrava	-5,6	-4,1	-0,8	3,0	7,3	10,6	11,9	11,6	8,7	4,7	0,9	-3,2
The Czech Rep. - AVERAGE	-5,28	-3,93	-0,88	2,85	7,25	10,48	11,85	11,58	8,70	4,45	0,40	-3,23
Poland: Warsaw	-6,1	-5,0	-1,5	3,0	8,0	11,3	12,6	12,1	8,7	4,5	0,8	-3,4
Poland: Poznan	-4,8	-3,9	-0,8	2,8	7,7	11,2	12,5	12,2	9,0	5,3	1,2	-2,6
Poland: Wroclaw	-5,3	-4,0	-0,9	2,8	7,1	10,7	12,0	11,6	8,7	4,6	0,6	-3,1
Poland: Krakow	-6,7	-4,8	-1,3	3,0	7,6	10,8	12,2	11,8	8,6	4,2	0,2	-4,0
Poland: Szczecin	-3,7	-3,1	-0,4	2,9	7,5	11,1	12,9	12,3	9,5	5,8	2,0	-1,6
Poland: Suwalki	-8,2	-7,7	-4,0	1,4	6,7	10,0	11,4	10,9	7,4	3,5	-0,5	-5,2
Poland - AVERAGE	-5,80	-4,75	-1,48	2,65	7,43	10,85	12,27	11,82	8,65	4,65	0,72	-3,32

data source:
<http://www.climate-charts.com/>; NOAA Global Climate Normals 1961-1990; National Oceanic and Atmospheric Administration (NOAA).

Figure 5. Average minimum monthly temperature graph



Average minimum monthly temperature in Poland and in the Czech Republic follows almost the same pattern, therefore, it is comparable.

1.1. Average monthly precipitation sum

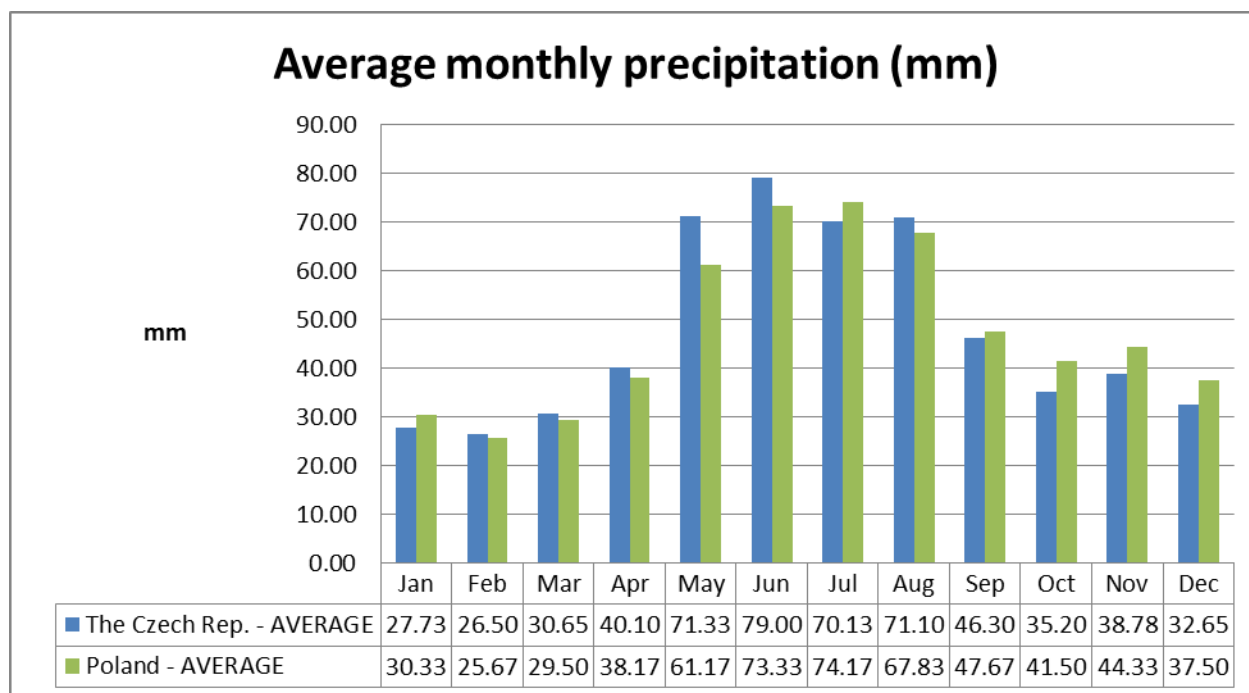
Table 5. Average monthly precipitation sum data

Location	Average monthly precipitation sum (mm)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
The Czech Rep.: Cheb	36,1	29,5	36,3	38,3	56,0	66,9	59,2	66,5	48,4	37,5	41,1	43,9
The Czech Rep.: Prague	23,6	22,6	28,1	38,2	77,2	72,7	66,2	69,6	40,4	30,5	31,9	25,3
The Czech Rep.: Brno	24,5	23,7	24,2	31,5	60,9	72,0	64,0	56,5	37,6	30,5	37,5	27,1
The Czech Rep.: Ostrava	26,7	30,2	34,0	52,4	91,2	104,4	91,1	91,8	58,8	42,3	44,6	34,3
The Czech Rep. - AVERAGE	27,73	26,50	30,65	40,10	71,33	79,00	70,13	71,10	46,30	35,20	38,78	32,65
Poland: Warsaw	22	21	26	33	58	71	69	62	43	37	41	32
Poland: Poznan	30	24	27	36	53	60	69	57	43	39	39	38
Poland: Wroclaw	28	26	26	39	64	80	84	78	48	40	43	34
Poland: Krakow	34	32	34	48	83	97	85	87	54	46	45	41
Poland: Szczecin	36	27	32	38	52	57	61	55	44	38	46	41
Poland: Suwalki	32	24	32	35	57	75	77	68	54	49	52	39
Poland - AVERAGE	30,33	25,67	29,50	38,17	61,17	73,33	74,17	67,83	47,67	41,50	44,33	37,50

data source:

<http://www.climate-charts.com/>; NOAA Global Climate Normals 1961-1990; National Oceanic and Atmospheric Administration (NOAA).

Figure 6. Average monthly precipitation sum graph



Average monthly precipitation sum in Poland and in the Czech Republic is similar. The graph above shows that there is slightly more precipitation in the Czech Republic in the first half of the year while the situation

is reversed in the second half of the year. The greatest difference in average precipitation sum is noted in the month of May – 10,16 mm.

4. Soil conditions

Soil conditions in Poland and in the Czech Republic are not compared.

5. Agricultural practice

5.1.Winter wheat, winter triticale, winter rye, winter barley sowing timing

According to the MOCA Study carried out by The MARS STAT Action in Poland sowing of winter wheat takes place in the second half of September (depending on the region term of sowing ranges from September 15th till October 5th). In the Czech Republic term of sowing of winter wheat is similar – the optimum sowing time is September 15th till October 15th.

Winter triticale follows practically are the same pattern with respect to sowing and entering subsequent development phases. The crops are winter cereals, therefore, it is assumed, they are subject to the same agricultural practices at the same time in each country

Spring barley, Spring wheat

According to the MOCA study in Poland sowing of spring barley takes place usually between March 15th and April 15th depending on the region. In Czech Republic spring barley should be planted as soon as possible when allowed by outside conditions.

Spring barley

According to the MOCA study in Poland sowing of spring barley takes place usually between March 15th and April 15th depending on the region. In Czech Republic spring barley should be planted as soon as possible when allowed by outside conditions.

Figure 7. Phenological crop calendar for winter wheat in Poland



Figure 8. Phenological crop calendar for winter wheat in the Czech Republic



Figure 9. Phenological crop calendar for spring barley in the Poland



Figure 10. Phenological crop calendar for spring barley in the Czech Republic



The data tables are incomplete with respect to tillering and shooting phases in the Czech Republic. It is so, because for financial reasons complete phenological data from the Czech Hydrometeorological Institute was not available to the authors of the MOCA Study. However, the distribution of the other available phenological phases allows for the assumption that the missing data is also comparable. In both countries climatic conditions are comparable so the development of spring barley follows a similar pattern. Tillering starts in the fall in the second half of April until the beginning of May, shooting starts in first half of May.

6. Conclusion

Poland and the Czech Republic are neighbouring countries. According to the EPPO guidelines PP 1/ 241(1) Guidance on comparable climates, Poland belongs to North-east zone and Czech Republic to Maritime zone. Both countries are located in central Europe in the moderate climate zone. They share not only the border but also important climatic characteristics. Yearly temperature and precipitation patterns are very similar in both counties. This has influence on the agricultural practice in these countries and on the development of cultivated crops. The greatest pest problems are posed by almost the same fungal species in both countries. All of these and many more are targeted by seed treatment prothioconazole which is the active substance of product CHR/ZF/PROTI.

In conclusion, authors of this report state that Poland and the Czech Republic share many elements of climatic and agricultural conditions. This allows efficacy and phytotoxicity study results acquired in Poland to be

used in registration procedures of an autumn in winter cereals seed treatment CHR/ZF/PROTI 100 FS in the Czech Republic.

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

Test report/ research number (1)	Trial location (2); Crop cultivar; F/G (3); N/A (4)	Testing Unit (5)	Test method (6); Plot size; Sample size (7)	Treatment			
				Growth stage (8)	Interval	Total number	Spray volume (ml/100 kg)
AH/20/PO/32/Zł/b/01	Złotniki / Poland winter wheat / Bogatka F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,4x8=11,2m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Gr/b/02	Gorzyń / Poland winter wheat / Opal F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
20 F/2021	Sośnicowice / Poland winter wheat / Opoka F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
21 F/2021	Łany Wielkie / Poland winter wheat / Pokusa F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
APK-20-47776-PL01	Kajkowo / Poland winter wheat / Bilanz F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47776-PL02	Jasiona / Poland winter wheat / Mewa F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pn/01	Poznań-Biocentrum / Poland winter wheat / Arkadia F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pn/02	Poznań-Biocentrum / Poland	Poznań University of Life Sciences,	EPPO PP 1/26(4)	BBCH 00	n/a	1	700

	winter wheat / Potencjal F N	Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	0,25x0,5=0,125m ²				
AF/20/PO/32/Pn/03	Poznań-Biocentrum / Poland winter wheat / Opal F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pn/04	Poznań-Biocentrum / Poland winter wheat / Opal F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pn/05	Poznań-Biocentrum / Poland winter wheat / Principes F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pn/06	Poznań-Biocentrum / Poland winter wheat / Tonacja F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
8 F/2021	Sośnicowice / Poland winter wheat / Jubilar F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
9 F/2021	Sośnicowice / Poland winter wheat / Turnia F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
10 F/2021	Sośnicowice / Poland winter wheat / Nadobna F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700

		cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland					
11 F/2021	Sośnicowice / Poland winter wheat / Tobak F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
12 F/2021	Sośnicowice / Poland winter wheat / Zyta F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
22 F/2021	Sośnicowice / Poland winter wheat / Zyta F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 12m ²	BBCH 00	n/a	1	700
23 F/2021	Łany Wielkie / Poland winter wheat / Fidel- ius F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 12m ²	BBCH 00	n/a	1	700
APK-20-47775-PL01	Kajkowo / Poland winter wheat / Bilanz F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47775-PL02	Jasiona / Poland winter wheat / Mewa F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47775-PL03	Łobez / Poland winter wheat / Julius F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47891-PL01	Kajkowo / Poland winter wheat / Julius F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700

APK-20-47891-PL02	Jasiona / Poland winter wheat / Bilanz F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47891-PL03	Łobez / Poland winter wheat / Julius F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Br/01	Brody / Poland winter wheat / Poten- zial F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Pr/02	Przybroda / Poland winter wheat / Tona- cja F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 1,5x12=18m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Gr/03	Gorzyń / Poland winter wheat / Prin- ceps F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Zł/04	Złotniki / Poland winter wheat / Bo- gatka F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 1,5x8=12m ²	BBCH 00	n/a	1	700
AF/20/PO/32/Br/05	Brody / Poland winter wheat / Prin- ceps F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Zł/b/03	Złotniki / Poland winter triticale / Alik F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska	EPPO PP 1/26(4) 1,4x8=11,2m ²	BBCH 00	n/a	1	700

		Polskiego 28, 60-637 Poznań, Poland					
AF/20/PszO/32/Gr/b/04	Gorzyń / Poland winter triticale / Twingo F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
13 F/2021	Sierakowice / Poland winter triticale / Trismart F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
14 F/2021	Sośnicowice / Poland winter triticale / Rotondo F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
APK-20-47776-PL03	Kajkowo / Poland winter triticale / Bereniko F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47776-PL04	Łaźniki / Poland winter triticale / Borowik F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pn/07	Poznań-Biocentrum / Poland winter triticale / Twingo F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pn/08	Poznań-Biocentrum / Poland winter triticale / Salto F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pn/09	Poznań-Biocentrum / Poland winter triticale / Grenado F	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700

	N	637 Poznań, Po- land					
AF/20/PszO/32/Pn/10	Poznań-Biocentrum / Poland winter triticales / Wilton F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pn/11	Poznań-Biocentrum / Poland winter triticales / Salto F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pn/12	Poznań-Biocentrum / Poland winter triticales / Magnat F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
15 F/2021	Sońnicowice / Poland winter triticales / Trismart F N	Institute of Plant Protection - Na- tional Research Institute Sońnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sońnicow- ice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
16 F/2021	Sierakowice / Poland winter triticales / Rotondo F N	Institute of Plant Protection - Na- tional Research Institute Sońnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sońnicow- ice, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
APK-20-47891-PL04	Kajkowo / Poland winter triticales / Porto F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47891-PL05	Wilkowyja / Poland winter triticales / Borowik F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47891-PL06	Łażniki / Poland winter triticales / Borowik F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/PszO/32/Pr/06	Przybroda / Poland winter triticales /	Institute of Plant Protection - Na-	EPPO PP 1/26(4)	BBCH 00	n/a	1	700

	Twingo F N	tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	1,5x12=18m ²				
AF/20/ŻO/32/Zł/b/05	Złotniki / Poland winter rye / Diamant F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,4x8=11,2m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Gr/b/06	Gorzyń / Poland winter rye / Poznań- skie F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
24 F/2021	Sośnicowice / Poland winter rye / Dukato F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
25 F/2021	Sierakowice / Poland winter rye / Su For- setti F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/26(4) 15m ²	BBCH 00	n/a	1	700
APK-20-47776-PL05	Wilkowyja / Poland winter rye / Dańkow- skie Turkus F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47776-PL06	Wólka Krosnowska / Poland winter rye / Dańkow- skie Amber F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pn/13	Poznań-Biocentrum / Poland winter rye / Poznań- skie F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700

AF/20/ŻO/32/Pn/14	Poznań-Biocentrum / Poland winter rye / Diamant F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pn/15	Poznań-Biocentrum / Poland winter rye / Daniello F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pn/16	Poznań-Biocentrum / Poland winter rye / Palazzo F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pn/17	Poznań-Biocentrum / Poland winter rye / Diamant F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pn/18	Poznań-Biocentrum / Poland winter rye / Poznań- skie F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 0,25x0,5=0,125m ²	BBCH 00	n/a	1	700
17 F/2021	Sośnicowice / Poland winter rye / Dańkow- skie Rubin F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
18 F/2021	Sośnicowice / Poland winter rye / Dukato F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicow- ice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
19 F/2021	Sośnicowice / Poland winter rye / Su For- setti	Institute of Plant Protection - Na- tional Research	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700

	F N	Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland					
26 F/2021	Sośnicowice / Poland winter rye / Dukato F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
27 F/2021	Sośnicowice / Poland winter rye / Dańkowskie Rubin F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
28 F/2021	Sierakowice / Poland winter rye / Su Forsetti F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
29 F/2021	Sośnicowice / Poland winter rye / Dańkowskie Granat F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
30 F/2021	Sośnicowice / Poland winter rye / Dańkowskie Diament F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/26(4) 10m ²	BBCH 00	n/a	1	700
APK-20-47891-PL07	Kajkowo / Poland winter rye / Agat F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
APK-20-47891-PL08	Wilkowyja / Poland winter rye / Dańkow-	STAPHYT Sp z o.o. Poznańska	EPPO PP 1/26(4)	BBCH 00	n/a	1	700

	skie Turkus F N	62/53, 60-853 Poznań, Poland	1,5x7=10,5m ²				
APK-20-47891-PL09	Wólka Krosnowska / Poland winter rye / Dańkow- skie Amber F N	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Br/07	Brody / Poland winter rye / Daniello F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x7=10,5m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Pr/08	Przybroda / Poland winter rye / Poznań- skie F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x12=18m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Gr/09	Gorzyń / Poland winter rye / Palazzo F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/20/ŻO/32/Zł/10	Złotniki / Poland winter rye / Dańkow- skie Diamant F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x8=12m ²	BBCH 00	n/a	1	700
9 F/2022	Sośnicowice / Poland winter wheat / Jubilar F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 7,5 m ²	BBCH 00	n/a	1	700
10 F/2022	Sośnicowice / Poland winter wheat / Turnia F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 7,5 m ²	BBCH 00	n/a	1	700
11 F/2022	Sośnicowice / Poland winter wheat / Na-	Institute of Plant Protection - Na-	EPPO PP 1/19(4)	BBCH 00	n/a	1	700

	dobna F N	tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	7,5 m2				
1 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Clakri F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
2 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley /Astoria F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
3 F/2024	Sośnicowice, Łany Wielkie/ Poland winter barley / Igri F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
4 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / U313 F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
5 F/2024	Sośnicowice Łany Wielkie/ Poland winter barley /Titus F N	Institute of Plant Protection - Na- tional Research Institute Sośnicow- ice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Z1/03	Złotniki/ Poland winter bar- ley/Kosmos F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700

		637 Poznań, Poland					
AF/23/JO/34/Pr/04	Przybroda / Poland winter barley/ Sandra F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Br/05	Brody / Poland winter barley/ Sandra F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x9=13,5m ²	BBCH 00	n/a	1	700
AF/23/JO/34/De/06	Dębno/ Poland winter barley/ Arenia F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 2,0x12=24m ²	BBCH 00	n/a	1	700
6 F/2024	Sośnicowice, Łany Wielkie/ Poland winter barley /Ketos F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
7 F/2024	Sośnicowice, Łany Wielkie/ Poland winter barley /Return F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
8 F/2024	Sośnicowice, Łany Wielkie/ Poland winter barley /Jeanie F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
9 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley /Jakubus F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700

		ment, Gliwicka 29, 44-153 Sośnicowice, Poland					
10 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley /Bażant F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
AF/23/JO/34/ZI/11	Złotniki/ Poland winter barley/Kosmos F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pr/12	Przybroda / Poland winter barley/ Sandra F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Br/13	Brody / Poland winter barley/ Sandra F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x9=13,5m ²	BBCH 00	n/a	1	700
AF/23/JO/34/De/14	Dębno / Poland winter barley/Arenia F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 2,0x12=24m ²	BBCH 00	n/a	1	700
11 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Clakri F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
12 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley /Astoria F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29,	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700

		44-153 Sośnicowice, Poland					
13 F/2024	Sośnicowice, Łany Wielkie/ Poland winter barley / Igni F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
14 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley /U 313 F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
15 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Titus F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Zł/07	Złotniki / Poland winter barley/Kosmos F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pr/08	Przybroda / Poland winter barley/ Sandra F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Br/09	Brody/ Poland winter barley/Arenia F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 1,5x9=13,5m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Dę/10	Dębno / Poland winter barley/ F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 2,0x12=24m ²	BBCH 00	n/a	1	700

		land					
19 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Ba- żant F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
20 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Return F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
21 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley/ Jeanie F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
22 F/2024	Sośnicowice, Łany Wielkie / Poland winter barley / Jaku- bus F N	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesti- cide Efficacy Testing Depart- ment, Gliwicka 29, 44-153 Sośnicowi- ce, Poland	EPPO PP 1/19(4) 15 m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Zł/01	Złotniki / Poland winter barley/Su Jule F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pr/02	Przybroda / Poland winter barley/Gloria F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60- 637 Poznań, Po- land	EPPO PP 1/26(4) 1,5x10=15m ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pn/15	Poznań-Biocentrum / Poland winter barley/ Su Jule F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700

		637 Poznań, Poland					
AF/23/JO/34/Pn/16	Poznań-Biocentrum / Poland winter barley/ Bordeaux F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pn/17	Poznań-Biocentrum / Poland winter barley/Gloria F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pn/18	Poznań-Biocentrum / Poland winter barley/Su Jule F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pn/19	Poznań-Biocentrum / Poland winter barley/ Bordeaux F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700
AF/23/JO/34/Pn/20	/ Poland winter barley/Gloria F N	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	EPPO PP 1/26(4) 3500 cm ²	BBCH 00	n/a	1	700
CPRHU23-1077-025FE	Szombathely/ Hungary winter barley/KWS Donau F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1078-025FE	Porrog / Hungary winter barley/KH KORSÓ F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1079-025FE	Hódmezővásárhely / Hungary winter barley/ Botond F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1080-025FE	Szombathely / Hungary winter barleyKWS Donau/	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700

	F N						
CPRHU23-1081-025FE	Porrog / Hungary winter barley/Botond	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1082-025FE	Hódmezővásárhely / Hungary winter barley/ KH Korsó	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1071-025FE	Szombathely / Hungary winter barley/ KWS Donau	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1072-025FE	Zákány / Hungary winter barley/ GK Judy	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1073-025FE	Hódmezővásárhely/ Hungary winter barley/ KWS Daxor	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1074-025FE	Szombathely / Hun- gary winter barley/ KWS Donau	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1075-025FE	Porrog / Hungary winter barley/ GK Judy	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1076-025FE	Hódmezővásárhely / Hungary winter barley/ KWS Daxor	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1062-025FE	Szombathely / Hun- gary winter wheat/ NS 46	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1063-025FE	Zákány / Hungary winter wheat/ GK Csillag	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1064-025FE	Balástya / Hungary winter wheat/ MV Nádor	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
	F N						
CPRHU23-1065-025FE	Szombathely/ Hun- gary	CPR Europe Kft., Török Ignác u. 30.,	EPPO PP 1/26(4)	BBCH 00	n/a	1	700

	winter wheat/ KWS Exotic F N	Szombathely, Hungary	5,4 m ²				
CPRHU23-1066-025FE	Zákány / Hungary winter wheat/NS 46 F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1067-025FE	Balástya / Hungary winter wheat/ MV Nádor F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1068-025FE	Szombathely / Hun- gary winter wheat/KWS Exotic F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1069-025FE	Zákány/ Hungary winter wheat/ GK Csillag F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700
CPRHU23-1070-025FE	Balástya / Hungary winter wheat/ MV Nádor F N	CPR Europe Kft., Török Ignác u. 30., Szombathely, Hungary	EPPO PP 1/26(4) 5,4 m ²	BBCH 00	n/a	1	700

Notes:

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

Appendix 4 Summary of data on effectiveness trials per use

Test report (1)	Crop/ cultivar Harmful or- ganism/ weed species or intended use	Assessed part and variable (2) no / m²	Untreated BBCH (during application)	Efficacy treatments (3)				Remarks (4)
				Product		Standard (s)		
				name	Dose [L/ha]	name	dose [L /ha]	
AF/20/PO/32/Pn/01	winter wheat / Arkadia FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020
AF/20/PO/32/Pn/02	winter wheat / Potenzial FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020
AF/20/PO/32/Pn/03	winter wheat / Opal FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020
AF/20/PO/32/Pn/04	winter wheat / Opal MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
AF/20/PO/32/Pn/05	winter wheat / Princeps MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
AF/20/PO/32/Pn/06	winter wheat / Tonacja MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
8 F/2021	winter wheat / Jubilar USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 18.06.2021
9 F/2021	winter wheat / Turnia USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 18.06.2021
10 F/2021	winter wheat / Nadobna USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 18.06.2021

11 F/2021	winter wheat / Tobak FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 13.11.2020 – FUSASP 25.02.2021 – MONGNI
12 F/2021	winter wheat / Zyta FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 16.11.2020 – FUSASP 25.02.2021 – MONGNI
22 F/2021	winter wheat / Zyta TILLCA	PLPRIN P	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 06.07.2021
23 F/2021	winter wheat / Fidelius TILLCA	PLPRIN P	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 25.09.2020 Assessment date: 06.07.2021
APK-20-47775-PL01	winter wheat / Bilanz TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 07.07.2021
APK-20-47775-PL02	winter wheat / Mewa TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 29.07.2021
APK-20-47775-PL03	winter wheat / Julius TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 19.07.2021
APK-20-47891-PL01	winter wheat / Julius FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 01.04.2021
APK-20-47891-PL02	winter wheat / Bilanz FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021
APK-20-47891-PL03	winter wheat / Julius FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 17.03.2021

AF/20/PO/32/Br/01	winter wheat / Potenzial TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 04.06.2021
AF/20/PO/32/Pr/02	winter wheat / Tonacja TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 08.06.2021
AF/20/PO/32/Gr/03	winter wheat / Princeps TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 04.06.2021
AF/20/PO/32/Zi/04	winter wheat / Bogatka TILLCA	EAR C	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 09.06.2021
AF/20/PO/32/Br/05	winter wheat / Princeps FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 16.10.2021 06.04.2021 – MONGNI
AF/20/PszO/32/Pn/07	winter triticale / Twingo FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.02.2021 Assessment date: 10.02.2021 22.02.2021
AF/20/PszO/32/Pn/08	winter triticale / Salto FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.02.2021 Assessment date: 10.02.2021 22.02.2021
AF/20/PszO/32/Pn/09	winter triticale / Grenado FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.02.2021 Assessment date: 10.02.2021 22.02.2021
AF/20/PszO/32/Pn/10	winter triticale / Wilton MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 23.02.2021 Assessment date: 02.03.2021 10.03.2021
AF/20/PszO/32/Pn/11	winter triticale / Salto MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 23.02.2021 Assessment date: 02.03.2021 10.03.2021

AF/20/PszO/32/Pn/12	winter triticales / Magnat MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 23.02.2021 Assessment date: 02.03.2021 10.03.2021
15 F/2021	winter triticales / Trismart FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 21.09.2020 Assessment date: 20.10.2020 – FUSASP 25.02.2021 – MONGNI
16 F/2021	winter triticales / Rotondo FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 21.09.2020 Assessment date: 09.10.2020 – FUSASP 25.02.2021 – MONGNI
APK-20-47891-PL04	winter triticales / Porto FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 01.04.2021
APK-20-47891-PL05	winter triticales / Borowik FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 24.03.2021
APK-20-47891-PL06	winter triticales / Borowik FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 31.03.2021
AF/20/PszO/32/Pr/06	winter triticales / Twingo FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 20.10.2020 – FUSASP 02.04.2021 – MONGNI
AF/20/ŻO/32/Pn/13	winter rye / Poznańskie FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020
AF/20/ŻO/32/Pn/14	winter rye / Diamant FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020

AF/20/ŻO/32/Pn/15	winter rye / Daniello FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 16.11.2020 Assessment date: 24.11.2020 04.12.2020
AF/20/ŻO/32/Pn/16	winter rye / Palazzo MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
AF/20/ŻO/32/Pn/17	winter rye / Diamant MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
AF/20/ŻO/32/Pn/18	winter rye / Poznańskie MONGNI	PLANT C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 11.01.2021 Assessment date: 19.01.2021 27.01.2021
17 F/2021	winter rye / Dańkowskie Rubin FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 05.11.2020 – FUSASP 25.02.2021 – MONGNI
18 F/2021	winter rye / Dukato FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 05.11.2020 – FUSASP 25.02.2021 – MONGNI
19 F/2021	winter rye / Su Forsetti FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 09.11.2020 – FUSASP 25.02.2021 – MONGNI
26 F/2021	winter rye / Dukato UROCO	PLPRIN P	UROCO BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021
27 F/2021	winter rye / Dańkowskie Rubin UROCO	PLPRIN P	UROCO BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021

28 F/2021	winter rye / Su Forsetti UROCOC	PLPRIN P	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021
29 F/2021	winter rye / Dańkowskie Granat UROCOC	PLPRIN P	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021
30 F/2021	winter rye / Dańkowskie Diamant UROCOC	PLPRIN P	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 31.03.2021
APK-20-47891-PL07	winter rye / Agat FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 01.04.2021
APK-20-47891-PL08	winter rye / Dańkowskie Turkus FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 29.09.2020 Assessment date: 15.03.2021
APK-20-47891-PL09	winter rye / Dańkowskie Amber FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 31.03.2021
AF/20/ŻO/32/Br/07	winter rye / Daniello UROCOC	EAR C	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 08.06.2021
AF/20/ŻO/32/Pr/08	winter rye / Poznańskie UROCOC	EAR C	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 14.06.2021
AF/20/ŻO/32/Gr/09	winter rye / Palazzo UROCOC	EAR C	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 30.09.2020 Assessment date: 11.06.2021
AF/20/ŻO/32/Zł/10	winter rye / Dańkowskie Diamant UROCOC	EAR C	UROCOC BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 01.10.2020 Assessment date: 09.06.2021
9 F/2022	winter wheat / Jubilar USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS	60 80	Premis 025 FS Redigo	200 100	Application date: 04.10.2021 Assessment

				3.CHR/ZF/PROTI 100 FS	100	100 FS		date: 20.10.2021 25.10.2021 05.11.2021 06.06.2022
10 F/2022	winter wheat / Turnia USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 04.10.2021 Assessment date: 20.10.2021 25.10.2021 08.11.2021 06.06.2022
11 F/2022	winter wheat / Nadobna USTINT	PLPRIN P	USTINT BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo 100 FS	200 100	Application date: 04.10.2021 Assessment date: 20.10.2021 25.10.2021 04.11.2021 06.06.2022
1 F/2024	Winter barley / Clakri PYRNGR	PLPRIN P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 06.05.2023
2 F/2024	Winter barley / Astoria PYRNGR	PLPRIN P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 06.05.2023
3 F/2024	Winter barley / Igri PYRNGR	PLPRIN P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 06.05.2023
4 F/2024	Winter barley / U313 PYRNGR	PLPRIN P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 06.05.2023
5 F/2024	Winter barley /Titus PYRNGR	PLPRIN P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 06.05.2023

AF/23/JO/ZI/03	Winter barley / Kosmos PYRNGR	LEAF C	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 22.09.2023 Assessment date: 11.10.2023 23.05.2023
AF/23/JO/34/Pr/04	Winter barley /Sandra PYRNGR	LEAF C	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 20.09.2023 Assessment date: 12.10.2023 27.05.2023
AF/23/JO/34/Br/05	Winter barley /Sandra PYRNGR	LEAF C	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 21.09.2023 Assessment date: 16.10.2023 17.05.2023
AF/23/JO/34/De/06	Winter barley / Arenia PYRNGR	LEAF C	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 28.09.2023 Assessment date: 23.10.2023 20.05.2023
6 F/2024	Winter barley / Ketos PYRNTE	PLPRIN P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 09.10.2023 02.04.2024
7 F/2024	Winter barley / Return PYRNTE	PLPRIN P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 11.10.2023 18.10.2023 02.04.2024
8 F/2024	Winter barley / Jeanie PYRNTE	PLPRIN P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 09.10.2023 18.10.2023 02.04.2024
9 F/2024	Winter barley / Jakubus PYRNTE	PLPRIN P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 09.10.2023 18.10.2023

								02.04.2024
10 F/2024	Winter barley / Bažant PYRNTE	PLPRIN P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 09.10.2023 18.10.2023 02.04.2024
AF/23/JO/34/Zl/11	Winter barley / Kosmos PYRNTE	LEAF; C	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 22.09.2023 Assessment date: 13.10.2023 20.10.2023 04.12.2023
AF/23/JO/34/Pr/12	Winter barley / Sandra PYRNTE	LEAF; C	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 20.09.2023 Assessment date: 09.10.2023 23.10.2023 04.12.2023
AF/23/JO/34/Br/13	Winter barley / Sandra PYRNTE	LEAF; C	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 21.09.2023 Assessment date: 18.10.2023 27.10.2023 06.12.2023
AF/23/JO/34/De/14	Winter barley / Arenia PYRNTE	LEAF; C	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 28.09.2023 Assessment date: 26.10.2023 03.11.2023 11.12.2023
11 F/2024	Winter barley / Clakri USTINH	PLPRIN P	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 13.05.2023
12 F/2024	Winter barley / Astoria USTINH	PLPRIN P	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 13.05.2023
13 F/2024	Winter barley / Igri	PLPRIN P	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI	60 80	Redigo Pro 170	50	Application date: 19.09.2023

	USTINH			100 FS 3.CHR/ZF/PROTI 100 FS	100	FS Redigo 100 FS	100	Assessment date: 28.09.2023 02.10.2023 06.10.2023 13.05.2023
14 F/2024	Winter barley / U313 USTINH	PLPRIN P	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 06.10.2023 13.05.2023
15 F/2024	Winter barley / Titus USTINH	PLPRIN P	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 19.09.2023 Assessment date: 28.09.2023 02.10.2023 09.10.2023 13.05.2023
AF/23/JO/34/Zl/07	Winter barley / Kosmos USTINH	EAR C	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 22.09.2023 Assessment date: 12.10.2023 03.06.2023
AF/23/JO/34/Pr/08	Winter barley / Sandra USTINH	EAR C	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 20.09.2023 Assessment date: 10.10.2023 05.06.2024
AF/23/JO/34/Br/09	Winter barley / Sandra USTINH	EAR C	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 21.09.2023 Assessment date: 16.10.2023 10.06.2024
AF/23/JO/34/De/10	Winter barley / Arenia USTINH	EAR C	USTINH BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	50 100	Application date: 28.09.2023 Assessment date: 25.10.2023 30.05.2024
19 F/2024	Winter barley / Bazant FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 29.10.2023 03.10.2023 06.10.2023 12.02.2024
20 F/2024	Winter barley / Return	PLPRIN P	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS	60	Redigo Pro 170	66,7	Application date:

	FUSASP MONGNI		MONGNI BBCH 00	2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	80 100	FS Redigo 100 FS	100	19.09.2023 Assessment date: 29.10.2023 03.10.2023 06.10.2023 12.02.2024
21 F/2024	Winter barley / Jeanie FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 29.10.2023 03.10.2023 06.10.2023 13.10.2023 12.02.2024
22 F/2024	Winter barley / Jakubus FUSASP MONGNI	PLPRIN P	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 19.09.2023 Assessment date: 29.10.2023 03.10.2023 06.10.2023 13.10.2023 12.02.2024
AF/23/JO/34/Zt/01	Winter barley / Su Jule FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 22.09.2023 Assessment date: 29.10.2023 03.10.2023 06.10.2023 13.10.2023 12.02.2024
AF/23/JO/34/Pr/02	Winter barley / Gloria FUSASP MONGNI	PLANT C	FUSASP BBCH 00 MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 20.09.2023 Assessment date: 13.10.2023 01.04.2024
AF/23/JO/34/Pn/15	Winter barley / Su Jule FUSASP	PLANT; C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 04.10.2023 Assessment date: 11.10.2023 20.10.2023
AF/23/JO/34/Pn/16	Winter barley / Bordeux FUSASP	PLANT; C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 04.10.2023 Assessment date: 11.10.2023 20.10.2023
AF/23/JO/34/Pn/17	Winter barley / Gloria FUSASP	PLANT; C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 04.10.2023 Assessment date: 11.10.2023 20.10.2023
AF/23/JO/34/Pn/18	Winter barley / Su Jule MONGNI	PLANT; C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo	66,7 100	Application date: 04.10.2023 Assessment date:

						100 FS		11.10.2023 20.10.2023
AF/23/JO/34/Pn/15	Winter barley / Bordeux MONGNI	PLANT; C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 04.10.2023 Assessment date: 11.10.2023 20.10.2023
AF/23/JO/34/Pn/15	Winter barley / Gloria MONGNI	PLANT; C	MONGNI BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Redigo Pro 170 FS Redigo 100 FS	66,7 100	Application date: 04.10.2023 Assessment date: 11.10.2023 20.10.2023
CPRHU23-1077-025FE	winter barley/ KWS Donau PYRNGR	TILLER;C	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date:
CPRHU23-1078-025FE	Winter barley / KH KORSÓ PYRNGR	TILLER;P	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 27.02.2024 30.04.2024
CPRHU23-1079-025FE	Winter barley / Botond PYRNGR	TILLER PLANT	PYRNGR BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Appli cation date: 27.10.2023 Assessment date: 15.12.2023 06.05.2024
CPRHU23-1080-025FE	Winter barley / KWS Donau PYRNTE	LEAF P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 26.04.2024 22.06.2024
CPRHU23-1081-025FE	Winter barley / Botond PYRNTE	LEAF P	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 13.03.2024
CPRHU23-1082-025FE	Winter barley / KH Korsó PYRNTE	LEAF P PLANT	PYRNTE BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 04.03.2024
CPRHU23-1071-025FE	Winter barley / KWS Donau	PLANT	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS	60	Premis	150	Application date:

	FUSASP			2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	80 100	025 FS Redigo Pro 170 FS	66,7	27.10.2023 Assessment date: 27.02.2024 21.03.2024
CPRHU23-1072-025FE	Winter barley / GK Judy FUSASP	PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 04.03.2024 14.03.2024 22.06.2024
CPRHU23-1073-025FE	Winter barley / KWS Daxor FUSASP	PLANT	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 04.03.2024
CPRHU23-1074-025FE	Winter barley / KWS Donau MICDMA	PLANT	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 27.02.2024 21.03.2024
CPRHU23-1075-025FE	Winter barley / GK Judy MICDMA	PLANT P	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 13.03.2024
CPRHU23-1076-025FE	Winter barley / KWS Daxor MICDMA	PLANT	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 04.03.2024
CPRHU23-1068-025FE	Winter wheat / KWS Exotic TILLCA	PLANT EAR	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 27.02.2024 25.06.2024
CPRHU23-1069-025FE	Winter wheat / GK Csillag TILLCA	PLANT EAR	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 18.06.2024
CPRHU23-1070-025FE	Winter wheat / MV Nádor	PLANT	TILLCA BBCH 00	1.CHR/ZF/PROTI 100 FS	60	Premis	150	Application date:

	TILLCA	EAR		2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	80 100	025 FS Redigo Pro 170 FS	66,7	27.10.2023 Assessment date: 22.01.2024 07.06.2024
CPRHU23-1062-025FE	Winter wheat / NS 46 FUSASP	PLANT	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 27.02.2024 21.03.2024
CPRHU23-1063-025FE	Winter wheat / GK Csillag FUSASP	PLANT P PLANT C	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 14.03.2024
CPRHU23-1064-025FE	Winter wheat / MV Nádor FUSASP	PLANT	FUSASP BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 04.03.2024
CPRHU23-1065-025FE	Winter wheat / KWS Exotic MICDMA	PLANT	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 27.02.2024 21.03.2024
CPRHU23-1066-025FE	Winter wheat / NS 46 MICDMA	PLANT P PLANT C	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 15.12.2023 14.03.2024
CPRHU23-1067-025FE	Winter wheat / MV Nádor MICDMA	PLANT	MICDMA BBCH 00	1.CHR/ZF/PROTI 100 FS 2.CHR/ZF/PROTI 100 FS 3.CHR/ZF/PROTI 100 FS	60 80 100	Premis 025 FS Redigo Pro 170 FS	150 66,7	Application date: 27.10.2023 Assessment date: 22.01.2024 04.03.2024

Notes:

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

Appendix 5 Summary of detailed data on fungicide seed treatment effectiveness trials

North-East Zone – Poland

Table 1. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter wheat. Assessment of efficacy in autumn 16 - 52 days after application.

Pest code			FUSASP Fusarium sp. autumn assessment					
report code			11 F/2021	12 F/2021	AF/20/PO/32/Br/05			
DA-A			49 DA-A	52 DA-A	16 DA-A			
date			13.11.2020	16.11.2020	16.10.2020	Average	min.	max.
Pest incidence / disease plant			62,00	55,00	35,90	50,97	35,90	62,00
Part assessed			PLPRIN P	PLPRIN P	PLANT C			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	14,50	23,60	38,00	25,37	14,50	38,00
3	CHR/ZF/PROTI 100 FS	80,00	43,50	35,50	72,20	50,40	35,50	72,20
4	CHR/ZF/PROTI 100 FS	100,00	50,80	54,50	95,70	67,00	50,80	95,70
5	Premis 025 FS	200,00	48,40	50,90	98,00	65,77	48,40	98,00
6	Redigo 100 FS	100,00	50,80	58,20	95,00	68,00	50,80	95,00
LSD (P=.05)			10,40	7,90	11,88			

Table 2. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter wheat. Assessment of efficacy in spring 169-183 days after application.

Pest code			FUSASP Fusarium sp. spring assessment					
report code			APK-20-47891-PL01	APK-20-47891-PL02	APK-20-47891-PL03			
DA-A			183 DA-A	181 DA-A	169 DA-A			
date			01.04.2021	31.03.2021	17.03.2021	Average	min.	max.
Pest incidence / disease plant			62,80	15,30	21,90	33,33	15,30	62,80
Part assessed			PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	33,40	79,50	67,00	59,97	33,40	79,50
3	CHR/ZF/PROTI 100 FS	80,00	39,10	100,00	77,80	72,30	39,10	100,00
4	CHR/ZF/PROTI 100 FS	100,00	50,20	100,00	88,50	79,57	50,20	100,00
5	Premis 025 FS	200,00	23,90	100,00	82,70	68,87	23,90	100,00
6	Redigo 100 FS	100,00	29,90	100,00	82,50	70,80	29,90	100,00
LSD (P=.05)			4,78	5,23	9,87			

Table 3. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter wheat. Assessment of efficacy in laboratory experiments 8 - 18 days after application.

Pest code			FUSASP Fusarium sp.								
report code			AF/20/PO/32/Pn/01		AF/20/PO/32/Pn/02		AF/20/PO/32/Pn/03				
DA-A			8 DA-A	18 DA-A	8 DA-A	18 DA-A	8 DA-A				18 DA-A
date			24.11.2020	04.12.2020	24.11.2020	04.12.2020	24.11.2020	04.12.2020	Average	min.	max.
Pest incidence / disease plant			6,30	8,30	5,30	6,00	7,00	8,00	6,82	5,30	8,30
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	36,00	42,40	47,60	54,20	39,30	37,50	42,83	36,00	54,20
3	CHR/ZF/PROTI 100 FS	80,00	64,00	69,70	57,10	58,30	60,70	62,50	62,05	57,10	69,70
4	CHR/ZF/PROTI 100 FS	100,00	72,00	81,80	66,70	62,50	78,60	75,00	72,77	62,50	81,80
5	Premis 025 FS	200,00	52,00	66,70	47,60	47,80	67,90	68,80	58,47	47,60	68,80
6	Redigo 100 FS	100,00	68,00	66,70	71,40	71,80	71,40	71,90	70,20	66,70	71,90
LSD (P=.05)			23,12	19,36	36,03	39,99	19,88	17,40			

Table 4. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter wheat. Assessment of efficacy in field trials 153-188 days after application

Pest code			MONGNI Monographella nivalis (anam. Microdochium nivale)								
report code			11 F/2021	12 F/2021	APK-20-47891-PL01	APK-20-47891-PL02	APK-20-47891-PL03	AF/20/PO/32/Br/05			
DA-A			153 DA-A	153 DA-A	183 DA-A	181 DA-A	169 DA-A	188 DA-A			
date			25.02.2021	25.02.2021	01.04.2021	31.03.2021	17.03.2021	06.04.2021	Average	min.	max.
Pest incidence / disease plant			8,00	5,00	9,70	6,00	11,40	31,40	11,92	5,00	31,40
Part assessed			PLPRIN P	PLPRIN P	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	41,90	52,40	56,30	91,40	72,90	32,60	57,92	32,60	91,40
3	CHR/ZF/PROTI 100 FS	80,00	54,80	61,90	66,00	100,00	100,00	74,10	76,13	54,80	100,00
4	CHR/ZF/PROTI 100 FS	100,00	61,30	66,70	76,90	100,00	100,00	95,20	83,35	61,30	100,00
5	Premis 025 FS	200,00	64,50	81,00	53,50	100,00	100,00	95,20	82,37	53,50	100,00
6	Redigo 100 FS	100,00	45,20	38,10	61,90	100,00	100,00	96,10	73,55	38,10	100,00
LSD (P=.05)			0,80	0,70	7,07	6,26	12,82	23,72			

Table 5. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter wheat. Assessment of efficacy in laboratory experiments 8 - 16 days after application

Pest code			MONGNI Monographella nivalis (anam. Microdochium nivale)								
report code			AF/20/PO/32/Pn/04		AF/20/PO/32/Pn/05		AF/20/PO/32/Pn/06				
DA-A			8 DA-A	16 DA-A	8 DA-A	16 DA-A	8 DA-A	16 DA-A			
date			19.01.2021	27.01.2021	19.01.2021	27.01.2021	19.01.2021	27.01.2021	Average	min.	max.
Pest incidence / disease plant			6,80	8,50	6,30	8,30	7,30	9,00	7,70	6,30	9,00
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	22,20	26,50	36,00	39,40	13,80	19,40	26,22	13,80	39,40
3	CHR/ZF/PROTI 100 FS	80,00	29,60	29,40	52,00	69,70	34,50	36,10	41,88	29,40	69,70
4	CHR/ZF/PROTI 100 FS	100,00	55,60	61,80	52,00	72,70	75,90	77,80	65,97	52,00	77,80
5	Premis 025 FS	200,00	51,90	52,90	48,00	66,70	72,40	75,00	61,15	48,00	75,00
6	Redigo 100 FS	100,00	59,30	58,80	44,00	69,70	44,80	44,40	53,50	44,00	69,70
LSD (P=.05)			39,65	42,02	26,29	21,09	49,39	50,47			

Table 6. The efficacy of CHR/ZF/PROTI in control of *TILLCA Tilletia caries* in winter wheat

Pest code	report code	DA-A	date	Pest incidence / disease plant	Part assessed	No.	1	2	3	4	5	6	LSD (P=,05)
						Name	Untreated Check	CHR/ZF/PROTI 100 FS	CHR/ZF/PROTI 100 FS	CHR/ZF/PROTI 100 FS	Premis 025 FS	Redigo 100 FS	
						Rate (ml/100 kg)		60,00	80,00	100,00	200,00	100,00	
<i>TILLCA Tilletia caries</i>	22 F/2021	284 DA-A	06.07.2021	29,04	PLPRIN P		0,00	100,00	100,00	100,00	100,00	99,70	3,221
	23 F/2021	284 DA-A	06.07.2021	32,39	PLPRIN P		0,00	97,20	99,70	100,00	100,00	100,00	2,082
	APK-20-47775-PL01	281 DA-A	07.07.2021	349,70	EAR C		0,00	99,70	100,00	100,00	99,80	100,00	0,28
	APK-20-47775-PL02	302 DA-A	29.07.2021	114,40	EAR C		0,00	91,70	98,50	100,00	100,00	100,00	1,15
	APK-20-47775-PL03	293 DA-A	19.07.2021	225,20	EAR C		0,00	97,30	100,00	100,00	100,00	100,00	0,81
	AF/20/PO/32/Br/01	247 DA-A	04.06.2021	190,00	EAR C		0,00	84,00	93,00	100,00	99,00	100,00	2,90
	AF/20/PO/32/Pr/02	251 DA-A	08.06.2021	432,80	EAR C		0,00	83,00	94,00	100,00	99,00	100,00	3,10
	AF/20/PO/32/Gr/03	247 DA-A	04.06.2021	344,90	EAR C		0,00	80,00	91,00	100,00	100,00	100,00	0,2-3,8
	AF/20/PO/32/Zl/04	251 DA-A	09.06.2021	381,90	EAR C		0,00	77,00	91,00	100,00	100,00	100,00	0,1-2,9
			Average	233,37			0,00	89,99	96,36	100,00	99,76	99,97	
			min.	29,04			0,00	77,00	91,00	100,00	99,00	99,70	
			max.	432,80			0,00	100,00	100,00	100,00	100,00	100,00	

Table 7. The efficacy of CHR/ZF/PROTI in control of *USTINT Ustilago tritici* in winter wheat

Pest code			USTINT Ustilago tritici								
report code			8 F/2021	9 F/2021	10 F/2021	9 F/2022	10 F/2022	11 F/2022			
DA-A			266 DA-A	266 DA-A	266 DA-A	245 DA-A	245 DA-A	245 DA-A			
date			18.06.2021	18.06.2021	18.06.2021	06.06.2022	06.06.2022	06.06.2022	Average	min.	max.
Pest incidence / disease plant			5,49	7,86	6,76	3,03	5,16	5,05	5,56	3,03	7,86
Part assessed			PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	93,60	95,50	95,00	98,00	99,00	97,00	96,35	93,60	99,00
3	CHR/ZF/PROTI 100 FS	80,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
4	CHR/ZF/PROTI 100 FS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
5	Premis 025 FS	200,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
6	Redigo 100 FS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
LSD (P=.05)			1,541	0,576	1,079	1,276	0,522	0,213			

Table 8. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter triticale. Assessment of efficacy in autumn 20 - 49 days after application.

Pest code			FUSASP Fusarium sp. autumn assessment					
report code			15 F/2021	16 F/2021	AF/20/PszO/32/Pr/06			
DA-A			29 DA-A	49 DA-A	20 DA-A			
date			20.10.2020	09.10.2020	20.10.2020	Average	min.	max.
Pest incidence / disease plant			52,00	40,50	36,80	43,10	36,80	52,00
Part assessed			PLPRIN P	PLPRIN P	PLANT C			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	34,60	27,20	30,00	30,60	27,20	34,60
3	CHR/ZF/PROTI 100 FS	80,00	60,60	66,70	64,00	63,77	60,60	66,70
4	CHR/ZF/PROTI 100 FS	100,00	66,30	80,20	93,70	80,07	66,30	93,70
5	Premis 025 FS	200,00	78,80	77,80	91,50	82,70	77,80	91,50
6	Redigo 100 FS	100,00	54,80	74,10	94,40	74,43	54,80	94,40
LSD (P=.05)			9,26	11,416	6,81			

Table 9. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter triticale. Assessment of efficacy in spring 175-184 days after application.

Pest code			FUSASP Fusarium sp. spring assessment					
report code			APK-20-47891-PL04	APK-20-47891-PL05	APK-20-47891-PL06			
DA-A			184 DA-A	175 DA-A	183 DA-A			
date			01.04.2021	24.03.2021	31.03.2021	Average	min.	max.
Pest incidence / disease plant			66,00	19,10	18,00	34,37	18,00	66,00
Part assessed			PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	26,10	51,80	58,40	45,43	26,10	58,40
3	CHR/ZF/PROTI 100 FS	80,00	43,40	67,20	81,20	63,93	43,40	81,20
4	CHR/ZF/PROTI 100 FS	100,00	64,20	85,90	88,90	79,67	64,20	88,90
5	Premis 025 FS	200,00	62,60	79,50	87,50	76,53	62,60	87,50
6	Redigo 100 FS	100,00	61,60	82,40	89,90	77,97	61,60	89,90
LSD (P=.05)			12,50	22,07	11,63			

Table 10. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter triticales. Assessment of efficacy in laboratory experiments 9 - 21 days after application.

Pest code			FUSASP Fusarium sp.								
report code			AF/20/PszO/32/Pn/07		AF/20/PszO/32/Pn/08		AF/20/PszO/32/Pn/09				
DA-A			9 DA-A	21 DA-A	9 DA-A	21 DA-A	9 DA-A				21 DA-A
date			10.02.2021	22.02.2021	10.02.2021	22.02.2021	10.02.2021	22.02.2021	Average	min.	max.
Pest incidence / disease plant			5,00	6,80	5,30	6,30	6,30	9,30	6,50	5,00	9,30
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	45,00	48,10	57,10	60,00	48,00	54,10	52,05	45,00	60,00
3	CHR/ZF/PROTI 100 FS	80,00	55,00	63,00	71,40	60,00	68,00	67,60	64,17	55,00	71,40
4	CHR/ZF/PROTI 100 FS	100,00	85,00	88,90	71,40	64,00	72,00	70,30	75,27	64,00	88,90
5	Premis 025 FS	200,00	30,00	37,00	47,60	48,00	80,00	91,90	55,75	30,00	91,90
6	Redigo 100 FS	100,00	35,00	51,90	57,10	56,00	76,00	81,10	59,52	35,00	81,10
LSD (P=.05)			59,58	55,26	31,59	21,70	27,14	22,65			

Table 11. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*) winter triticales. Assessment of efficacy in field trials 157-184 days after application.

Pest code			MONGNI Monographella nivalis (anam. Microdochium nivale)								
report code			15 F/2021	16 F/2021	APK-20-47891-PL04	APK-20-47891-PL05	APK-20-47891-PL06	AF/20/PszO/32/Pr/06			
DA-A			157 DA-A	157 DA-A	184 DA-A	175 DA-A	183 DA-A	184 DA-A			
date			25.02.2021	25.02.2021	01.04.2021	24.03.2021	31.03.2021	02.04.2021	Average	min.	max.
Pest incidence / disease plant			17,25	19,50	13,50	15,50	10,20	29,70	17,61	10,20	29,70
Part assessed			PLPRIN P	PLPRIN P	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	34,80	39,70	43,80	75,10	86,70	19,00	49,85	19,00	86,70
3	CHR/ZF/PROTI 100 FS	80,00	59,40	69,20	53,00	100,00	100,00	57,30	73,15	53,00	100,00
4	CHR/ZF/PROTI 100 FS	100,00	66,70	82,10	68,60	100,00	100,00	95,90	85,55	66,70	100,00
5	Premis 025 FS	200,00	56,50	83,30	70,40	100,00	100,00	91,30	83,58	56,50	100,00
6	Redigo 100 FS	100,00	79,70	83,30	68,10	100,00	100,00	95,70	87,80	68,10	100,00
LSD (P=.05)			3,124	3,541	11,58	11,21	6,96	12,81			

Table 12. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*) winter triticales. Assessment of efficacy in laboratory experiments 7 - 15 days after application.

Pest code			MONGNI Monographella nivalis (anam. Microdochium nivale)								
report code			AF/20/PszO/32/Pn/10		AF/20/PszO/32/Pn/11		AF/20/PszO/32/Pn/12				
DA-A			7 DA-A	15 DA-A	7 DA-A	15 DA-A	7 DA-A	15 DA-A			
date			02.03.2021	10.03.2021	02.03.2021	10.03.2021	02.03.2021	10.03.2021	Average	min.	max.
Pest incidence / disease plant			6,30	8,30	5,00	5,80	5,30	6,30	6,17	5,00	8,30
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	36,00	39,40	40,00	30,40	33,30	36,00	35,85	30,40	40,00
3	CHR/ZF/PROTI 100 FS	80,00	76,00	75,80	80,00	73,90	65,80	68,00	73,25	65,80	80,00
4	CHR/ZF/PROTI 100 FS	100,00	88,00	81,80	90,00	82,60	71,10	77,00	81,75	71,10	90,00
5	Premis 025 FS	200,00	76,00	81,80	85,00	73,90	66,70	56,00	73,23	56,00	85,00
6	Redigo 100 FS	100,00	80,00	81,80	75,00	73,90	66,70	44,00	70,23	44,00	81,80
LSD (P=.05)			17,75	20,03	24,20	27,02	51,37	48,26			

Table 13. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* winter rye. Assessment of efficacy in autumn 35-39 days after application

Pest code			FUSASP Fusarium sp. autumn assessment					
report code			17 F/2021	18 F/2021	19 F/2021			
DA-A			35 DA-A	35 DA-A	39 DA-A			
date			05.11.2020	05.11.2020	09.11.2020	Average	min.	max.
Pest incidence / disease plant			12,00	18,50	9,50	13,33	9,50	18,50
Part assessed			PLPRIN P	PLPRIN P	PLPRIN P			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	75,00	59,50	57,90	64,13	57,90	75,00
3	CHR/ZF/PROTI 100 FS	80,00	100,00	75,70	94,70	90,13	75,70	100,00
4	CHR/ZF/PROTI 100 FS	100,00	100,00	86,50	100,00	95,50	86,50	100,00
5	Premis 025 FS	200,00	83,30	83,80	94,70	87,27	83,30	94,70
6	Redigo 100 FS	100,00	83,30	89,20	84,20	85,57	83,30	89,20
LSD (P=.05)			1,439	3,209	1,959			

Table 14. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* winter rye. Assessment of efficacy in spring 167-184 days after application.

Pest code			FUSASP Fusarium sp. spring assessment					
report code			APK-20-47891-PL07	APK-20-47891-PL08	APK-20-47891-PL09			
DA-A			184 DA-A	167 DA-A	182 DA-A			
date			01.04.2021	15.03.2021	31.03.2021	Average	min.	max.
Pest incidence / disease plant			46,90	21,00	51,80	39,90	21,00	51,80
Part assessed			PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	33,90	42,90	35,50	37,43	33,90	42,90
3	CHR/ZF/PROTI 100 FS	80,00	45,20	71,60	41,20	52,67	41,20	71,60
4	CHR/ZF/PROTI 100 FS	100,00	55,40	82,80	53,60	63,93	53,60	82,80
5	Premis 025 FS	200,00	50,70	77,80	50,10	59,53	50,10	77,80
6	Redigo 100 FS	100,00	55,50	76,70	52,20	61,47	52,20	76,70
LSD (P=.05)			11,20	11,95	7,05			

Table 15. The efficacy of CHR/ZF/PROTI in control of FUSASP Fusarium sp. winter rye. Assessment of efficacy in laboratory experiments 8-18 days after application

Pest code			FUSASP Fusarium sp.								
report code			AF/20/ŽO/32/Pn/13		AF/20/ŽO/32/Pn/14		AF/20/ŽO/32/Pn/15				
DA-A			8 DA-A	18 DA-A	8 DA-A	18 DA-A	8 DA-A	18 DA-A			
date			24.11.2020	04.12.2020	24.11.2020	04.12.2020	24.11.2020	04.12.2020	Average	min.	max.
Pest incidence / disease plant			5,80	7,00	5,00	6,80	6,00	6,80	6,23	5,00	7,00
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	60,90	64,30	25,00	33,30	41,70	40,70	44,32	25,00	64,30
3	CHR/ZF/PROTI 100 FS	80,00	65,20	71,40	45,00	48,10	75,00	70,40	62,52	45,00	75,00
4	CHR/ZF/PROTI 100 FS	100,00	82,60	85,70	85,00	85,20	79,20	74,10	81,97	74,10	85,70
5	Premis 025 FS	200,00	69,60	71,40	50,00	63,00	70,80	66,70	65,25	50,00	71,40
6	Redigo 100 FS	100,00	69,60	64,30	55,00	63,00	66,70	59,30	62,98	55,00	69,60
LSD (P=.05)			40,51	36,39	59,78	56,99	29,84	20,52			

Table 16. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*) winter rye. Assessment of efficacy in field trials 147-184 days after application.

Pest code			MONGNI Monographella nivalis (anam. Microdochium nivale)								
report code			17 F/2021	18 F/2021	19 F/2021	APK-20-47891-PL07	APK-20-47891-PL08	APK-20-47891-PL09			
DA-A			147 DA-A	147 DA-A	147 DA-A	184 DA-A	167 DA-A	182 DA-A			
date			25.02.2021	25.02.2021	25.02.2021	01.04.2021	15.03.2021	31.03.2021	Average	min.	max.
Pest incidence / disease plant			5,25	9,75	5,75	13,10	13,50	6,70	9,01	5,25	13,50
Part assessed			PLPRIN P	PLPRIN P	PLPRIN P	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	71,40	64,10	65,20	26,90	79,50	59,80	61,15	26,90	79,50
3	CHR/ZF/PROTI 100 FS	80,00	95,20	89,70	95,70	64,20	100,00	73,10	86,32	64,20	100,00
4	CHR/ZF/PROTI 100 FS	100,00	100,00	94,90	100,00	77,20	100,00	84,40	92,75	77,20	100,00
5	Premis 025 FS	200,00	81,00	94,90	95,70	78,60	100,00	80,30	88,42	78,60	100,00
6	Redigo 100 FS	100,00	76,20	97,40	87,00	76,00	100,00	76,10	85,45	76,00	100,00
LSD (P=.05)			1,063	1,231	0,953	13,74	4,99	23,88			

Table 17. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*) winter rye. Assessment of efficacy in laboratory experiments 8 - 16 days after application.

Pest code			MONGNI <i>Monographella nivalis</i> (anam. <i>Microdochium nivale</i>)								
report code			AF/20/ŽO/32/Pn/16		AF/20/ŽO/32/Pn/17		AF/20/PszO/32/Pn/18				
DA-A			8 DA-A	16 DA-A	8 DA-A	16 DA-A	8 DA-A	16 DA-A			
date			19.01.2021	27.01.2021	19.01.2021	27.01.2021	19.01.2021	27.01.2021	Average	min.	max.
Pest incidence / disease plant			5,50	7,30	5,50	6,80	5,80	7,00	6,32	5,50	7,30
Part assessed			PLANT C	PLANT C	PLANT C	PLANT C	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	36,40	44,80	63,20	55,60	60,90	60,70	53,60	36,40	63,20
3	CHR/ZF/PROTI 100 FS	80,00	68,20	69,00	68,40	66,70	73,90	82,10	71,38	66,70	82,10
4	CHR/ZF/PROTI 100 FS	100,00	72,70	72,40	73,70	70,40	78,30	85,70	75,53	70,40	85,70
5	Premis 025 FS	200,00	59,10	58,60	68,40	63,00	73,90	75,00	66,33	58,60	75,00
6	Redigo 100 FS	100,00	54,50	51,70	52,60	51,90	78,30	78,60	61,27	51,70	78,60
LSD (P=.05)			53,18	45,29	43,35	33,92	23,61	28,63			

Table 18. The efficacy of CHR/ZF/PROTI in control of *UROCOC Urocystis occulta* winter rye.

Pest code			UROCOC Urocystis occulta											
report code			AF/20/ŽO/32/Br/07	AF/20/ŽO/32/Pr/08	AF/20/PO/32/Gr/09	AF/20/ŽO/32/ZI/10	26 F/2021	27 F/2021	28 F/2021	29 F/2021	30 F/2021			
DA-A			251 DA-A	257 DA-A	254 DA-A	251 DA-A	242 DA-A	242 DA-A	242 DA-A	242 DA-A	242 DA-A			
date			08.06.2021	14.06.2021	11.06.2021	09.06.2021	31.03.2021	31.03.2021	31.03.2021	31.03.2021	31.03.2021			
Pest incidence / disease plant			623,30	576,8	541,40	478,60	5,21	5,17	5,01	5,94	6,66	Average	min.	max.
Part assessed			EAR C	EAR C	EAR C	EAR C	PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P			
No.	Name	Rate (ml/100 kg)												
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	89,00	89,00	89,00	90,00	100,00	100,00	100,00	100,00	97,10	94,90	89,00	100,00
3	CHR/ZF/PROTI 100 FS	80,00	97,00	98,00	97,00	99,00	100,00	100,00	100,00	100,00	100,00	99,00	97,00	100,00
4	CHR/ZF/PROTI 100 FS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
5	Premis 025 FS	200,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
6	Redigo 100 FS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00
LSD (P=.05)			2,50	2,800	3,00	0,4-3,6	0,742	0,683	1,298	0,797	0,985			

Table 19. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter barley. Assessment of efficacy in autumn 20-24 days after application.

Pest code			FUSASP Fusarium sp.								
report code			19 F/2024	20 F/2024	21 F/2024	22 F/2024	AF/23/JO/34/ZI/01	AF/23/JO/34/Pr/02			
DA-A			23 DA-A	23 DA-A	24 DA-A	24 DA-A	20 DA-A	23 DA-A			
date			12.10.2023	12.10.2023	13.10.2023	13.10.2024	12.10.2023	13.10.2023	Average	min.	max.
Pest incidence / disease plant			13,50	12,50	13,00	19,00	53,50	60,50	28,67	12,50	60,50
Part assessed			PLPRIN; P	PLPRIN; P	PLPRIN; P	PLPRIN; P	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	51,90	44,00	50,00	57,90	73,00	59,30	56,02	44,00	73,00
3	CHR/ZF/PROTI 100 FS	80,00	70,40	72,00	73,10	71,10	87,80	85,60	76,67	70,40	87,80
4	CHR/ZF/PROTI 100 FS	100,00	85,20	84,00	88,50	84,20	97,10	95,10	89,02	84,00	97,10
5	Redigo Pro 170 FS	66,70	92,60	96,00	96,20	89,50	94,80	93,60	93,78	89,50	96,20
6	Redigo 100 FS	100,00	88,90	80,00	88,50	81,60	96,20	94,10	88,22	80,00	96,20
LSD (P=0.05)			3,901	2,155	2,456	4,538	3,200	7,880			

Table 20. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter barley. Assessment of efficacy in laboratory experiments 7-16 days after application.

Pest code			FUSASP Fusarium sp.								
report code			AF/23/JO/34/Pn/15	AF/23/JO/34/Pn/15	AF/23/JO/34/Pn/16	AF/23/JO/34/Pn/16	AF/23/JO/34/Pn/17	AF/23/JO/34/Pn/17			
DA-A			7 DA-A	16 DA-A	7 DA-A	16 DA-A	7 DA-A	16 DA-A			
date			11.10.2023	20.10.2023	11.10.2023	20.10.2023	11.10.2023	20.10.2023	Average	min.	max.
Pest severity			8,30	8,10	15,80	17,00	11,50	14,50	12,53	8,10	17,00
Part assessed			PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	62,50	61,30	82,50	75,00	71,70	70,70	70,62	61,30	82,50
3	CHR/ZF/PROTI 100 FS	80,00	66,70	64,50	92,10	83,80	89,10	84,50	80,12	64,50	92,10
4	CHR/ZF/PROTI 100 FS	100,00	89,60	83,90	93,70	86,80	89,10	87,90	88,50	83,90	93,70
5	Redigo Pro 170 FS	66,70	79,20	77,40	88,90	82,40	87,00	82,80	82,95	77,40	88,90
6	Redigo 100 FS	100,00	79,20	79,00	90,50	79,40	89,10	79,30	82,75	79,00	90,50
LSD (P=0.05)			11,670	10,620	10,300	8,480	10,960	7,510			

Table 21. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter barley. Assessment of efficacy in field trials 146-194 days after application

Pest code			MICDMA <i>Microdochium majus</i>								
report code			19 F/2024	20 F/2024	21 F/2024	22 F/2024	AF/23/JO/34/ZI/01	AF/23/JO/34/Pr/02			
DA-A			146 DA-A	146 DA-A	146 DA-A	146 DA-A	189 DA-A	194 DA-A			
date			12.02.2024	12.02.2024	12.02.2024	12.02.2024	29.03.2024	01.04.2024	Average	min.	max.
Pest incidence / disease plant			25,50	18,50	14,00	16,00	32,00	27,30	22,22	14,00	32,00
Part assessed			PLPRIN; P	PLPRIN; P	PLPRIN; P	PLPRIN; P	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	56,90	40,50	51,80	50,00	76,10	74,20	58,25	40,50	76,10
3	CHR/ZF/PROTI 100 FS	80,00	64,70	62,20	71,40	62,50	94,40	87,90	73,85	62,20	94,40
4	CHR/ZF/PROTI 100 FS	100,00	88,20	86,50	82,10	87,50	96,00	92,50	88,80	82,10	96,00
5	Redigo Pro 170 FS	66,70	92,20	91,90	89,30	90,60	96,60	94,60	92,53	89,30	96,60
6	Redigo 100 FS	100,00	84,30	83,80	85,70	81,30	94,50	93,50	87,18	81,30	94,50
LSD (P=.05)			3,836	4,910	2,704	4,140	4,610	5,650			

Table 22. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter wheat. Assessment of efficacy in laboratory experiments 7 - 16 days after application

Pest code			MICDMA <i>Microdochium majus</i>								
report code			AF/23/JO/34/Pn/18	AF/23/JO/34/Pn/18	AF/23/JO/34/Pn/19	AF/23/JO/34/Pn/19	AF/23/JO/34/Pn/20	AF/23/JO/34/Pn/20			
DA-A			7 DA-A	16 DA-A	7 DA-A	16 DA-A	7 DA-A	16 DA-A			
date			11.10.2023	20.10.2023	11.10.2023	20.10.2023	11.10.2023	20.10.2023	Average	min.	max.
Pest incidence / disease plant			12,50	15,50	12,50	16,50	17,30	19,50	15,63	12,50	19,50
Part assessed			PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C	PLANT; C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	66,00	62,90	66,00	59,10	58,00	56,40	61,40	56,40	66,00
3	CHR/ZF/PROTI 100 FS	80,00	84,00	74,20	70,00	63,60	66,70	62,80	70,22	62,80	84,00
4	CHR/ZF/PROTI 100 FS	100,00	84,00	77,40	86,00	81,80	78,30	76,90	80,73	76,90	86,00
5	Redigo Pro 170 FS	66,70	76,00	71,00	72,00	71,20	78,30	75,60	74,02	71,00	78,30
6	Redigo 100 FS	100,00	76,00	66,10	76,00	72,70	69,60	69,20	71,60	66,10	76,00
LSD (P=.05)			22,400	11,660	12,420	11,530	6,760	8,220			

Table 23. The efficacy of CHR/ZF/PROTI in control of *PYRNGR Pyrenophora graminea* in winter barley

Pest code			PYRNGR <i>Pyrenophora graminea</i>											
report code			1 F/2024	2 F/2024	3 F/2024	4 F/2024	5 F/2024	AF/23/JO/34/ZI/03	AF/23/JO/34/Pr/04	AF/23/JO/34/Br/05	AF/23/JO/34/De/06			
DA-A			230 DA-A	230 DA-A	230 DA-A	230 DA-A	230 DA-A	244 DA-A	250 DA-A	239 DA-A	235 DA-A			
date			06.05.2024	06.05.2024	06.05.2024	06.05.2024	06.05.2024	23.05.2024	27.05.2024	17.05.2024	20.05.2024	Average	min.	max.
Pest incidence / disease plant			5,64	6,00	6,98	8,73	7,26	518,30	589,50	575,00	527,30	249,41	5,64	589,50
Part assessed			PLPRIN; P	PLPRIN; P	PLPRIN; P	PLPRIN; P	PLPRIN; P	Leaf C	Leaf C	Leaf C	Leaf C			
No.	Name	Rate (ml/100 kg)												
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	72,00	72,00	72,00	73,00	69,00	87,00	84,00	74,00	83,00	76,22	69,00	87,00
3	CHR/ZF/PROTI 100 FS	80,00	81,00	81,00	81,00	80,00	78,00	97,00	96,00	91,00	96,00	86,78	78,00	97,00
4	CHR/ZF/PROTI 100 FS	100,00	88,00	88,00	88,00	84,00	81,00	99,00	100,00	97,00	100,00	91,67	81,00	100,00
5	Redigo Pro 170 FS	66,70	98,00	98,00	98,00	98,00	97,00	99,00	100,00	98,00	100,00	98,44	97,00	100,00
6	Redigo 100 FS	100,00	90,00	90,00	90,00	90,00	88,00	99,00	100,00	98,00	100,00	93,89	88,00	100,00
LSD (P=.05)			0,356	0,461	0,523	0,732	0,796	3,100	4,500	4,200	4,900			

Table 24. The efficacy of CHR/ZF/PROTI in control of *PYRNT* *Pyrenophora teres* (anam. *Drechslera teres*) in winter barley

Pest code	report code	DA-A	date	Pest incidence / disease plant	Part assessed	No.	1	2	3	4	5	6	LSD (P=.05)
						Name	Untreated Check	CHR/ZF/PROTI 100 FS	CHR/ZF/PROTI 100 FS	CHR/ZF/PROTI 100 FS	Redigo Pro 170 FS	Redigo 100 FS	
						Rate (ml/100 kg)		60,00	80,00	100,00	66,70	100,00	
PYRNT <i>Pyrenophora teres</i> (anam. <i>Drechslera teres</i>)	6 F/2024	29 DA-A	18.10.2023	9,25	PLPRIN: P		0,00	30,00	41,00	51,00	46,00	27,00	2,167
	6 F/2024	196 DA-A	02.04.2024	11,75	PLPRIN: P		0,00	36,00	40,00	62,00	66,00	28,00	2,954
	7 F/2024	29 DA-A	18.10.2023	5,00	PLPRIN: P		0,00	50,00	55,00	55,00	65,00	45,00	0,692
	7 F/2024	196 DA-A	02.04.2024	11,00	PLPRIN: P		0,00	64,00	66,00	70,00	64,00	57,00	1,871
	8 F/2024	29 DA-A	18.10.2023	9,50	PLPRIN: P		0,00	32,00	42,00	55,00	76,00	66,00	2,142
	8 F/2024	196 DA-A	02.04.2024	17,50	PLPRIN: P		0,00	39,00	41,00	50,00	69,00	66,00	2,967
	9 F/2024	29 DA-A	18.10.2023	13,00	PLPRIN: P		0,00	42,00	46,00	54,00	73,00	31,00	2,451
	9 F/2024	196 DA-A	02.04.2024	21,25	PLPRIN: P		0,00	42,00	46,00	49,00	67,00	31,00	3,506
	10 F/2024	29 DA-A	18.10.2023	17,75	PLPRIN: P		0,00	24,00	34,00	41,00	61,00	38,00	2,981
	10 F/2024	196 DA-A	02.04.2024	25,00	PLPRIN: P		0,00	25,00	33,00	41,00	59,00	37,00	4,647
	AF/23/JO/34/ZI/11	28 DA-A	20.10.2023	10,00	LEAF: C		0,00	50,63	81,88	91,88	85,00	87,50	7,460
	AF/23/JO/34/ZI/11	73 DA-A	04.12.2023	15,00	LEAF: C		0,00	71,67	86,25	92,92	89,58	89,17	5,413
	AF/23/JO/34/Pr/12	33 DA-A	23.10.2023	5,30	LEAF: C		0,00	61,90	75,00	88,10	84,52	84,52	10,591
	AF/23/JO/34/Pr/12	75 DA-A	04.12.2023	6,90	LEAF: C		0,00	65,45	80,00	89,09	87,27	88,18	10,391
	AF/23/JO/34/Br/13	36 DA-A	27.10.2023	12,50	LEAF: C		0,00	77,00	84,50	94,00	93,00	92,00	6,974
	AF/23/JO/34/Br/13	76 DA-A	06.12.2023	16,60	LEAF: C		0,00	77,74	88,30	93,96	92,45	90,94	3,639
	AF/23/JO/34/Dc/14	36 DA-A	03.11.2023	5,30	LEAF: C		0,00	55,29	75,29	83,53	82,35	77,65	7,911
	AF/23/JO/34/Dc/14	74 DA-A	11.12.2023	8,80	LEAF: C		0,00	66,43	82,86	87,86	84,29	84,29	10,995
			Average	12,30			0,00	50,56	61,00	69,41	74,69	62,24	
			min.	5,00			0,00	24,00	33,00	41,00	46,00	27,00	

	max.	25,00			0,00	77,74	88,30	94,00	93,00	92,00	
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Table 25. The efficacy of CHR/ZF/PROTI in control of *USTINH Ustilago nuda* in winter barley

Pest code			USTINH Ustilago nuda											
report code			11 F/2024	12 F/2024	13 F/2024	14 F/2024	15 F/2024	AF/23/JO/34/Zl/07	AF/23/JO/34/Pr/08	AF/23/JO/34/Br/09				AF/23/JO/34/De/10
DA-A			237 DA-A	237 DA-A	237 DA-A	237 DA-A	237 DA-A	255 DA-A	259 DA-A	263 DA-A	245 DA-A			
date			13.05.2024	13.05.2024	13.05.2024	13.05.2024	13.05.2024	03.06.2024	05.06.2024	10.06.2023	30.05.2023	Average	min.	max.
Pest incidence / disease plant			5,37	5,44	5,22	8,60	9,07	829,00	345,00	637,50	713,80	284,33	5,22	829,00
Part assessed			PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P	PLPRIN P	EAR C	EAR C	EAR C	EAR C			
No.	Name	Rate (ml/100 kg)												
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	53,00	46,00	45,00	47,00	37,00	86,00	84,00	82,00	86,00	62,89	37,00	86,00
3	CHR/ZF/PROTI 100 FS	80,00	69,00	65,00	64,00	62,00	61,00	96,00	94,00	95,00	98,00	78,22	61,00	98,00
4	CHR/ZF/PROTI 100 FS	100,00	77,00	77,00	76,00	79,00	71,00	99,00	99,00	100,00	100,00	86,44	71,00	100,00
5	Redigo Pro 170 FS	50,00	96,00	95,00	94,00	97,00	96,00	99,00	99,00	99,00	100,00	97,22	94,00	100,00
6	Redigo 100 FS	100,00	50,00	61,00	71,00	47,00	70,00	99,00	99,00	100,00	100,00	77,44	47,00	100,00
LSD (P=.05)			0,933	1,265	1,280	2,408	1,619	1,000	2,400	1,400	2,900			

South-East Zone – Hungary

Table 26. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter wheat. Assessment of efficacy in 49-146 days after application.

Pest code			<i>FUSASP Fusarium sp.</i>								
report code			CPRHU23-1062-025FE	CPRHU23-1062-025FE	CPRHU23-1063-025FE	CPRHU23-1063-025FE	CPRHU23-1064-025FE	CPRHU23-1064-025FE			
DA-A			123 DA-A	146 DA-A	49 DA-A	139 DA-A	87 DA-A	129 DA-A			
date			27.02.2024	21.03.2024	15.12.2023	14.03.2024	22.01.2024	04.03.2024	Average	min.	max.
Pest incidence / disease plant			56,88	59,83	5,14	5,43	4,84	5,30	22,90	4,84	59,83
Part assessed			PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	34,30	33,09	100,00	100,00	94,10	92,77	75,71	33,09	100,00
3	CHR/ZF/PROTI 100 FS	80,00	73,94	72,12	100,00	100,00	100,00	100,00	91,01	72,12	100,00
4	CHR/ZF/PROTI 100 FS	100,00	93,09	92,44	100,00	100,00	100,00	100,00	97,59	92,44	100,00
5	Premis 025 FS	150,00	85,99	84,57	100,00	100,00	100,00	100,00	95,09	84,57	100,00
6	Redigo Pro 170 FS	66,70	95,24	94,45	100,00	100,00	100,00	100,00	98,28	94,45	100,00
LSD (P=.05)			7,532	6,690			1,834	1,201			

Table 27. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter wheat. Assessment of efficacy in field trials 123-146 days after application

Pest code			MICDMA <i>Microdochium majus</i>				
report code			CPRHU23-1065-025FE	CPRHU23-1065-025FE			
DA-A			123 DA-A	146 DA-A			
date			27.02.2024	21.03.2024	Average	min.	max.
Pest incidence / disease plant			5,47	5,72	5,60	5,47	5,72
Part assessed			PLANT; P	PLANT; P			
No.	Name	Rate (ml/100 kg)					
1	Untreated Check		0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	57,86	53,56	55,71	53,56	57,86
3	CHR/ZF/PROTI 100 FS	80,00	83,44	81,50	82,47	81,50	83,44
4	CHR/ZF/PROTI 100 FS	100,00	86,35	84,80	85,58	84,80	86,35
5	Premis 025 FS	150,00	83,11	78,59	80,85	78,59	83,11
6	Redigo Pro 170 FS	66,70	88,09	85,59	86,84	85,59	88,09
LSD (P=.05)			16,570	17,586			

Table 28. The efficacy of CHR/ZF/PROTI in control of *TILLCA Tilletia caries* in winter wheat

Pest code			<i>TILLCA Tilletia caries</i>					
report code			CPRHU23-1068-025FE	CPRHU23-1069-025FE	CPRHU23-1070-025FE			
DA-A			242 DA-A	235 DA-A	226 DA-A			
date			25.06.2024	18.06.2024	07.06.2024	Average	min.	max.
Pest incidence / disease plant			41,56	27,39	41,47	36,81	27,39	41,56
Part assessed			EAR;	EAR;	EAR;			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	93,43	95,04	93,13	93,87	93,13	95,04
3	CHR/ZF/PROTI 100 FS	80,00	98,76	100,00	95,28	98,01	95,28	100,00
4	CHR/ZF/PROTI 100 FS	100,00	99,78	100,00	95,37	98,38	95,37	100,00
5	Premis 025 FS	150,00	99,21	100,00	89,33	96,18	89,33	100,00
6	Redigo Pro 170 FS	66,70	99,79	100,00	94,98	98,26	94,98	100,00
LSD (P=.05)			1,854	1,847	1,420			

Table 29. The efficacy of CHR/ZF/PROTI in control of *FUSASP Fusarium sp.* in winter barley. Assessment of efficacy in 49-146 days after application.

Pest code			FUSASP Fusarium sp.								
report code			CPRHU23-1071-025FE	CPRHU23-1071-025FE	CPRHU23-1072-025FE	CPRHU23-1072-025FE	CPRHU23-1073-025FE	CPRHU23-1073-025FE			
DA-A			123 DA-A	146 DA-A	49 DA-A	139 DA-A	87 DA-A	129 DA-A			
date			27.02.2024	21.03.2024	15.12.2023	14.03.2024	22.01.2024	04.03.2024	Average	min.	max.
Pest incidence / disease plant			10,14	10,93	4,63	5,02	6,84	7,88	7,57	4,63	10,93
Part assessed			PLANT; P	PLANT; P	PLANT; P	PLANT; P	PLANT C	PLANT C			
No.	Name	Rate (ml/100 kg)									
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	63,80	60,97	100,00	100,00	90,03	86,91	83,62	60,97	100,00
3	CHR/ZF/PROTI 100 FS	80,00	86,40	85,33	100,00	100,00	100,00	100,00	95,29	85,33	100,00
4	CHR/ZF/PROTI 100 FS	100,00	91,62	90,18	100,00	100,00	100,00	100,00	96,97	90,18	100,00
5	Premis 025 FS	150,00	88,08	86,98	100,00	100,00	100,00	100,00	95,84	86,98	100,00
6	Redigo Pro 170 FS	66,70	90,01	89,58	100,00	100,00	100,00	100,00	96,60	89,58	100,00
LSD (P=.05)			9,336	8,679			1,499	2,949			

Table 30. The efficacy of CHR/ZF/PROTI in control of *MONGNI Monographella nivalis* (anam. *Microdochium nivale*). in winter barley. Assessment of efficacy in field trials 87-146 days after application

Pest code			MICDMA <i>Microdochium majus</i>						
report code			CPRHU23-1074-025FE	CPRHU23-1074-025FE	CPRHU23-1076-025FE	CPRHU23-1076-025FE			
DA-A			123 DA-A	146 DA-A	87 DA-A	129 DA-A			
date			27.02.2024	21.03.2024	22.01.2024	04.03.2024	Average	min.	max.
Pest incidence / disease plant			7,28	7,79	5,46	5,99	6,63	5,46	7,79
Part assessed			PLANT; P	PLANT; P	PLANT; P	PLANT; P			
No.	Name	Rate (ml/100 kg)							
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	74,11	71,85	100,00	100,00	86,49	71,85	100,00
3	CHR/ZF/PROTI 100 FS	80,00	87,49	84,42	100,00	100,00	92,98	84,42	100,00
4	CHR/ZF/PROTI 100 FS	100,00	95,38	93,05	100,00	100,00	97,11	93,05	100,00
5	Premis 025 FS	200 czy 150	92,66	91,13	100,00	100,00	95,95	91,13	100,00
6	Redigo Pro 170 FS	66,70	94,69	92,26	100,00	100,00	96,74	92,26	100,00
LSD (P=.05)			6,018	4,522					

Table 31. The efficacy of CHR/ZF/PROTI in control of *PYRNGR Pyrenophora graminea* in winter barley

Pest code			PYRNGR <i>Pyrenophora graminea</i>					
report code			CPRHU23-1077-025FE	CPRHU23-1078-025FE	CPRHU23-1079-025FE			
DA-A			186 DA-A	192 DA-A	182 DA-A			
date			30.04.2024	06.05.2024	26.04.2024	Average	min.	max.
Pest incidence / disease plant			5,75	5,25	5,78	5,59	5,25	5,78
Part assessed			TILLER; C	TILLER; P	PLANT; P			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	79,74	82,65	90,68	84,36	79,74	90,68
3	CHR/ZF/PROTI 100 FS	80,00	90,82	100,00	100,00	96,94	90,82	100,00
4	CHR/ZF/PROTI 100 FS	100,00	95,64	100,00	100,00	98,55	95,64	100,00
5	Premis 025 FS	150,00	94,99	100,00	100,00	98,33	94,99	100,00
6	Redigo Pro 170 FS	66,70	96,55	100,00	100,00	98,85	96,55	100,00
LSD (P=.05)			5,110	2,381	3,385			

Table 32. The efficacy of CHR/ZF/PROTI in control of *PYRNTE Pyrenophora teres (anam. Drechslera teres)* in winter barley

Pest code			<i>PYRNTE Pyrenophora teres (anam. Drechslera teres)</i>					
report code			CPRHU23-1080-025FE	CPRHU23-1081-025FE	CPRHU23-1082-025FE			
DA-A			146 DA-A	138 DA-A	129 DA-A			
date			21.03.2024	13.03.2024	04.03.2024	Average	min.	max.
pest severity/disease plant			5,80	5,50	5,26	5,52	5,26	5,80
Part assessed			LEAF	PLANT; P	LEAF			
No.	Name	Rate (ml/100 kg)						
1	Untreated Check		0,00	0,00	0,00	0,00	0,00	0,00
2	CHR/ZF/PROTI 100 FS	60,00	70,52	69,41	89,66	76,53	69,41	89,66
3	CHR/ZF/PROTI 100 FS	80,00	83,60	94,43	95,40	91,14	83,60	95,40
4	CHR/ZF/PROTI 100 FS	100,00	87,83	98,18	97,71	94,57	87,83	98,18
5	Premis 025 FS	150,00	85,71	98,33	96,73	93,59	85,71	98,33
6	Redigo Pro 170 FS	66,70	88,97	98,12	97,92	95,00	88,97	98,12
LSD (P=.05)			3,323	6,185	1,272			

Appendix 6 Summary of phytotoxicity trials data in summary for

North-East Zone – Poland

Table 1 – data from efficacy field trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
8 F/2021	Timing of assessment	DA-A	24 DA-A	38 DA-A	
	date		19.10.2020	02.11.2020	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
9 F/2021	Timing of assessment	DA-A	24 DA-A	38 DA-A	
	date		19.10.2020	02.11.2020	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
10 F/2021	Timing of assessment	DA-A	24 DA-A	38 DA-A	
	date		19.10.2020	02.11.2020	

	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
11 F/2021	Timing of assessment	DA-A	39 DA-A		
	date		03.11.2020		
	1.Untreated Check		0		
	2.CHR/ZF/PROTI 100 FS	60	0		
	3.CHR/ZF/PROTI 100 FS	80	0		
	4.CHR/ZF/PROTI 100 FS	100	0		
	5.Premis 025 FS	200	0		
	6.Redigo 100 FS	100	0		
	LSD (P=.05)				
12 F/2021	Timing of assessment	DA-A	39 DA-A		
	date		03.11.2020		
	1.Untreated Check		0		
	2.CHR/ZF/PROTI 100 FS	60	0		
	3.CHR/ZF/PROTI 100 FS	80	0		
	4.CHR/ZF/PROTI 100 FS	100	0		
	5.Premis 025 FS	200	0		
	6.Redigo 100 FS	100	0		
	LSD (P=.05)				
22 F/2021	Timing of assessment	DA-A	35 DA-A	42 DA-A	
	date		30.10.2020	06.11.2020	

	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
23 F/2021	Timing of assessment	DA-A	38 DA-A	46 DA-A	
	date		02.11.2020	10.11.2020	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
APK-20-47775-PL01	Timing of assessment	DA-A	34 DA-A	261 DA-A	
	date		02.11.2020	17.06.2021	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
APK-20-47775-PL02	Timing of assessment	DA-A	49 DA-A	264 DA-A	
	date		18.11.2020	21.06.2021	

	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
APK-20-47775-PL03	Timing of assessment	DA-A	45 DA-A	255 DA-A	
	date		13.11.2020	11.06.2021	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
APK-20-47891-PL01	Timing of assessment	DA-A	34 DA-A	56 DA-A	259 DA-A
	date		03.11.2020	25.11.2020	16.06.2021
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0	0
	5.Premis 025 FS	200	0	0	0
	6.Redigo 100 FS	100	0	0	0
	LSD (P=.05)				
APK-20-47891-PL02	Timing of assessment	DA-A	39 DA-A	55 DA-A	259 DA-A
	date		09.11.2020	25.11.2020	17.06.2021

	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0	0
	5.Premis 025 FS	200	0	0	0
	6.Redigo 100 FS	100	0	0	0
	LSD (P=.05)				
APK-20-47891-PL03	Timing of assessment	DA-A	45 DA-A	57 DA-A	255 DA-A
	date		13.11.2020	25.11.2020	11.06.2021
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0	0
	5.Premis 025 FS	200	0	0	0
	6.Redigo 100 FS	100	0	0	0
AF/20/PO/32/Br/01	LSD (P=.05)				
	Timing of assessment	DA-A	19 DA-A	247 DA-A	
	date		19.10.2020	04.06.2021	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
AF/20/PO/32/Pr/02	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
	Timing of assessment	DA-A	20 DA-A	251 DA-A	
	date		20.10.2020	08.06.2021	

	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
AF/20/PO/32/Gr/03	Timing of assessment	DA-A	19 DA-A	247 DA-A	
	date		19.10.2020	04.06.2020	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
AF/20/PO/32/ZI/04	Timing of assessment	DA-A	20 DA-A	251 DA-A	
	date		21.10.2020	09.06.2020	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
AF/20/PO/32/Br/05	Timing of assessment	DA-A	16 DA-A	188 DA-A	
	date		16.10.2020	06.04.2021	

	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
9 F/2022	Timing of assessment	DA-A	16 DA-A	21 DA-A	
	date		20.10.2021	25.10.2021	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
10 F/2022	Timing of assessment	DA-A	16 DA-A	21 DA-A	
	date		20.10.2021	25.10.2021	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				
11 F/2022	Timing of assessment	DA-A	16 DA-A	21 DA-A	
	date		20.10.2021	25.10.2021	

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	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	60	0	0	
	3.CHR/ZF/PROTI 100 FS	80	0	0	
	4.CHR/ZF/PROTI 100 FS	100	0	0	
	5.Premis 025 FS	200	0	0	
	6.Redigo 100 FS	100	0	0	
	LSD (P=.05)				

Table 2 – data from efficacy laboratory trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
AF/20/PO/32/Pn/01	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2020
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PO/32/Pn/02	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2020
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PO/32/Pn/03	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2020
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PO/32/Pn/04	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00

	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PO/32/Pn/05	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PO/32/Pn/06	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			

Table 3 – data from selectivity field trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %				
20 F/2021	Timing of assessment	DA-A	32 DA-A	35 DA-A			
	date		27.10.2020	30.10.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						
21 F/2021	Timing of assessment	DA-A	32 DA-A	35 DA-A			
	date		27.10.2020	30.10.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						
APK-20-47776-PL01	Timing of assessment	DA-A	33 DA-A	62 DA-A	183 DA-A	259 DA-A	
	date		02.11.2020	01.12.2020	01.04.2021	16.06.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	

	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
APK-20-47776-PL02	Timing of assessment	DA-A	39 DA-A	55 DA-A	181 DA-A	259 DA-A	
	date		09.11.2020	25.11.2020	31.03.2021	17.06.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
AH/20/PO/32/ZI/b/01	Timing of assessment	DA-A	18 DA-A	21 DA-A	25 DA-A	32 DA-A	152 DA-A
	date		19.10.2020	22.10.2020	26.10.2020	02.11.2020	02.03.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						
AF/20/PO/32/Gr/b/02	Timing of assessment	DA-A	5 DA-A	8 DA-A	14 DA-A	23 DA-A	205 DA-A
	date		05.10.2020	08.10.2020	14.10.2020	23.10.2020	23.04.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00

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	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						

Table 4 – data from efficacy field trials – winter triticale

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
15 F/2021	Timing of assessment	DA-A	17 DA-A	29 DA-A	
	date		08.10.2020	20.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
16 F/2021	Timing of assessment	DA-A	32 DA-A	45 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
APK-20-47891-PL04	Timing of assessment	DA-A	34 DA-A	57 DA-A	252 DA-A
	date		02.11.2020	25.11.2020	08.06.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				

APK-20-47891-PL05	Timing of assessment	DA-A	14 DA-A	23 DA-A	241 DA-A
	date		14.10.2020	23.10.2020	29.05.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				
APK-20-47891-PL06	Timing of assessment	DA-A	36 DA-A	45 DA-A	248 DA-A
	date		04.11.2020	13.11.2020	04.06.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				
AF/20/PszO/32/Pr/06	Timing of assessment	DA-A	25 DA-A	184 DA-A	
	date		25.10.2020	02.04.2021	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				

Table 5 – data from efficacy laboratory trials – winter triticales

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
AF/20/PszO/32/Pn/07	Timing of assessment	DA-A	9 DA-A	21 DA-A
	date		10.02.2021	22.02.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PszO/32/Pn/08	Timing of assessment	DA-A	9 DA-A	21 DA-A
	date		10.02.2021	22.02.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PszO/32/Pn/09	Timing of assessment	DA-A	9 DA-A	21 DA-A
	date		10.02.2021	22.02.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00

	LSD (P=.05)			
AF/20/PszO/32/Pn/10	Timing of assessment	DA-A	7 DA-A	15 DA-A
	date		02.03.2021	10.03.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PszO/32/Pn/11	Timing of assessment	DA-A	7 DA-A	15 DA-A
	date		02.03.2021	10.03.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/PszO/32/Pn/12	Timing of assessment	DA-A	7 DA-A	15 DA-A
	date		02.03.2021	10.03.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			

Table 6 – data from selectivity field trials – winter triticale

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %				
13 F/2021	Timing of assessment	DA-A	32 DA-A	45 DA-A			
	date		23.10.2020	05.11.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						
14 F/2021	Timing of assessment	DA-A	12 DA-A	21 DA-A			
	date		03.10.2020	12.10.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						
APK-20-47776-PL03	Timing of assessment	DA-A	33 DA-A	56 DA-A	183 DA-A	251 DA-A	
	date		02.11.2020	25.11.2020	01.04.2021	08.06.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	

	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
APK-20-47776-PL04	Timing of assessment	DA-A	36 DA-A	45 DA-A	183 DA-A	248 DA-A	
	date		04.11.2020	13.11.2020	31.03.2021	04.06.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
AF/20/PszO/32/ZI/b/03	Timing of assessment	DA-A	14 DA-A	15 DA-A	22 DA-A	32 DA-A	204 DA-A
	date		15.10.2020	16.10.2020	23.10.2020	02.11.2020	23.04.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						
AF/20/PszO/32/Gr/b/04	Timing of assessment	DA-A	5 DA-A	8 DA-A	14 DA-A	23 DA-A	205 DA-A
	date		05.10.2020	08.10.2020	14.10.2020	23.10.2020	23.04.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00

Product code: CHR/ZF/PROTI 100 FS
Product name: Gamelan 100 FS/ Doraltres 100 FS
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	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						

Table 7 – data from efficacy field trials – winter rye

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
17 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
18 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
19 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
26 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	

	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
27 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
28 F/2021	Timing of assessment	DA-A	22 DA-A	39 DA-A	
	date		23.10.2020	09.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
29 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
30 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A	
	date		23.10.2020	05.11.2020	
	1.Untreated Check		0,00	0,00	

	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
APK-20-47891-PL07	Timing of assessment	DA-A	34 DA-A	57 DA-A	252 DA-A
	date		02.11.2020	25.11.2020	08.06.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				
APK-20-47891-PL08	Timing of assessment	DA-A	22 DA-A	38 DA-A	241 DA-A
	date		21.10.2020	06.11.2020	28.05.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				
APK-20-47891-PL09	Timing of assessment	DA-A	36 DA-A	48 DA-A	247 DA-A
	date		05.11.2020	17.11.2020	04.06.2021
	1.Untreated Check		0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00
	LSD (P=.05)				
AF/20/ŽO/32/Br/07	Timing of assessment	DA-A	23 DA-A	251 DA-A	
	date		23.10.2020	08.06.2021	

	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
AF/20/ZO/32/Pr/08	Timing of assessment	DA-A	22 DA-A	257 DA-A	
	date		22.10.2020	14.06.2021	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
AF/20/PO/32/Gr/09	Timing of assessment	DA-A	26 DA-A	254 DA-A	
	date		26.10.2020	11.06.2021	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				
AF/20/ZO/32/ZI/10	Timing of assessment	DA-A	22 DA-A	251 DA-A	
	date		23.10.2020	09.06.2021	
	1.Untreated Check		0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00	
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00	
	5.Premis 025 FS	200	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	
	LSD (P=.05)				

Table 8 – data from efficacy laboratory trials – winter rye

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
AF/20/ZO/32/Pn/13	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/ZO/32/Pn/14	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/ZO/32/Pn/15	Timing of assessment	DA-A	8 DA-A	18 DA-A
	date		24.11.2020	04.12.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/ZO/32/Pn/16	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00

	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/ZO/32/Pn/17	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			
AF/20/ZO/32/Pn/13	Timing of assessment	DA-A	8 DA-A	16 DA-A
	date		19.01.2021	27.01.2021
	1.Untreated Check		0,00	0,00
	2.CHR/ZF/PROTI 100 FS	60	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	80	0,00	0,00
	4.CHR/ZF/PROTI 100 FS	100	0,00	0,00
	5.Premis 025 FS	200	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00
	LSD (P=.05)			

Table 9 – data from selectivity field trials – winter rye

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %				
APK-20-47776-PL05	Timing of assessment	DA-A	24 DA-A	35 DA-A	176 DA-A	242 DA-A	
	date		23.10.2020	03.11.2020	24.03.2021	29.05.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
APK-20-47776-PL06	Timing of assessment	DA-A	36 DA-A	48 DA-A	182 DA-A	247 DA-A	
	date		05.11.2020	17.11.2020	31.03.2021	04.06.2021	
	1.Untreated Check		0,00	0,00	0,00	0,00	
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	
	LSD (P=.05)						
AF/20/ŽO/32/ZI/b/05	Timing of assessment	DA-A	15 DA-A	18 DA-A	20 DA-A	25 DA-A	153 DA-A
	date		16.10.2020	19.10.2020	21.10.2020	26.10.2020	03.03.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						
AF/20/ŽO/32/Gr/b/06	Timing of assessment	DA-A	5 DA-A	8 DA-A	14 DA-A	23 DA-A	205 DA-A

	date		05.10.2020	08.10.2020	14.10.2020	23.10.2020	23.04.2021
	1.Untreated Check		0,00	0,00	0,00	0,00	0,00
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00	0,00	0,00	0,00
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00	0,00	0,00	0,00
	4.Premis 025 FS	200	0,00	0,00	0,00	0,00	0,00
	5.Premis 025 FS	300	0,00	0,00	0,00	0,00	0,00
	6.Redigo 100 FS	100	0,00	0,00	0,00	0,00	0,00
	7.Redigo 100 FS	150	0,00	0,00	0,00	0,00	0,00
	LSD (P=.05)						
24 F/2021	Timing of assessment	DA-A	22 DA-A	35 DA-A			
	date		23.10.2020	05.11.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						
25 F/2021	Timing of assessment	DA-A	22 DA-A	39 DA-A			
	date		23.10.2020	09.11.2020			
	1.Untreated Check		0,00	0,00			
	2.CHR/ZF/PROTI 100 FS	100	0,00	0,00			
	3.CHR/ZF/PROTI 100 FS	150	0,00	0,00			
	4.Premis 025 FS	200	0,00	0,00			
	5.Premis 025 FS	300	0,00	0,00			
	6.Redigo 100 FS	100	0,00	0,00			
	7.Redigo 100 FS	150	0,00	0,00			
	LSD (P=.05)						

Table 10 – data from efficacy field trials – winter barley

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
1 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
2 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
3 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
4 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
5 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/ZI/03	Timing of assessment	DA-A	19 DA-A	244 DA-A
	date		11.10.2023	23.05.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pr/04	Timing of assessment	DA-A	22 DA-A	250 DA-A
	date		12.10.2023	27.05.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Br/05	Timing of assessment	DA-A	25 DA-A	239 DA-A
	date		16.10.2023	17.05.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/De/06	Timing of assessment	DA-A	25 DA-A	235 DA-A
	date		23.10.2023	20.05.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
6 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
7 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
8 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
9 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
10 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/ZI/11	Timing of assessment	DA-A	21 DA-A	
	date		13.10.2023	
	1.Untreated Check		0	
	2.CHR/ZF/PROTI 100 FS	60	0	
	3.CHR/ZF/PROTI 100 FS	80	0	
	4.CHR/ZF/PROTI 100 FS	100	0	
	5. Redigo Pro 170 FS	66,7	0	

	6.Redigo 100 FS	100	0	
	LSD (P=.05)			
AF/23/JO/34/Pr/12	Timing of assessment	DA-A	19 DA-A	
	date		09.10.2023	
	1.Untreated Check		0	
	2.CHR/ZF/PROTI 100 FS	60	0	
	3.CHR/ZF/PROTI 100 FS	80	0	
	4.CHR/ZF/PROTI 100 FS	100	0	
	5. Redigo Pro 170 FS	66,7	0	
	6.Redigo 100 FS	100	0	
	LSD (P=.05)			
AF/23/JO/34/Br/13	Timing of assessment	DA-A	27 DA-A	
	date		18.10.2023	
	1.Untreated Check		0	
	2.CHR/ZF/PROTI 100 FS	60	0	
	3.CHR/ZF/PROTI 100 FS	80	0	
	4.CHR/ZF/PROTI 100 FS	100	0	
	5.Premis 025 FS	66,7	0	
	6.Redigo 100 FS	100	0	
	LSD (P=.05)			
AF/23/JO/34/De/14	Timing of assessment	DA-A	28 DA-A	
	date		26.10.2023	
	1.Untreated Check		0	
	2.CHR/ZF/PROTI 100 FS	60	0	
	3.CHR/ZF/PROTI 100 FS	80	0	
	4.CHR/ZF/PROTI 100 FS	100	0	
	5. Redigo Pro 170 FS	66,7	0	

	6.Redigo 100 FS	100	0	1
	LSD (P=.05)	1	1	1
11 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date	1	28.09.2023	02.10.2023
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)	1	1	1
12 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date	1	28.09.2023	02.10.2023
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)	1	1	1
13 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date	1	28.09.2023	02.10.2023
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
14 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
15 F/2024	Timing of assessment	DA-A	9 DA-A	13 DA-A
	date		28.09.2023	02.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/ZI/07	Timing of assessment	DA-A	20 DA-A	255 DA-A
	date		12.10.2023	03.06.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pr/08	Timing of assessment	DA-A	20 DA-A	259 DA-A
	date		10.10.2023	05.06.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Br/09	Timing of assessment	DA-A	25 DA-A	263 DA-A
	date		16.10.2023	10.06.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/De/10	Timing of assessment	DA-A	27 DA-A	245 DA-A
	date		25.10.2023	30.05.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	50	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
19 F/2024	Timing of assessment	DA-A	10 DA-A	14 DA-A
	date		29.09.2023	03.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
20 F/2024	Timing of assessment	DA-A	10 DA-A	14 DA-A
	date		29.09.2023	03.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
21 F/2024	Timing of assessment	DA-A	10 DA-A	14 DA-A
	date		29.09.2023	03.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
22 F/2024	Timing of assessment	DA-A	16 DA-A	21 DA-A
	date		20.10.2021	25.10.2021
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/ZI/01	Timing of assessment	DA-A	20 DA-A	189 DA-A
	date		12.10.2023	29.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pr/02	Timing of assessment	DA-A	23 DA-A	194 DA-A
	date		13.10.2023	01.04.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			

Table 11 – data from efficacy laboratory trials – winter barley

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
AF/23/JO/34/Pn/15	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pn/16	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	200	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pn/17	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0

	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	200	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pn/18	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	200	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pn/19	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	200	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			
AF/23/JO/34/Pn/20	Timing of assessment	DA-A	7 DA-A	16 DA-A
	date		11.10.2023	20.10.2023
	1.Untreated Check		0	0

	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	200	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)			

Table 12 – data from selectivity field trials – winter barley

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
16 F/2024	Timing of assessment	DA-A	8 DA-A	20 DA-A	
	date		27.09.2023	09.10.2023	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	100	0	0	
	3.CHR/ZF/PROTI 100 FS	150	0	0	
	4. Redigo Pro 170 FS	66,7	0	0	
	5. Redigo Pro 170 FS	100,05	0	0	
	6.Redigo 100 FS	100	0	0	
	7.Redigo 100 FS	150	0	0	
	LSD (P=.05)				
17 F/2024	Timing of assessment	DA-A	8 DA-A	20 DA-A	
	date		27.09.2023	09.10.2023	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	100	0	0	
	3.CHR/ZF/PROTI 100 FS	150	0	0	
	4. Redigo Pro 170 FS	66,7	0	0	
	5. Redigo Pro 170 FS	100,05	0	0	
	6.Redigo 100 FS	100	0	0	
	7.Redigo 100 FS	150	0	0	
	LSD (P=.05)				
18 F/2024	Timing of assessment	DA-A	8 DA-A	21 DA-A	
	date		27.09.2023	10.10.2023	
	1.Untreated Check		0	0	
	2.CHR/ZF/PROTI 100 FS	100	0	0	
	3.CHR/ZF/PROTI 100 FS	150	0	0	

	4. Redigo Pro 170 FS	66,7	0	0	
	5. Redigo Pro 170 FS	100,05	0	0	
	6.Redigo 100 FS	100	0	0	
	7.Redigo 100 FS	150	0	0	
	LSD (P=.05)				
AF/23/JO/34/Br/01	Timing of assessment	DA-A	11 DA-A	28 DA-A	172 DA-A
	date		02.10.2023	19.10.2023	11.03.2024
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	4. Redigo Pro 170 FS	66,7	0	0	0
	5. Redigo Pro 170 FS	100,05	0	0	0
	6.Redigo 100 FS	100	0	0	0
	7.Redigo 100 FS	150	0	0	0
	LSD (P=.05)				
AF/23/JO/34/Pr/02	Timing of assessment	DA-A	14 DA-A	28 DA-A	160 DA-A
	date		04.10.2023	18.10.2023	27.02.2024
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	4. Redigo Pro 170 FS	66,7	0	0	0
	5. Redigo Pro 170 FS	100,05	0	0	0
	6.Redigo 100 FS	100	0	0	0
	7.Redigo 100 FS	150	0	0	0
	LSD (P=.05)				
AF/23/JO/34/De/03	Timing of assessment	DA-A	13 DA-A	32 DA-A	173 DA-A
	date		11.10.2023	30.10.2023	19.03.2024
	1.Untreated Check		0	0	0

Product code: CHR/ZF/PROTI 100 FS
 Product name: Gamelan 100 FS/ Doraltes 100 FS
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	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	4. Redigo Pro 170 FS	66,7	0	0	0
	5. Redigo Pro 170 FS	100,05	0	0	0
	6.Redigo 100 FS	100	0	0	0
	7.Redigo 100 FS	150	0	0	0
	LSD (P=.05)				

Table 13 data from phytotoxicity trials

Test report (1)	Testing Unit GEP (2)	Country Region (3)	Dates of trials and GS (4)	Cultivar F/G (5) N/A (6)	Experimental design Test method (7) Replicates	Remarks
AH/20/PO/32/ZI/b/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Pol- skiego 28, 60-637 Poznań, Poland	Złotniki / Poland	01.10.2020 BBCH 00	winter wheat / Bogat- ka F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,8
AF/20/PO/32/Gr/b/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Pol- skiego 28, 60-637 Poznań, Poland	Gorzyń / Poland	30.09.2020 BBCH 00	winter wheat / Opal F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,4
20 F/2021	Institute of Plant Protec- tion - National Research Institute Sońnicowice Branch; Pesticide Effi- cacy Testing Depart- ment, Gliwicka 29, 44- 153 Sońnicowice, Poland	Sońnicowice / Poland	06.10.2020 BBCH 00	winter wheat / Opoka F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,2
21 F/2021	Institute of Plant Protec- tion - National Research Institute Sońnicowice Branch; Pesticide Effi- cacy Testing Depart- ment, Gliwicka 29, 44- 153 Sońnicowice, Poland	Łany Wielkie / Poland	08.10.2020 BBCH 00	winter wheat / Pokusa F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,1
APK-20-47776-PL01	STAPHYT Sp z o.o. Poznańska 62/53, 60- 853 Poznań, Poland	Kajkowo / Poland	09.10.2020 BBCH 00	winter wheat / Bilanz F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,6
APK-20-47776-PL02	STAPHYT Sp z o.o. Poznańska 62/53, 60-	Jasiona / Poland	10.10.2020 BBCH 00	winter wheat / Mewa F	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 7,2

	853 Poznań, Poland			N		
AF/20/PszO/32/ZI/b/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Złotniki / Poland	01.10.2020 BBCH 00	winter triticales / Alik F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,8
AF/20/PszO/32/Gr/b/04	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń / Poland	30.09.2020 BBCH 00	winter triticales / Twingo F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,4
13 F/2021	Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sońnicowice, Poland	Sierakowice / Poland	09.10.2020 BBCH 00	winter triticales / Trismart F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,3
14 F/2021	Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sońnicowice, Poland	Sońnicowice / Poland	24.09.2020 BBCH 00	winter triticales / Rotondo F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy clay loam pH 6,07
APK-20-47776-PL03	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	Kajkowo / Poland	09.10.2020 BBCH 00	winter triticales / Bereniko F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,6
APK-20-47776-PL04	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	Łaźniki / Poland	07.10.2020 BBCH 00	winter triticales / Borowik F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 7,4

AF/20/ŻO/32/ZI/b/05	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Złotniki / Poland	01.10.2020 BBCH 00	winter rye / Diamant F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,8
AF/20/ŻO/32/Gr/b/06	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Gorzyń / Poland	30.09.2020 BBCH 00	winter rye / Poznańskie F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,4
24 F/2021	Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sońnicowice, Poland	Sońnicowice / Poland	07.10.2020 BBCH 00	winter rye / Dukato F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6
25 F/2021	Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sońnicowice, Poland	Sierakowice / Poland	09.10.2020 BBCH 00	winter rye / Su Forsetti F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,9
APK-20-47776-PL05	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	Wilkowyja / Poland	30.09.2020 BBCH 00	winter rye / Dańkowskie Turkus F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,4
APK-20-47776-PL06	STAPHYT Sp z o.o. Poznańska 62/53, 60-853 Poznań, Poland	Wólka Krosnowska / Poland	05.10.2020 BBCH 00	winter rye / Dańkowskie Amber F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 7,2
16 F/2024	Institute of Plant Protection - National Research Institute Sońnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sońnicowice, Poland	Lany Wielkie/ Poland	19.09.2023 BBCH 00	winter barley / Return F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,5

	efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland					
17 F/2024	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	Łany Wielkie / Poland	19.09.2023 BBCH 00	winter barley / Jeanie F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,5
18 F/2024	Institute of Plant Protection - National Research Institute Sośnicowice Branch; Pesticide Efficacy Testing Department, Gliwicka 29, 44-153 Sośnicowice, Poland	Łany Wielkie/ Poland	19.09.2023 BBCH 00	winter barley / Jakub F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 6,5
AF/23/JO/34/Br/01	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Brody / Poland	21.09.2023 BBCH 00	winter barley / Julie F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loamy sand pH 6,8
AF/23/JO/34/Pr/02	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Przybroda/ Poland	20.09.2023 BBCH 00	winter barley / Bordeaux F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loamy sand pH 6,0
AF/23/JO/34/De/03	Poznań University of Life Sciences, Research and Education Center Gorzyń, Wojska Polskiego 28, 60-637 Poznań, Poland	Dębno/ Poland	28.09.2023 BBCH 00	winter barley / Gloria F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loamy sand pH 6,3

Notes:

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

North-East Zone - Latvia, Lithuania

Table 14 – data from selectivity field trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %			
195 24 02-04-LV	Timing of assessment	DA-A	13 DA-A	16 DA-A	197 DA-A	259 DA-A
	date		03.10.2023	06.10.2023	04.04.2024	05.06.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-05-LV	Timing of assessment	DA-A	14 DA-A	21 DA-A	195 DA-A	257 DA-A
	date		06.10.2023	13.10.2023	04.04.2024	05.06.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-06LT	Timing of assessment	DA-A	23 DA-A	39 DA-A	207 DA-A	257 DA-A
	date		15.10.2023	31.10.2023	16.04.2024	05.06.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0

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	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					

Table 15 – data from selectivity field trials – winter triticales

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %			
195 24 02-07-LV	Timing of assessment	DA-A	13 DA-A	16 DA-A	201 DA-A	247 DA-A
	date		03.10.2023	06.10.2023	08.04.2024	24.05.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-08-LV	Timing of assessment	DA-A	14 DA-A	21 DA-A	195 DA-A	250 DA-A
	date		06.10.2023	13.10.2023	04.04.2024	29.05.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-09LT	Timing of assessment	DA-A	23 DA-A	39 DA-A	207 DA-A	257 DA-A
	date		15.10.2023	31.10.2023	16.04.2024	05.06.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					

Table 16 – data from selectivity field trials – winter rye

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %			
195 24 02-01-LV	Timing of assessment	DA-A	13 DA-A	16 DA-A	197 DA-A	252 DA-A
	date		03.10.2023	06.10.2023	04.04.2024	29.05.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-02-LV	Timing of assessment	DA-A	14 DA-A	21 DA-A	195 DA-A	250 DA-A
	date		06.10.2023	13.10.2023	04.04.2024	29.05.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					
195 24 02-03LT	Timing of assessment	DA-A	23 DA-A	39 DA-A	207 DA-A	257 DA-A
	date		15.10.2023	31.10.2023	16.04.2024	05.06.2024
	1.Untreated Check		0	0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0	0
	4.Celest Trio 060 FS	200	0	0	0	0
	5.Celest Trio 060 FS	300	0	0	0	0
	LSD (P=.05)					

Table 17 data from phytotoxicity trials

Test report (1)	Testing Unit GEP (2)	Country Region (3)	Dates of trials and GS (4)	Cultivar F/G (5) N/A (6)	Experimental design Test method (7) Replicates	Remarks
195 24 02-01-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Lutriņi / Latvia	20.09.2023 BBCH 00	winter rye / Kaupo F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,83
195 24 02-02-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Jaunlutriņi/Latvia	22.09.2023 BBCH 00	winter rye / Jethro F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,16
195 24 02-03LT	UAB Agrolab Baltic, Bugeniai village, LT- 89452 Mažeikiai dis- trict, Lithuania	Žemalė/Lithuania	22.09.2023 BBCH 00	winter rye / Rubin F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,67
195 24 02-04-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Lutriņi / Latvia	20.09.2023 BBCH 00	winter wheat/ Edvins F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,83
195 24 02-05-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Jaunlutriņi/Latvia	22.09.2023 BBCH 00	winter wheat / Fredis F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,16
195 24 02-06LT	UAB Agrolab Baltic, Bugeniai village, LT- 89452 Mažeikiai dis- trict, Lithuania	Žemalė/Lithuania	22.09.2023 BBCH 00	winter wheat / KWS Extase F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,6
195 24 02-07-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Lutriņi / Latvia	20.09.2023 BBCH 00	winter triticale / Ruja F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,83
195 24 02-08-LV	SIA Agrolab Baltic, Kuldigas iela 86, LV- 3801, Saldus, Latvia	Jaunlutriņi/Latvia	22.09.2023 BBCH 00	winter triticale / Trivalan F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: sandy loam pH 5,16
195 24 02-09LT	UAB Agrolab Baltic, Bugeniai village, LT- 89452 Mažeikiai dis-	Žemalė/Lithuania	22.09.2023 BBCH 00	winter triticale / Capricia F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: loam pH 7,67

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	trict, Lithuania					
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Notes:

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

South-East Zone - Hungary

Table 18 – data from efficacy field trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
CPRHU23-1062-025FE	Timing of assessment	DA-A	123 DA-A	146 DA-A
	date		27.02.2024	21.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)			
CPRHU23-1063-025FE	Timing of assessment	DA-A	49 DA-A	139 DA-A
	date		15.12.2023	14.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)			
CPRHU23-1064-025FE	Timing of assessment	DA-A	87 DA-A	129 DA-A
	date		22.01.2023	04.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0

	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0
	6.Redigo 100 FS	100	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1065-025FE	Timing of assessment	DA-A	123 DA-A	146 DA-A
	date	1	27.02.2024	21.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1066-025FE	Timing of assessment	DA-A	49 DA-A	139 DA-A
	date	1	15.12.2023	14.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1067-025FE	Timing of assessment	DA-A	87 DA-A	129 DA-A
	date	1	22.01.2024	04.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0

	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1068-025FE	Timing of assessment	DA-A	123 DA-A	242 DA-A
	date	1	27.02.2024	25.06.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1069-025FE	Timing of assessment	DA-A	49 DA-A	235 DA-A
	date	1	15.12.2023	18.06.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1070-025FE	Timing of assessment	DA-A	87 DA-A	224 DA-A
	date	1	22.01.2024	07.06.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0

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	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=,05)			

Table 19 – data from selectivity field trials – winter wheat

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
CPRHU23-1083-025FS	Timing of assessment	DA-A	24 DA-A	31 DA-A	45 DA-A
	date		20.11.2023	27.11.2023	11.12.2023
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	5.Premis 025 FS	150	0	0	0
	6.Premis 025 FS	225	0	0	0
	6.Redigo Pro 170 FS	66,7	0	0	0
	7.Redigo Pro 170 FS	100,05	0	0	0
	LSD (P=.05)				
CPRHU23-1084-025FS	Timing of assessment	DA-A	38 DA-A	49 DA-A	139 DA-A
	date		04.12.2023	15.12.2023	14.03.2024
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	5.Premis 025 FS	150	0	0	0
	6.Premis 025 FS	225	0	0	0
	6.Redigo Pro 170 FS	66,7	0	0	0
	7.Redigo Pro 170 FS	100,05	0	0	0
	LSD (P=.05)				
CPRHU23-1085-025FS	Timing of assessment	DA-A	14 DA-A	31 DA-A	45 DA-A
	date		10.11.2023	27.11.2023	11.12.2023
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0

	5.Premis 025 FS	150	0	0	0
	6.Premis 025 FS	225	0	0	0
	6.Redigo Pro 170 FS	66,7	0	0	0
	7.Redigo Pro 170 FS	100,05	0	0	0
	LSD (P=.05)				

Table 20 – data from efficacy field trials – winter barley

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %	
CPRHU23-1071-025FE	Timing of assessment	DA-A	123 DA-A	146 DA-A
	date		27.02.2024	21.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)			
CPRHU23-1072-025FE	Timing of assessment	DA-A	49 DA-A	139 DA-A
	date		15.12.2023	14.03.2023
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)			
CPRHU23-1073-025FE	Timing of assessment	DA-A	87 DA-A	129 DA-A
	date		22.01.2024	04.03.2024
	1.Untreated Check		0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5. Redigo Pro 170 FS	66,7	0	0

	6.Redigo 100 FS	100	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1074-025FE	Timing of assessment	DA-A	123 DA-A	146 DA-A
	date	1	27.02.2024	21.03.2024
	1.Untreated Check	1	0	1
	2.CHR/ZF/PROTI 100 FS	60	0	1
	3.CHR/ZF/PROTI 100 FS	80	0	1
	4.CHR/ZF/PROTI 100 FS	100	0	1
	5.Premis 025 FS	150	0	1
	6.Redigo Pro 170 FS	66,7	0	1
	LSD (P=.05)	1	1	1
CPRHU23-1075-025FE	Timing of assessment	DA-A	49 DA-A	138 DA-A
	date	1	15.12.2023	13.03.2024
	1.Untreated Check	1	0	1
	2.CHR/ZF/PROTI 100 FS	60	0	1
	3.CHR/ZF/PROTI 100 FS	80	0	1
	4.CHR/ZF/PROTI 100 FS	100	0	1
	5.Premis 025 FS	150	0	1
	6.Redigo Pro 170 FS	66,7	0	1
	LSD (P=.05)	1	1	1
CPRHU23-1076-025FE	Timing of assessment	DA-A	87 DA-A	129 DA-A
	date	1	22.01.2024	04.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0

	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1077-025FE	Timing of assessment	DA-A	123 DA-A	186 DA-A
	date	1	27.02.2024	30.04.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1078-025FE	Timing of assessment	DA-A	49 DA-A	192 DA-A
	date	1	15.12.2023	06.05.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1079-025FE	Timing of assessment	DA-A	87 DA-A	182 DA-A
	date	1	22.01.2024	26.04.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0

	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1080-025FE	Timing of assessment	DA-A	123 DA-A	246 DA-A
	date	1	27.02.2024	21.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1081-025FE	Timing of assessment	DA-A	49 DA-A	183 DA-A
	date	1	15.12.2023	13.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0
	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1
CPRHU23-1082-025FE	Timing of assessment	DA-A	87 DA-A	129 DA-A
	date	1	22.01.2024	04.03.2024
	1.Untreated Check	1	0	0
	2.CHR/ZF/PROTI 100 FS	60	0	0
	3.CHR/ZF/PROTI 100 FS	80	0	0
	4.CHR/ZF/PROTI 100 FS	100	0	0
	5.Premis 025 FS	150	0	0

	6.Redigo Pro 170 FS	66,7	0	0
	LSD (P=.05)	1	1	1

Table 21 – data from selectivity field trials – winter barley

Report code	Treatment	Dose [ml/100 kg]	Phytotoxicity in %		
CPRHU23-1086-025FS	Timing of assessment	DA-A	21 DA-A	27 DA-A	41 DA-A
	date		17.11.2023	23.11.2023	07.12.2023
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	5.Premis 025 FS	150	0	0	0
	6.Premis 025 FS	225	0	0	0
	6.Redigo Pro 170 FS	66,7	0	0	0
	7.Redigo Pro 170 FS	100,05	0	0	0
	LSD (P=.05)				
CPRHU23-1087-025FS	Timing of assessment	DA-A	38 DA-A	49 DA-A	63 DA-A
	date		04.12.2023	15.12.2023	29.12.2023
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0
	5.Premis 025 FS	150	0	0	0
	6.Premis 025 FS	225	0	0	0
	6.Redigo Pro 170 FS	66,7	0	0	0
	7.Redigo Pro 170 FS	100,05	0	0	0
	LSD (P=.05)				
CPRHU23-1088-025FS	Timing of assessment	DA-A	14 DA-A	31 DA-A	45 DA-A
	date		10.11.2023	27.11.2023	11.12.2023
	1.Untreated Check		0	0	0
	2.CHR/ZF/PROTI 100 FS	100	0	0	0
	3.CHR/ZF/PROTI 100 FS	150	0	0	0

5.Premis 025 FS	150	0	0	0
6.Premis 025 FS	225	0	0	0
6.Redigo Pro 170 FS	66,7	0	0	0
7.Redigo Pro 170 FS	100,05	0	0	0
LSD (P=.05)				

Table 22 data from phytotoxicity trials

Test report (1)	Testing Unit GEP (2)	Country Region (3)	Dates of trials and GS (4)	Cultivar F/G (5) N/A (6)	Experimental design Test method (7) Replicates	Remarks
CPRHU23-1083-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Szombathely / Hungary	27.10.2023 BBCH 00	winter wheat/ KWS Exotic F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: clay loam pH 6,35
CPRHU23-1084-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Zákány / Hungary	27.10.2023 BBCH 00	winter wheat/ NS 46 F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: clay loam pH 5,81
CPRHU23-1085-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Hódmezővásárhely / Hungary	27.10.2023 BBCH 00	winter wheat/ GK Csillag F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: silty clay pH 7,1
CPRHU23-1086-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Szombathely / Hungary	27.10.2023 BBCH 00	winter barley/ KWS Donau F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: clay loam pH 6,35
CPRHU23-1087-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Porrog / Hungary	27.10.2023 BBCH 00	winter barley/ GK Judy F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: clay loam pH 5,72
CPRHU23-1088-025FS	CPR Europe Kft., Török Ignác u. 30., Szombat- hely, Hungary	Hódmezővásárhely / Hungary	27.10.2023 BBCH 00	winter barley/ KWS Daxor F N	Randomized blocks EPPO PP 1/135 (4)	Soil type: silty clay pH 7,1

Notes:

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

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

None

Appendix 8 Summary of data on succeeding crop

None