FINAL REGISTRATION REPORT

Part B

Section 3

Efficacy Data and Information

Concise summry

Product code: MT-565SG-OR2-C

Product name(s): HAKSAR TOP 565 SG

Chemical active substances:

Tribenuron-methyl, 15 g/kg

MCPA, 550 g/kg

Central Zone

Zonal Rapporteur Member State: POLAND

CORE ASSESSMENT

(new authorization)

Applicant: CIECH Sarzyna S.A.

Submission date: 1/2021

MS Finalisation date: 06/12/2021

Version history

When	What
January 2021	First submission to zRMS
02/2021	Dossier sent for evaluation to Merit Mark (PL)
08/2021	zRMS finalised evaluation
December 2021	Final RR

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

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

The process chosen by the zRMS to transform the dRR into a RR involves creating commenting boxes

Comments of zRMS:	The commenting boxes are filled-in by the zRMS. They are usually placed at the end of each chapter. Commenting boxes should be understandable alone and refer very precisely to the text commented. The main advantage of their use is to distinguish easily between the applicant and the zRMS text.

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

Abstract

The presented document is prepared in accordance with Regulation (EC) No1107/2009, article 33 and concern herbicide MT-565SG-OR2-C, product name HAKSAR TOP 565 SG (Tribenuron methyl + MCPA). This Report is based on proper documentation and contains comprehensive description of tested herbicide.

Haksar Top 565 SG is intended to control a wide range of dicotyledonous weeds in winter and spring cereals. 140(+7 bridging) tests conducted in 2016, 2017 and 2018 on 40 weed species in 3 climate EPPO zones confirmed the high effectiveness of this herbicide. The effective dose was set at 1kg/ha which is containing 15 g/kg of Tribenuron-methyl and 550 g/kg of MCPA. Tested herbicide MT-565SG-OR2-C, Haksar Top 565 SG is a soluble granules.The herbicide is intended for a single application during the vegetation season: autumn (BBCH 13-23) or spring application (BBCH 13-39) in winter cereals and spring application (BBCH 13-39) in spring cereals. The data obtained in the experiments confirm the proposed uses. Haksar Top 565 SG is effective in controlling a cumbersome weed species: GALAP 78,5-80,2% %, MATIN 87,1- 92,5%, CENCY 89,1-88,8 %, CHEAL 95,6- 100%. The number of weed species susceptible to Haksar Top 565 SG included in the label is greater than the number of moderately susceptible species.

The effective dose was set at 1kg/ha which is containing 15 g/kg of Tribenuron-methyl and 550 g/kg of MCPA. Tested herbicide MT-565SG-OR2-C, Haksar Top 565 SG is a soluble granules.The herbicide is intended for a single application during the vegetation season: autumn (BBCH 13-23) or spring application (BBCH 13-39) in winter cereals and spring application (BBCH 13-39) in spring cereals. The data obtained in the experiments confirm the proposed uses. Haksar Top 565 SG is effective in controlling a cumbersome weed species: GALAP 78,5-80,2% %, MATIN 87,1- 92,5%, CENCY 89,1-88,8 %, CHEAL 95,6- 100%. The number of weed species susceptible to Haksar Top 565 SG included in the label is greater than the number of moderately susceptible species.

The effectiveness of the studied herbicide obtained in the experiments confirms the correctness of the information in the label. It is appropriate to divide the weeds into susceptible or moderately susceptible weeds for autumn or spring application for winter cereals or spring application for spring cereals.

The applicant has presented in the label important and appropriate elements of the anti-immune policy.

Haksar Top 565 SG shows high selectivity towards cereals. No adverse plant symptoms or negative effects of the herbicide on cereal yield were observed. The data obtained in the experiments confirm these features.

The results obtained in the experiments justify the needed for registration of the studied agent for weed control in cereals in Poland.

The data provided in dRR confirm the above applications and authorize the registration of Haksar Top 565 SG in Poland.

The RR is drafted correctly and contains appropriate and sufficient data on the performance of the herbicide tested. These data provide the basis for registration of the studied agent in Poland.

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

1	2	3	4	5	6	7	8	9		10	11	12	13	14	15
Use-No. [(e)]	**Member state(s)**	**Crop and/ or situation** **(crop destination / purpose of crop)**	**F, Fn, Fpn G, Gn, Gpn or I**	**Pests or Group of pests controlled** (additionally: developmental stages of the pest or pest group)	**Application**					**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [(f)]	**zRMS Conclusion** (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)		kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
Zonal uses (field or outdoor uses, certain types of protected crops)															
1	PL	Winter soft wheat (TRZAW), Winter rye (SECCW), Winter triticale (TTLWI), Winter barley (HORVW)	F	Annual dicotyledonous weeds	Broadcast - foliar	Autumn BBCH 13 – 23	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.		A
2	PL	Winter soft wheat (TRZAW), Spring soft wheat (TRZAS), Winter rye (SECCW), Winter triticale (TTLWI) Winter barley (HORVW) Spring barley (HORVS) Oats (AVESA)	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.		A

1	2	3	4	5	6	7	8	9		10	11	12	13	14	15
Use-No. [(e)]	**Member state(s)**	**Crop and/ or situation** **(crop destination / purpose of crop)**	**F, Fn, Fpn G, Gn, Gpn or I**	**Pests or Group of pests controlled** (additionally: developmental stages of the pest or pest group)	**Application**					**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [(f)]	**zRMS Conclusion** (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)		kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
3	DE	Winter soft wheat (TRZAW), Winter rye (SECCW), Winter triticale (TTLWI), Winter barley (HORVW)	F	Annual dicotyledonous weeds	Broadcast - foliar	Autumn BBCH 13 – 23	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.	To be further submitted via Mutual Recognition procedure.	
4	DE	Winter soft wheat (TRZAW), Spring barley (HORVS), Winter barley (HORVW) Winter rye (SECCW), Winter triticale (TTLWI),	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.	To be further submitted via Mutual Recognition procedure.	
5	HU	Winter soft wheat (TRZAW), Spring barley (HORVS)	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g	200 / 400	n.a.	To be further submitted via Mutual Recognition procedure.	

1	2	3	4	5	6	7	8	9		10	11	12	13	14	15
Use-No. [(e)]	**Member state(s)**	**Crop and/ or situation** **(crop destination / purpose of crop)**	**F, Fn, Fpn G, Gn, Gpn or I**	**Pests or Group of pests controlled** (additionally: developmental stages of the pest or pest group)	**Application**					**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [(f)]	**zRMS Conclusion** (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)		kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
											as/ha				
6	RO	Winter soft wheat (TRZAW), Spring barley (HORVS)	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.	To be further submitted via Mutual Recognition procedure.	
Minor uses according to Article 51 (zonal uses)															
7	PL	Durum wheat (TRZDU), Spelt wheat (TRZSP), einkorn wheat (TRZMO) emmer wheat (TRZDI)	F	Annual dicotyledonous weeds	Broadcast - foliar	Autumn BBCH 13 – 23	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.		There are no phytotoxicity studies for minor uses. It is possible to register in Poland without an effectiveness test pursuant to Art 51 of the Regulation 1107/2009
8	PL	Durum wheat (TRZDU), Spelt wheat	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha;	a) MCPA 550 g as/ha;	200 / 400	n.a.		In Poland spring tritica-

1	2	3	4	5	6	7	8	9		10	11	12	13	14	15
Use-No. [(e)]	**Member state(s)**	**Crop and/ or situation** **(crop destination / purpose of crop)**	**F, Fn, Fpn G, Gn, Gpn or I**	**Pests or Group of pests controlled** (additionally: developmental stages of the pest or pest group)	**Application**					**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [(f)]	**zRMS Conclusion** (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)		kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
		(TRZSP), Spring rye (SECCS), Spring triticale (TTLWS), einkorn wheat (TRZMO), emmer wheat (TRZDI)								b) 1,00 kg/ha	tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha				le is not included in the list of minor uses. There are no phytotoxicity studies for minor uses. It is possible to register in Poland without an effectiveness test pursuant to Art 51 of the Regulation 1107/2009
9	PL	Miscanthus sp. (MISSS)	F	Annual dicotyledonous weeds	Broadcast - foliar	BBCH 12 -14	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g	200 / 400	n.a.		There are no phytotoxicity studies for minor uses. It is possible to register in Poland without an effec-

1	2	3	4	5	6	7	8	9		10	11	12	13	14	15
Use-No. (e)	**Member state(s)**	**Crop and/ or situation** **(crop destination / purpose of crop)**	**F, Fn, Fpn G, Gn, Gpn or I**	**Pests or Group of pests controlled** (additionally: developmental stages of the pest or pest group)	**Application**					**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha (f)	**zRMS Conclusion** (efficacy)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)		kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
											as/ha				tiveness test pursuant to Art 51 of the Regulation 1107/2009
10	PL	Grasses grown for seeds	F	Annual dicotyledonous weeds	Broadcast - foliar	Spring BBCH 13 – 39	a) 1 b) 1	n.a.		a) 1,00 kg/ha; b) 1,00 kg/ha	a) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha b) MCPA 550 g as/ha; tribenuron methyl 15 g as/ha	200 / 400	n.a.		There are no phytotoxicity studies for minor uses. It is possible to register in Poland without an effectiveness test pursuant to Art 51 of the Regulation 1107/2009

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

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

Column 15: zRMS conclusion.

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

Comment on Label

Zboża ozime-zabieg jesienią:

niezapominajka polna MYOAR: 0 exp. North eastern, 2 exp. Maritime 100%, - Special Grouping Poland + Germany

stulisz lekarski SSYOF: 0 exp. North eastern, 2 exp.Maritime 100%, 0 exp. South eastern, - Special Grouping Poland + Germany

Zboża ozime- zabieg wiosną:

sporek polny SPRAR: 1 exp. North eastern 87,5 % , 1 exp. Maritime 98,8 %, 0 exp. South eastern, 2 exp. Special Grouping Poland + Germany 93,2%.

dymnica pospolita FUMOF: 2 exp. North eastern 75,7 % , 0 exp. Maritime, 0 exp. South eastern, -Special Grouping Poland + Germany

Zboża jare:

dymnica poapolita FUMOF: 1 exp. North eastern 77,6 % , 2 exp.Maritime 96,7 %, 1exp. South eastern 100% , 2 exp. Special Grouping Poland + Germany 87,7 %

rdest ptasi: POLAV: 2 exp. North eastern 95.7% , 0 exp. Maritime, 0 exp. South eastern, - Special Grouping Poland + Germany

rumian polny: ANTAR: 2 exp. North eastern 98%, 0 exp. Maritime, 0 exp. South eastern , - Special Grouping Poland + Germany

tobołki polne THLAR: 2 exp. North eastern 82.3%, 0 exp. Maritime, 0 exp. South eastern, - Special Grouping Poland + Germany

Comment on Label -continiued

Above, we have selected weed species that have been tested in an insufficient number of experiments and do not meet Polish requirements. They should not be included in the label. In the label, they were marked with gray shading.

The combined use of a.s Tribenuron methyl and a.s. MCPA allowed the spectrum of weed control to be extended to include other species.(such as Fumaria officinalis.) However, these species were not tested in a sufficient number of experiments and therefore they cannot be presented in the label. When Haksar Top 365 SG was applied to winter cereals in spring, fewer species were classified as medium susceptible weeds. Fewer weed species showed only moderate susceptibility to Haksar Top 565 SG (Tribenuron methyl+MCPA) than with Tribenuron-methyl alone.
The label of the studied herbicide under "Use of the plant protection product in minor crops and uses" lists spring triticale as a minor use. In Poland, triticale has the status of a major crop.

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3.2 Efficacy data (KCP 6)

Introduction

This document summarises the information related to the efficacy of the plant protection product MT-565SG-OR2-C (commercial name HAKSAR TOP 565 SG) containing Tribenuron-methyl and MCPA which were included into Annex I of Regulation (EC) no 1107/2009 (Reg. (EU) 2018/1913 for Tribenuron-methyl and Reg. (EU) No 540/2011 for MCPA). The SANCO reports for Tribenuron-methyl and MCPA (SANCO/10671/04 and SANCO/4062/2001 respectively) is considered to provide the relevant review information or a reference to where such information can be founded.

The Annex I Inclusion Directive for Tribenuron-methyl and MCPA (1107/2009) provides specific provisions under Part B which need to be considered by the applicant in the preparation of their submission and by the MS prior to granting an authorisation.

This document is submitted in view to the submission new product.

This document will be evaluated by Poland as Zonal Rapporteur Member State (zRMS).

Description of active substances

MT-565SG-OR2-C is a soluble granules (SG) containing 15 g/kg of Tribenuron-methyl and 550 g/kg of MCPA for use on winter cereals (wheat, rye, triticale and barley) and spring cereals (wheat and barley) against dicotyledonous weeds.

Mode of action

Tribenuron-methyl belongs to the Sulfonylurea (HRAC group: B) chemical family of herbicides (HRAC, 2018).
Tribenuron-methyl inhibits the plant amino acid synthesis by blocking the normal function of the aceto-hydroxyacid synthase (AHAS) also known as acetolactate synthase (ALS) (weedscience.org). ALS is a key enzyme of the branched-chain amino acids isoleucine, leucine and valine (LaRossa and Schloss, 1984) and without proteins, plants starve to death (Pue and Guddat, 2014). However, the actual sequence of phytotoxic processes in unclear (weedscience.org).

MCPA is an herbicide widely used for the selective control of annual and perennial broad-leaved weeds in cereals crops such as wheat, oats, triticale and rye and other crops.
MCPA is a selective and systemic auxin growth regulator herbicide. It is absorbed by roots or leaves with a translocation and accumulation in vegetative shoots and roots (PPDB, 2018). This herbicide disrupts plant cell division, growth and differentiation of meristematic tissues in the newly forming stems and leaves, it affects protein synthesis and damages the vascular system (Grossmann and Mediation, 2003). Bending and twisting of leaves and stems is observed almost immediately after application. Delayed symptom development includes malformed growth and tumours: misshapen leaves, stems and flowers and abnormal roots (Alberta Agriculture and Forestry, 2018). The effects associated with auxins help set them apart from other downwardly mobile herbicides (Prudue University, 2018).

Table 3.2-1: Details of the active substances

Active substance	Tribenuron-methyl	MCPA
Concentration (Unit: g/kg or g/L...)	15 g/kg	550 g/kg

Active substance	Tribenuron-methyl	MCPA
Chemical group	Sulfonylurea	Phenoxy-carboxylic-acid
Mode of action	Inhibition of plant amino acid synthesis by blocking acetolactate synthase (ALS)	affects protein synthesis and damages the vascular system
Biological action	Selective post-emergence herbicide	selective and systemic auxin growth regulator herbicide

Comments of zRMS:	**This study (RR)** is based on proper documentation and contains a comprehensive description of the presented product: Product code: MT-565SG-OR2-C, product name(s): HAKSAR TOP 565SG. Chemical active substances: Tribenuron-methyl, 15 g/kg, MCPA550g/kg, is a water dispersible granules (WG).

Description of the plant protection product

MT-565SG-OR2-C is a soluble granules (SG) containing 15 g/kg of Tribenuron-methyl and 550 g/kg of MCPA. This herbicidal product is intended to be used for the control of dicotyledonous weeds already emerged in winter cereals (wheat, barley, rye, and triticale) and spring cereals (wheat, barley and oat).
MT-565SG-OR2-C can be applied either in autumn or in spring.

Table 3.2-2: Simplified table of requested uses for MT-565SG-OR2-C

Uses		Member States	Application timing season	Requested rates	Comments / Other relevant details on GAPs
Crop(s)	Target(s)				
Winter wheat	Annual dicotyledonous weeds	PL, DE, HU, RO	Spring (BBCH 13-39)	1 kg/ha 1 application	
		PL, DE	Autumn (BBCH 13-23)	1 kg/ha 1 application	-
Winter rye	Annual dicotyledonous weeds	PL, DE	Spring (BBCH 13-39)	1 kg/ha 1 application	
			Autumn (BBCH 13-23)	1 kg/ha 1 application	-
Winter triticale	Annual dicotyledonous weeds	PL, DE	Spring (BBCH 13-39)	1 kg/ha 1 application	
			Autumn (BBCH 13-23)	1 kg/ha 1 application	-
Winter barley	Annual dicotyledonous weeds	PL, DE	Spring (BBCH 13-39)	1 kg/ha 1 application	
		PL, DE	Autumn (BBCH 13-23)	1 kg/ha 1 application	-
Spring wheat	Annual dicotyledonous weeds	PL	Spring (BBCH 13-39)	1 kg/ha 1 application	
Spring barley	Annual dicotyledonous weeds	PL, DE, HU, RO	Spring (BBCH 13-39)	1 kg/ha 1 application	

Uses		Member States	Application timing season	Requested rates	Comments / Other relevant details on GAPs
Crop(s)	Target(s)				
Oat	Annual dicotyledonous weeds	PL	Spring (BBCH 13-39)	1 kg/ha 1 application	

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

Description of the target pests

Weeds have direct and indirect impacts on crops. Direct impacts are due to the competition for light, space, water and nutrients. This competition affects mainly crop growth and yield. Competition is particularly harmful at early stage of cereals crops (germination and emergence). Weeds can also have an allelopathic effect on crops, they produce and release one or more biochemicals, called allelochemicals, which can have detrimental effect on crops by influencing the germination, growth, survival and/or reproduction. Undirect impacts affect sanitary quality (potential hosts for pests and diseases, weed seed contaminants), quality parameters, labour time (difficulties for harvesting) and the future potential for production (increase of the seeds stock). Some weeds germinate mainly in the autumn, some mainly in the spring, and others will germinate throughout both times of the year.
Weeds are more or less detrimental according to the weed species. The threshold of acceptable density of weed in a crop depends on the weed species and crop species. For example, 1.8 plants/m² of *Galium aparine* would be sufficient to reduce cereals yield by 5%, whereas the threshold for *Papaver rhoeas* is at 22 plants/m² (ARVALIS, sd).

A total of 69 dicotyledonous weed species have been assessed in the individual efficacy trial. In this dossier, only the most represented weeds, assessed in a total of 2 trials or more, were analysed in detail. Data for other weeds assessed once have also been presented in summary form in order to bring all relevant data together in support of the comparison of the test and reference products.

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

EPPO code	Family	*species*	EPPO code	Family	*species*
AETCY	Apiaceae	*Aethusa cynapium*	**LITAR**	Boraginaceae	*Buglossoides arvensis*
AGOGI	Caryophyllaceae	*Agrostemma githago*	**LYCAR**	Boraginaceae	*Anchusa arvensis*
AMBEL	Asteraceae	*Ambrosia artemisiifolia*	**MATCH**	Asteraceae	*Matricaria chamomilla*
AMARE	Amaranthaceae	*Amaranthus retroflexus*	**MATIN**	Asteraceae	*Tripleurospermum inodorum*
ANGAR	Primulaceae	*Anagallis arvensis*	**MYOAR**	Boraginaceae	*Myosotis arvensis*
ANRSY	Apiaceae	*Anthriscus sylvestris*	**PAPRH**	Papaveraceae	*Papaver rhoeas*
ANTAR	Asteraceae	*Anthemis arvensis*	**POLAV**	Polygonaceae	*Polygonum aviculare*
APHAR	Rosaceae	*Aphanes arvensis*	**POLCO**	Polygonaceae	*Fallopia convolvulus*
ARBTH	Brassicaceae	*Arabidopsis thaliana*	**POLPE**	Polygonaceae	*Persicaria maculosa*
BRSNA	Brassicaceae	*Brassica napus subsp. Rapifera*	**RAPSO**	Brassicaceae	*Raphanus sativus subsp. Oleiferus*
BRSNN	Brassicaceae	*Brassica napus*	**RUMAA**	Polygonaceae	*Rumex acetosella*
BRSNS	Brassicaceae	*Brassica napus*	**SENVU**	Asteraceae	*Senecio vulgaris*
BRSNW	Brassicaceae	*Brassica napus*	**SINAR**	Brassicaceae	*Sinapis arvensis*
CAPBP	Brassicaceae	*Capsella bursa-pastoris*	**SONOL**	Asteraceae	*Sonchus oleraceus*
CEFPU	Dicranaceae	*Ceratodon purpureus*	**SPRAR**	Caryophyllaceae	*Spergula arvensis*
CENCY	Asteraceae	*Cyanus segetum*	**SSYOF**	Brassicaceae	*Sisymbrium officinale*
CENSS	Asteraceae	*Centaurea sp.*	**STEME**	Caryophyllaceae	*Stellaria media*
CHEAL	Amaranthaceae	*Chenopodium album*	**TAROF**	Asteraceae	*Taraxacum officinale*
CHEHY	Amaranthaceae	*Chenopodiastrum hybridum*	**THLAR**	Brassicaceae	*Thlaspi arvensis*
CIRAR	Asteraceae	*Cirsium arvense*	**URTUR**	Urticaceae	*Urtica urens*
CNISA	Canabaceae	*Cannabis sativa*	**VERAG**	Plantaginaceae	*Veronica agrestis*
CNSOR	Ranunculaceae	*Consolida orientalis*	**VERAR**	Plantaginaceae	*Veronica arvensis*

CNSRE	Ranunculaceae	*Consolida regalis*	**VERHE**	Plantaginaceae	*Veronica hederifolia*
CONAR	Convolvulaceae	*Convolvulus arvensis*	**VERHT**	Plantaginaceae	*Veronica hederifolia subsp. triloba*
DESSO	Brassicaceae	*Descurainia sophia*	**VERPE**	Plantaginaceae	*Veronica persica*
EROCI	Geraniaceae	*Erodium cicutarium*	**VERTR**	Plantaginaceae	*Veronica triphyllos*
FUMOF	Papaveraceae	*Fumaria officinalis*	**VICCR**	Fabaceae	*Vicia cracca*
GAETE	Lamiaceae	*Galeopsis tetrahit*	**VICFM**	Fabaceae	*Vicia faba subsp. Mi-nor*
GALAP	Rubiaceae	*Galium aparine*	**VICIN**	Fabaceae	*Vicia cracca subsp. Incana*
GERDI	Geraniaceae	*Geranium dissectum*	**VICTE**	Fabaceae	*Vicia tetrasperma*
GERMO	Geraniaceae	*Geranium purpureum*	**VICVI**	Fabaceae	*Vicia villosa*
GERPU	Geraniaceae	*Geranium pusillum*	**VICFX**	Fabaceae	*Vicia faba*
HIBTR	Malvaceae	*Hibiscus trionum*	**VIOAR**	Violaceae	*Viola arvensis*
LAMAM	Lamiaceae	*Lamium amplexicaule*	**XANOR**	Asteraceae	*Xanthium orientale*
LAMPU	Lamiaceae	*Lamium purpureum*	**XANST**	Asteraceae	*Xanthium strumarium*

Weeding is a major issue in cereal growing, especially at the time of germination and emergence of the crop. It prevents the crops from competition for light, space, nutrients and water. Controlling broad leaved is essential in winter and spring cereals crops to ensure profitable yield, trouble free harvesting and high-quality seed. Weed prevention is the most effective method of dealing with weeds. Once a weed has entered into an area and becomes established, eradication is far more complicated. It is much easier to treat weeds when present in small numbers than when they are well established. The main aim of autumn applied herbicides is to reduce the competition effect of autumn weeds until crop growth takes off in the spring. Herbicides applied at the end of the autumn are used to control some weeds highly detrimental which benefit from spring humidity. Weeds seeds in grain crops perpetuate when the seed is replanted.

Comments of zRMS:	In this dossier, a total of 70 weed species(69+ SSYOF) were presented, which were analyzed in terms of their sensitivity to the tested herbicide MT-565SG-OR2-C, product name: HAKSAR TOP 565 SG. **These species were assessed in the experiments, according to EPPO guidelines and GEP requirements and uniform principles**. Note: The EPPO methodologies cited in the dRR have the correct edition (version) numbers, while most reports show numbers for outdated editions

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, DE, HU, RO	-	Broadleaved weeds	PL, DE, HU, RO	-
Winter rye	PL, DE	-	Broadleaved weed	PL, DE	-
Winter triticale	PL, DE	-	Broadleaved weed	PL, DE	-
Winter barley	PL, DE	-	Broadleaved weed	PL, DE	-
Spring wheat	PL	-	Broadleaved weed	PL	-
Spring barley	PL, DE, HU, RO	-	Broadleaved weed	PL, DE, HU, RO	-
Oat	PL	-	~~Oat~~ Broadleaved weed	PL	-

Comments of zRMS:	**<u>Target pests status</u>:** The experiments evaluated the effectiveness of MT-565SG-OR2-C, product name: HAKSAR TOP 565 SG against <u>major</u> broadleaf weeds in the major crops of cereals. **Winter wheat, spring wheat, winter rye, winter barley, spring barley, winter triticale, oats have major status in the Poland.**

Compliance with the Uniform Principles

All efficacy trials presented in this BAD were carried out by contractor companies which follow the EPPO standard guidelines and are officially recognized by the competent authorities to carry out field registration trials in accordance with the principles of Good Experimental Practices (GEP).

Comments of zRMS:	**<u>Compliance with the Uniform Principles</u>**: All trials were conducted according to appropriate EPPO guidelines and GEP requirements and uniform principles.

Information on trials submitted (3.1 Efficacy data)

A total of 147 trials investigating the minimum effective dose and the effectiveness of MT-565SG-OR2-C against weeds were implemented in 2016 (44 trials), 2017 (96 trials) and 2018 (7 trials). Those trials were undertaken in winter wheat (45 trials), winter barley (21 trials), winter rye (23 trials), winter triticale (19 trials), spring wheat (6 trials), spring barley (27 trials) and oat (6 trials).
Trials were located in the Maritime EPPO zone (67 trials) in Germany (55 trials) and United Kingdom (12 trials), in the North-Eastern EPPO zone in Poland (65 trials) and in the South-Eastern EPPO zone (15 trials) in Hungary (9 trials) and in Romania (6 trials).

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

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials (number of valid trials)			GEP, non-GEP, official***	Comments (any other relevant information)
					Maritime zone	North-eastern zone	South-eastern zone		
Winter wheat	Broadleaved weeds	PL	2016 – 2017	MED + E	-	5 (5)	-	GEP	
		DE	2016 – 2017	MED + E	10 (10)	-	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**10 (10)**	**5 (5)**	**-**	**-**	
Winter rye	Broadleaved weeds	PL	2016 – 2017	MED + E	-	5 (5)	-	GEP	
		DE	2016 – 2017	MED + E	6 (6)	-	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**6 (6)**	**5 (5)**	**-**	**-**	
Winter triticale	Broadleaved weeds	PL	2016 – 2017	MED + E	-	5 (5)	-	GEP	
		DE	2016 – 2017	MED + E	4 (4)	-	-	GEP	
	TOTAL	**-**	**2016 -**	**-**	**4 (4)**	**5 (5)**	**-**	**-**	

Crop(s) *	Target(s)*	Country	Years	Type of tri-al**	Number of trials (number of valid trials)			GEP, non-GEP, official***	Comments (any other relevant information)
					Maritime zone	North-eastern zone	South-eastern zone		
			2017						
Winter barley	Broadleaved weeds	PL	2016 – 2017	MED + E	-	5 (5)	-	GEP	
		DE	2016 – 2017	MED + E	6 (6)	-	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**6 (6)**	**5 (5)**	**-**	**-**	

* 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.

Localisation of efficacy trials in the North Eastern EPPO zone

Autumn trials

Figure 3.2-6: Trial map – Efficacy trials performed in autumn on winter wheat in the North Eastern EPPO zone

Winter wheat – Autumn trials - NE

Number on the map	Test report	Year	Trial location
1	253_01_F16_493	2016	Słupia Gaj 3 (96-128) Słupia, Poland
2	253_02_F16_494	2016	Ul Kościelna 6/1 Rąbiń (64-010) Krzywiń, Poland
3	253_03_F16_495	2016	Jaraczewo 44 (64-930) Szydłowo, Poland
4	415_01_F17_38	2017	Lipce Reymontowskie (96-127) Łódzkie, Poland
5	416_01_F17_39	2017	Wszembórz (62-306) Wielkopolskie, Poland

Figure 3.2-7: Trial map – Efficacy trials performed in autumn on winter rye in the North Eastern EPPO zone

Winter rye – Autumn trials – NE

Number on the map	Test report	Year	Trial location
1	AH/16/JO/33/Br/a	2016	Brody (64-310) Poland
2	AH/16/ŻO/33/Pr/a	2016	Przybroda (60-623) Poland
3	AH/16/ŻO/33/Zł/a	2016	Zlotniki, Poland
4	AH/17/ŻO/19/Br/a/OR2-C3	2017	Brody (64-310) Poland
5	AH/17/ŻO/19/Zł/a/OR2-C2	2017	Zlotniki, Poland

Figure 3.2-8: Trial map – Efficacy trials performed in autumn on winter triticale in the North Eastern EPPO zone

Winter triticale – Autumn trials – NE

Number on the map	Test report	Year	Trial location
1	254_01_F16_496	2016	Stare Olszyny (09-142) Załuski
2	254_02_F16_497	2016	Szydłowo (64-930) Poland
3	254_03_F16_498	2016	Krzywiń (64-010) Poland
4	AH17PszO19PraOR2-C1	2017	Przybroda (60-623) Poland
5	AH17PszO19ZłaOR2-C	2017	Zlotniki (62-002) Poland

Figure 3.2-9: Trial map – Efficacy trials performed in autumn on winter barley in the North Eastern EPPO zone

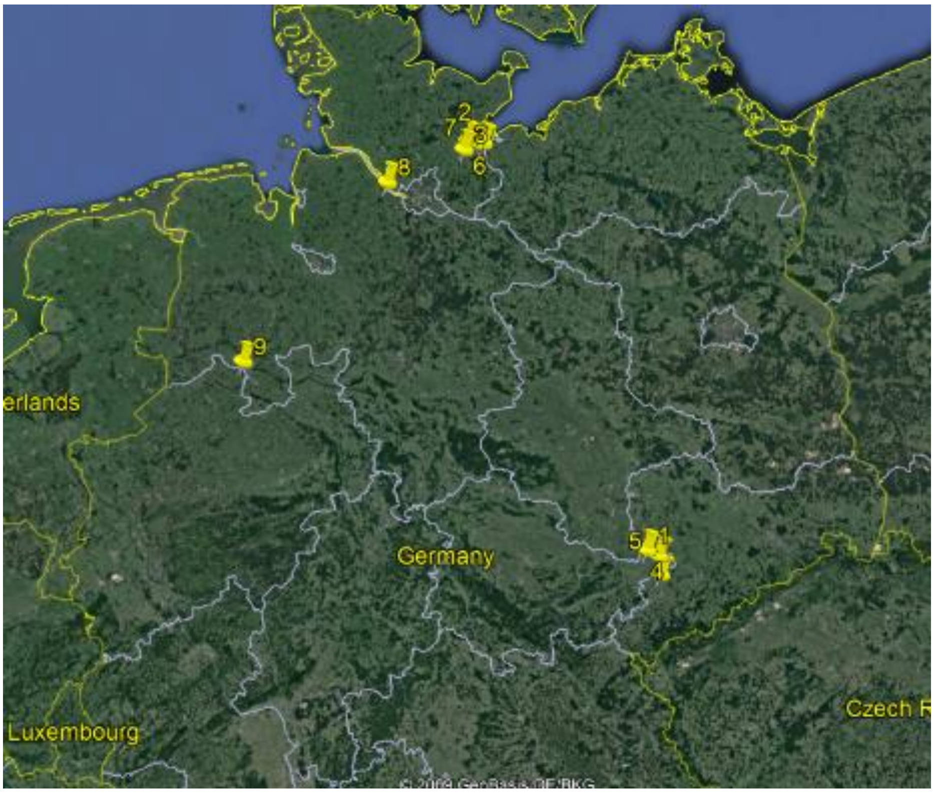
Winter barley – Autumn trials - NE

Number on the map	Test report	Year	Trial location
1	AH/16/JO/33/Br/a	2016	Brody (64-310) Wielkopolska Poland
2	AH/16/JO/33/Pr/a	2016	Przybroda (60-623) Wielkopolska Poland
3	417_01_F17_40	2017	Zamborzyce Wojciechowskie 21 (20-515) Lublin, Lubelski, Poland
4	418_01_F17_41	2017	Kąpiel, Wielkopolskie (62-402) Poland
5	419_01_F17_42	2017	Kościan, Wielkopolskie (62-400) Poland

Localisation of efficacy trials in the Maritime EPPO zone

Autumn trials

Figure 3.2-10: Trial map – Efficacy trials performed in autumn on winter wheat in the Maritime EPPO zone



Winter wheat – Autumn trials – MAR

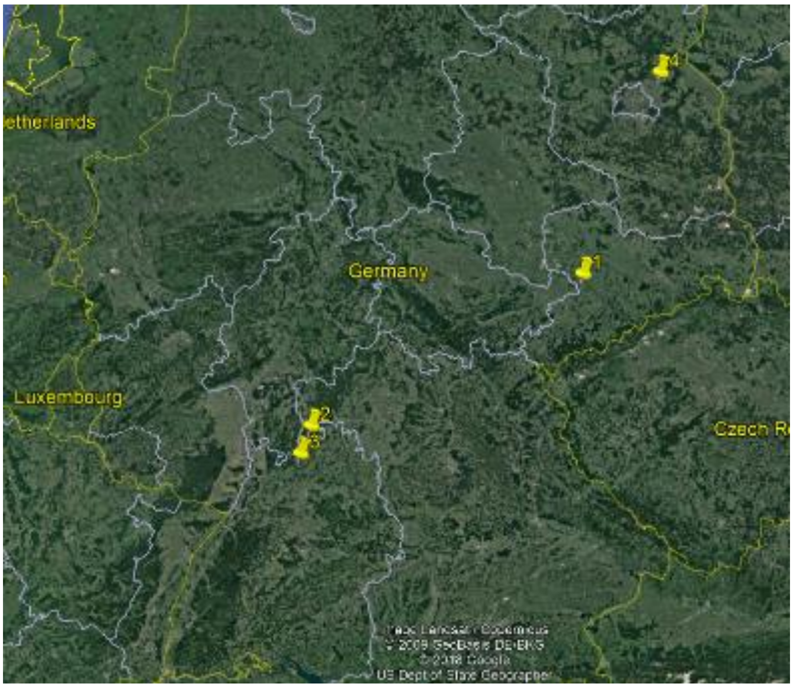
Number on the map	Test report	Year	Trial location
1	CFZ-17-27857-DE04	2016	Graicha (04626) Germany
2	CFZ-17-27857-DE05	2016	Barnitz (23858) Germany
3	CFZ-17-27857-DE07	2016	Groß Boden (23847) Germany
4	CFZ-17-27857-DE08	2016	Königswalde (08412) Germany
5	CFZ-17-27857-DE09	2016	Nörditz (04639) Germany
6	CFZ-18-32129-DE01	2017	Beidendorf (23560) Germany
7	S17-07125-01	2017	Groß Schenkenberg (23860) Germany
8	S17-07128-01	2017	Dollern (21739) Germany
9	S17-07129-01	2017	Westerkappeln (49492) Germany

Figure 3.2-11: Trial map – Efficacy trials performed in autumn on winter rye in the Maritime EPPO zone

Winter rye – Autumn trials – MAR

Number on the map	Test report	Year	Trial location
1	CFZ-17-27857-DE13	2016	Blaufelden (74572) Germany
2	CFZ-17-27857-DE14	2016	Elsenfeld (63820) Germany
3	CFZ-18-32129-DE03	2017	Blaufelden (74572) Germany
4	S17-07138-01	2017	Ohrensen (21698) Germany
5	S17-07139-01	2017	Walldorf (69190) Germany
6	S17-07140-01	2017	Altlandsberg (15345) Germany

Figure 3.2-12: Trial map – Efficacy trials performed in autumn on winter triticale in the Maritime EPPO zone



Winter triticale – Autumn trials – MAR

Number on the map	Test report	Year	Trial location
1	CFZ-17-27857-DE10	2016	Langleuba-Oberhain (09322) Germany
2	CFZ-17-27857-DE11	2016	Amorbach (63916) Germany
3	S17-07135-01	2017	Neckargerach (69437) Germany
4	S17-07136-01	2017	Weesow (69437) Germany

Figure 3.2-13: Trial map – Efficacy trials performed in autumn on winter barley in the Maritime EPPO zone

Winter barley – Autumn trials – MAR

Number on the map	Test report	Year	Trial location
1	CFZ-17-27857-DE17	2016	Lindach (91622) Germany
2	CFZ-17-27857-DE18	2016	Klein-Umstadt (64823) Germany
3	CFZ-17-27857-DE20	2016	Amorbach-Beuchen (63916) Germany
4	S17-07131-01	2017	Bliedersdorf (21640) Germany
5	S17-07132-01	2017	Bielefeld – Altenhagen (33729) Germany
6	S17-07134-01	2017	Brakel-Erkeln (33034) Germany

Table 3.2-14: Presentation of trials (efficacy trials, preliminary trials...) – Spring application

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials (number of valid trials)			GEP, non-GEP, official***	Comments (any other relevant information)
					Maritime zone	North-eastern zone	South-eastern zone		
Winter wheat	Broadleaved weeds	PL	2016 – 2018	MED + E	-	9 (9)	-	GEP	
		DE	2016 – 2018	MED + E	7 (7)	-	-	GEP	
		UK	2016 – 2018	MED + E	6 (6)	-	-	GEP	
		HU	2016 – 2018	MED + E	-	-	5 (5)	GEP	
		RO	2016 – 2017	MED + E	-	-	3 (3)	GEP	

Crop(s) *	Target(s)*	Country	Years	Type of trial**	Number of trials (number of valid trials)			GEP, non-GEP, official***	Comments (any other relevant information)
					Maritime zone	North-eastern zone	South-eastern zone		
	TOTAL	**-**	**2016 - 2018**	**-**	**13 (13)**	**9 (9)**	**8 (8)**	**-**	
Winter rye	Broadleaved weeds	PL	2016 – 2017	MED + E	-	7 (7)	-	GEP	
		DE	2017	MED + E	5 (5)	-	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**5 (5)**	**7 (7)**	-	**-**	
Winter triticale	Broadleaved weeds	PL	2017	MED + E	-	5 (5)	-	GEP	
		DE	2017	MED + E	5 (5)	-	-	GEP	
	TOTAL	**-**	**2017**	**-**	**5 (5)**	**5 (5)**	-	**-**	
Winter barley	Broadleaved weeds	PL	2017	MED + E	-	5 (5)	-	GEP	
		DE	2017	MED + E	5 (5)	-	-	GEP	
	TOTAL	**-**	**2017**	**-**	**5 (5)**	**5 (5)**	-	**-**	
Spring wheat	Broadleaved weeds	PL	2016 – 2017	MED + E	-	6 (6)	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**-**	**6 (6)**	-	**-**	
Spring barley	Broadleaved weeds	PL	2016 – 2018	MED + E	-	7 (7)	-	GEP	
		DE	2016 – 2018	MED + E	7 (7)	-	-	GEP	
		UK	2016 – 2018	MED + E	6 (6)	-	-	GEP	
		HU	2016 – 2017	MED + E	-	-	4 (4)	GEP	
		RO	2016 – 2017	MED + E	-	-	3 (3)	GEP	
	TOTAL	**-**	**2016 - 2018**	**-**	**13 (13)**	**7 (7)**	**7 (7)**	**-**	
Oat	Broadleaved weeds	PL	2016 – 2017	MED + E	-	6 (6)	-	GEP	
	TOTAL	**-**	**2016 - 2017**	**-**	**-**	**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.

Localisation of efficacy trials in the North Eastern EPPO zone

Spring trials

Figure 3.2-15: Trial map – Efficacy trials performed in spring on winter wheat in the North Eastern EPPO zone

Winter wheat – Spring trials - NE

Number on the map	Test report	Year	Trial location
1	PL 16 066 PL1	2016	Mamlicz (88-190) Poland
2	PL 16 066 PL2	2016	Wegrzce (32-086) Poland
3	PL 17 030 PL1	2017	Gulczewo (88-190) Poland
4	PL 17 030 PL2	2017	Dąbrowa Mszadelska (95-061) Poland
5	SRPL17-078-395HE (CH_H_MTT_EFF01)	2017	Wenecja (88-400) Poland
6	SRPL17-079-395HE (CH_H_MTT_EFF02)	2017	Teresin (22-122) Poland
7	SRPL17-080-395HE (CH_H_MTT_EFF03)	2017	Olszany (58-150) Poland
8	SRPL17-081-395HE (CH_H_MTT_EFF04)	2017	Kluczewo Huby (64-560) Poland

Figure 3.2-16: Trial map – Efficacy trials performed in spring on winter rye in the North Eastern EPPO zone

Winter rye – Spring trials - NE

Number on the map	Test report	Year	Trial location
1	PL 16 068 PL1	2016	Ojrzanowo (89-210) Poland
2	PL 16 068 PL2	2016	Dluzec (32-340) Poland
3	PL 17033 PL2	2017	Nadolna (95-061) Poland
4	SRPL17-084-395HE (CH_H_MTT_EFF05)	2017	Słębowo (88-400) Poland
5	SRPL17-085-395HE (CH_H_MTT_EFF06)	2017	Wąsosz (89-200) Poland
6	SRPL17-086-395HE (CH_H_MTT_EFF07)	2017	Święciechowa (64-115) Poland
7	SRPL17-087-395HE (CH_H_MTT_EFF08)	2017	Brodziszewo (64-500) Poland

Figure 3.2-17: Trial map – Efficacy trials performed in spring on winter triticale in the North Eastern EPPO zone

Winter triticale – Spring trials – NE

Number on the map	Test report	Year	Trial location
1	MT-565SG-T-75WG-OR2-C-PL-08	2017	Lichnowy (89-620) Poland
2	MT-565SG-T-75WG-OR2-C-PL-09	2017	Zamarte (89-430) Poland
3	MT-565SG-T-75WG-OR2-C-PL-10	2017	Zablocie Kozlowskie (13-124) Poland
4	MT-565SG-T-75WG-OR2-C-PL-11	2017	Jagarzewo (13-113) Poland
5	MT-565SG-T-75WG-OR2-C-PL-12	2017	Kaczkowo (88-400) Poland

Figure 3.2-18: Trial map – Efficacy trials performed in spring on winter barley in the North Eastern EPPO zone

Winter barley – Spring trials - NE

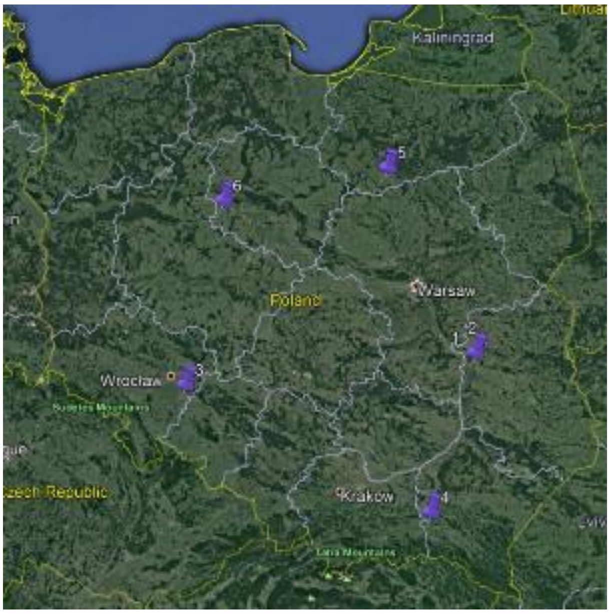
Number on the map	Test report	Year	Trial location
1	SRPL17-090-395HE (CH_H_MTT_EFF09)	2017	Retkowo (89-240) Poland
2	SRPL17-091-395HE (CH_H_MTT_EFF10)	2017	Murczyn (88-400) Poland
3	SRPL17-092-395HE (CH_H_MTT_EFF11)	2017	Rozwadowka Folwark (25-518) Poland
4	SRPL17-093-395HE (CH_H_MTT_EFF12)	2017	Jankowice Wielkie (49-332) Poland
5	SRPL17-094-395HE (CH_H_MTT_EFF13)	2017	Kluczewo Huby 9 (64-560) Poland

Figure 3.2-19: Trial map – Efficacy trials performed in spring on spring wheat in the North Eastern EPPO zone

Spring wheat – Spring trials – NE

Number on the map	Test report	Year	Trial location
1	NUZ 12 + 13/16 – Trial 1 (Spring wheat)	2016	Puławy (24-100) Poland
2	NUZ 12 + 13/16 – Trial 2 (Spring wheat)	2016	Puławy (24-100) Poland
3	NUZ 12 + 13/16 – Trial 3 (Spring wheat)	2016	Puławy (24-100) Poland
4	MT-565SG-T-75WG-OR2-C-PL01	2017	Jerzmionki (89-430) Poland
5	MT-565SG-T-75WG-OR2-C-PL02	2017	Piskorzowek (55-216) Poland
6	MT-565SG-T-75WG-OR2-C-PL02	2017	Borek Strzelinski (57-160) Poland

Figure 3.2-20: Trial map – Efficacy trials performed in spring on spring barley in the North Eastern EPPO zone



Spring barley – Spring trials – NE

Number on the map	Test report	Year	Trial location
1	NUZ 12 + 13/16 – Trial 1 (Spring barley)	2016	Puławy (24-100) Poland

Number on the map	Test report	Year	Trial location
2	NUZ 12 + 13/16 – Trial 2 (Spring barley)	2016	Puławy (24-100) Poland
3	MT-565SG-T-75WG-OR2-C-PL4	2017	Drzemlikowice (55-200) Poland
4	MT-565SG-T-75WG-OR2-C-PL5	2017	Slawecin (86-620) Poland
5	MT-565SG-T-75WG-OR2-C-PL6	2017	Zalesie (13-124) Poland
6	MT-565SG-T-75WG-OR2-C-PL7	2017	Swiatkowo (88-430) Poland

Figure 3.2-21: Trial map – Efficacy trials performed in spring on oat in the North Eastern EPPO zone

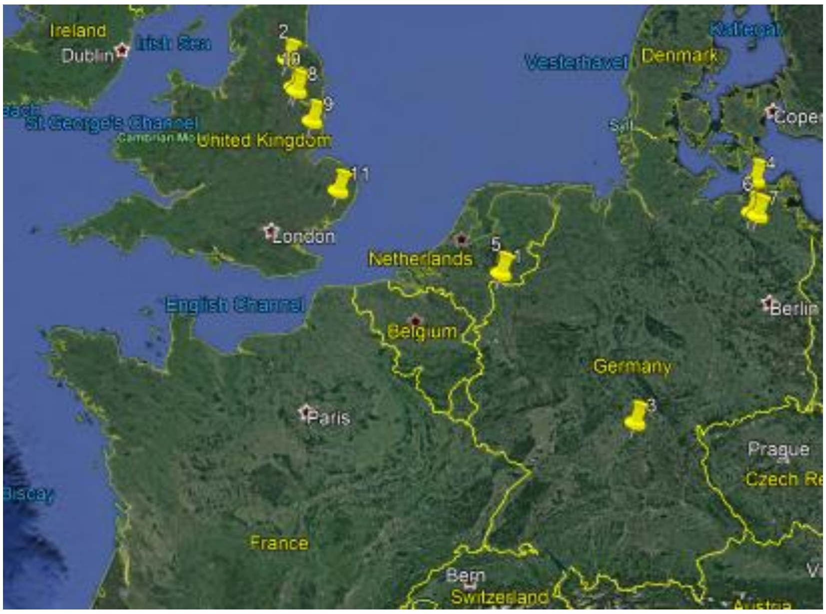
Oat – Spring trials – NE

Number on the map	Test report	Year	Trial location
1	NUZ 12 + 13/16 – Trial 1 (oat)	2016	Puławy (24-100) Poland
2	NUZ 12 + 13/16 – Trial 2 (oat)	2016	Puławy (24-100) Poland
3	NUZ 12 + 13/16 – Trial 3 (oat)	2016	Gniewoszów, Kol. Markowola 16 (24-960) Poland
4	SRPL17-099-395HE (CH_H_MTT_EFF14)	2017	Święciechowa (64-115) Poland
5	SRPL17-100-395HE (CH_H_MTT_EFF15)	2017	Waszkowo (64-115) Poland
6	SRPL17-101-395HE (CH_H_MTT_EFF16)	2017	Tarnowko (64-710) Poland

Localisation of efficacy trials in the Maritime EPPO zone

Spring trials

Figure 3.2-22: Trial map – Efficacy trials performed in spring on winter wheat in the Maritime EPPO zone



Winter wheat – Spring trials – MAR

Number on the map	Test report	Year	Trial location
1	16 1069 5120	2016	Goch-Pfalzdorf (47574) Germany
2	288A	2016	Plompton (HG5 8LX) UK
3	17 1061 1009	2017	Ebarch (96157) Germany
4	17 1064 1008	2017	Blankenhagen (18182) Germany
5	17 1069 5123	2017	Goch (47574) Germany
6	G-111-QUI-17-380	2017	Liepen (17194) Germany
7	G-111-QUI-17-381	2017	Sommerstorf (17194) Germany
8	718A	2017	Sandtoft (DN9 1LQ) UK
9	723A	2017	Haltham, Horncastle (LN9 6JH) UK
10	724A	2017	Hatfield, Doncaster (DN7 6EA) UK
11	724B	2017	Crettingham (IP13 7AZ) UK

Figure 3.2-23: Trial map – Efficacy trials performed in spring on winter rye in the Maritime EPPO zone

Winter rye – Spring trials – MAR

Number on the map	Test report	Year	Trial location
1	17 1061 1003	2017	Ebrach (96157) Germany
2	17 1064 1002	2017	Ebrach (96157) Germany
3	17 1069 5001	2017	Weeze (47652) Germany
4	17 1061 1448	2017	Ebrach (96157) Germany
5	G-111-QUI-17-383	2017	Groß Bäbelin (18292) Germany

Figure 3.2-24: Trial map – Efficacy trials performed in spring on winter triticale in the Maritime EPPO zone

Winter triticale – Spring trials – MAR

Number on the map	Test report	Year	Trial location
1	17 1061 1450	2017	Weeze (47652) Germany
2	17 1069 5124	2017	Weeze (47652) Germany
3	G-111-QUI-17-385	2017	Beilstein (71717) Germany
4	G-111-QUI-17-386	2017	Beilstein (71717) Germany
5	G-111-QUI-17-387	2017	Groß Bäbelin (18292) Germany

Figure 3.2-25: Trial map – Efficacy trials performed in spring on winter barley in the Maritime EPPO zone

Winter barley – Spring trials - MAR

Number on the map	Test report	Year	Trial location
1	17 1069 5126	2017	Goch (47574) Germany
2	G-111-QUI-17-133	2017	Sommerstorf (17194) Germany
3	G-111-QUI-17-134	2017	Sommerstorf (17194) Germany
4	G-111-QUI-17-389	2017	Hallalit (17194) Germany
5	G-111-QUI-17-390	2017	Kamenz (01917) Germany

Figure 3.2-26: Trial map – Efficacy trials performed in spring on spring barley in the Maritime EPPO zone

Spring barley – Spring trials – MAR

Number on the map	Test report	Year	Trial location
1	16 1060 1641	2016	Buchow-Karpzow (14641) Brandenburg, Germany

Number on the map	Test report	Year	Trial location
2	16 1064 1642	2016	Roggow (18230) Mecklenburg Vorpommern, Germany
3	308A	2016	Stratton Audley (OX27 9AS) UK
4	17 1069 5005	2017	Weeze (47652) Germany
5	17 1061 1445	2017	Weeze (47652) Germany
6	17 1064 1444	2017	Kessin (18196) Germany
7	G-111-QUI-17-378	2017	Liepen (14194) Germany
8	711 A	2017	Aberdeen (AB39 3SP) UK
9	721A	2017	Bere Regis (BH20 7JQ) UK
10	721B	2017	Peterborough (PE9 4AT) UK

Localisation of efficacy trials in the South Eastern EPPO zone

Spring trials

Figure 3.2-27: Trial map – Efficacy trials performed in spring on winter wheat in the South Eastern EPPO zone

Winter wheat – Spring trials - SE

Number on the map	Test report	Year	Trial location
1	EU 16 116 KO1	2016	Ács (2941) Hungary
2	RO 16-017 DE1	2016	Corabia (235300) Romania
3	EU 17 132 KO1	2017	Ács (2941) Hungary
4	EU 17 133 KO1	2017	Tatabánya (2800) Hungary
5	RO 17-007 DE1	2017	Corabia (237046) Romania
6	EU 17 096 KO1	2017	Tatabánya (2800) Hungary
7	RO 17-002 DE1	2017	Corabia (237046) Romania

Figure 3.2-28: Trial map – Efficacy trials performed in spring on spring barley in the South Eastern EPPO zone

Spring barley – Spring trials – SE

Number on the map	Test report	Year	Trial location
1	EU 16 156 KO1	2016	Komárom (2921) Hungary
2	RO 16-032 DE1	2016	Galati (807245) Romania
3	EU 17 129 KO1	2017	Csengele (6765) Hungary
4	EU 17 130 KO1	2017	Mocsa (2911) Hungary
5	EU 17 105 KO1	2017	Komárom (2921) Hungary
6	RO 17-005 DE1	2017	Spantov (917230) Romania
7	RO 17-003 DE1	2017	Spantov (917230) Romania

Comments of zRMS:	**<u>Trials submitted</u>** The applicant presents the number of trials carried out in accordance with the reports: A total of 147 trials investigating the effectiveness of MT-565SG-OR2-C against weeds were implemented in 2016 (44 trials), 2017 (96 trials) and 2018 (7 trials). Those trials were undertaken in winter wheat (45 trials), winter barley (21 trials), winter rye (23 trials), winter triticale (19 trials), spring wheat (6 trials), spring barley (27 trials) and oat (6 trials). Trials were located in the Maritime EPPO zone (67 trials): in Germany (55 trials) and United Kingdom (12 trials), in the North-Eastern EPPO zone: in Poland (65 trials) and in the South-Eastern EPPO zone (15 trials) in Hungary (9 trials) and in Romania (6 trials). The required number of experiments on winter cereals were carried out to evaluate the autumn application The required number of experiments on winter and spring cereals were carried out to evaluate the spring application of tested herbicide. The experiments were performed in the three vegetation seasons which is sufficient and justified. A total of 140+7(bridging) experiments were conducted in 2016, 2017 and 2018 seasons and are presented in the table. All trials were conducted in the field conditions that took into account a variety of environmental and agrotechnical conditions.The crop safety and

	efficacy of MT-565SG-OR2-C, HAKSAR TOP 565 SG has been tested on a different varieties of cereals. The localizationtions of the experiments were appropriate and produced representative results. **The required number of experiments on winter and spring cereals were carried out to evaluate the effectivenes of MT-565SG-OR2-C, product name: HAKSAR TOP 565 SG for nuisance dicotyledonous weeds control.The methods used in the trials were appropriate and trials submitted for evaluation are satisfactorily representative. Experiments complied with GEP requirements, while the efficacy evaluation methods agreed with specific EPPO guidelines and uniform principles**.

3.2.1 Preliminary tests (KCP 6.1)

Comments of zRMS:	**Tribenuron-methyl** is well known of 1987, registered and commercialised active substance for the use as a major herbicide used to control broadleaves weeds on winter and spring cereals, fallows and other crops (EFSA, 2018). **MCPA** is well known active substance, it is herbicide. It has been developed during World War II and first approved for use in 1950. All the preliminary studies have been presented with the first registration documentation, for this reason further preliminary efficacy tests for Tribenuron-methyl and MCPA are not necessary.**This is comply with uniform principles.**

3.2.1.1 Justification of the co-formulation

Using prepackage mixtures is a very common approach in intensive agriculture aiming to broaden spectrum of weed control, to improve efficacy of the combined herbicides, to delay herbicide resistance development in weed populations, or to reduce herbicide rates and consequently to reduce the cost of weed control[1].
MT-565SG-OR2-C combines two different active substances with two different modes of action well known in practice from effective control of broadleaved weeds on winter and spring cereals:
- 550 g/kg MCPA
- 15 g/kg Tribenuron-methyl

MCPA belongs to the Phenoxy-carboxylic-acid (HRAC group: O) chemical family of herbicides.
MCPA is a selective and systemic auxin growth regulator herbicide. It is absorbed by roots or leaves with a translocation and accumulation in vegetative shoots and roots

Tribenuron-methyl belongs to the Sulfonylurea (HRAC group: B) chemical family of herbicides (HRAC, 2018). It is a potent, selective, foliar acting and post-emergence herbicide used to control broadleaved weeds on winter and spring cereals, fallows and other crops (EFSA, 2018).
Tribenuron-methyl inhibits the plant amino acid synthesis by blocking the normal function of the acetohydroxyacid synthase (AHAS) also known as acetolactate synthase (ALS).

Actually several products containing only MCPA or only Tribenuron-methyl are currently registered and marketed to control dicotyledonous weeds (see standard references used in trials), for example:

[1] Damalas C.A., 2004: Review Herbicide Tank Mixtures: Common Interactions, International Journal of Agriculture & Biology, 1560–8530/2004/06–1–209–212.

- CHWASTOX 750 SL (750 g/l MCPA, SL) registered in Poland (R-71/2010) at 1 l/ha (750 g ai/ha of MCPA)
- POINTER SX (500 g/kg Tribenuron-methyl) registered in Germany (005890-00) at 30-60 g/ha (15-30 g ai/ha of Tribenuron-methyl) in spring application

There is no registered product containing both active substances.

MT-565SG-OR2-C is intended to be sprayed one time at 1 kg/ha (550 g/kg MCPA + 15 g/kg Tribenuron-methyl).

Based on presented in this document trial results target dose is very effective in control most of the annual dicotyledonous weeds, therefore use of the product MT-565SG-OR2-C reduce application dose of both actives in comparison to commonly available on the market products with only one active ingredient with similar or even better results (750 g/ha MCPA applied solo vs. 550 g/ha in MT-565SG-OR2-C and 15-30 g/ha of Tribenuron methyl applied solo vs. 15 g/ha). Combining those two active substances was very effective and confirmed in control of broad-leaved weeds in cereal crops and additional positive effect of this unique combination was revealed during analysis of risk of resistance development – combination of one limited risk with one high risk active substance contributes to lower the risk of resistance development without lowering the effectiveness of the herbicidal product.

MT-565SG-OR2-C is consequently a unique combination of two active substances, MCPA and Tribenuron-methyl, allowing to optimize the control of broad-leaved weeds and managing the risk of resistance development.

Comments of zRMS:	The applicant properly justified the creation of a new herbicide. The combination of a.s. tribenuron -methyl and MCPA gives in practice a higher efficacy of weed control in cereal crops using lower doses of the individual active substances. The combined use of a.s with different mechanisms of action allows resistance to these a.s to be more effectively avoided and assists in conducting an anti-resistance policy against noxious weeds of economic importance in cereal crops. However, it is advisable to use an anti-resistance strategy (alternating herbicides with different mechanisms of action) to avoid cross-resistance.

3.2.1.2 Justification of the comparability of trials implemented with and without adjuvant

MT-565SG-OR2-C (550 g/kg MCPA, 15 g/kg Tribenuron-methyl, SG) is plant protection product intended to control dicotyledonous weeds on winter and spring cereals.
Due to the combination of MCPA and Tribenuron-methyl and its large spectrum of activity, the product is recommended to be applied in post-emergence of the crop either in autumn (BBCH 13-23) or in spring (BBCH 13-39).

In spring, favourable weather conditions, especially warm temperatures and high levels of humidity, create favourable conditions for weed development.
At that time, cereals are at the beginning of growing period. The poor competition of crops toward weeds combined with favourable weather conditions allow possible good emergence and development of weeds in the field.

Spring offers therefore high challenging conditions for the control of weeds and in practice, there is a risk of the incomplete elimination of weeds and new weed emergences, which competing with cereals can limit its yielding.

Herbicide application at that period should effectively reduce weed infestation and provide good conditions for cereals growth.
However, environmental conditions, such as climate and soil, are main factors determining herbicide efficiency. Species composing weed pool and their developmental stages determines also the success of their applications. Indeed, weed species with a waxy and thick cuticle or with a high hairiness are more difficult to control by an herbicidal application as the product does not penetrate easily in the plant.

The use of an adjuvant is therefore sometimes needed and this method is nowadays largely adopted in Europe to enhance the herbicidal performance of conventional herbicide products in spring.

MT-565SG-OR2-C is recommended to be used in spring without an adjuvant (see GAP table). However, all trials implemented in spring to evaluate the minimum effective dose and the efficacy of MT-565SG-OR2-C against dicotyledonous weeds on cereals were performed with the use of adjuvant.
The test product MT-565SG-OR2-C was applied combined with the adjuvant SARBIO 90 EC at the rate of 50 ml/100l of water.
Standard reference products were applied combined with the adjuvant TREND 90 or ATPOLAN 80 EC in compliance with the label recommendations where applicable.

A total of 7 trials were implemented in 2018 to compare the effectiveness of MT-565SG-OR2-C applied with or without adjuvant in spring.
Those trials were implemented in North-eastern EPPO zone on winter wheat (1) and spring barley (1); in Maritime EPPO zone on winter wheat (2) and spring barley (2) and in South-eastern EPPO zone on winter wheat (1).

Table 3.2-29: Presentation of bridging trials

EPPO zone / crop	North-eastern EPPO zone	Maritime EPPO zone	South-eastern EPPO zone
Winter wheat	1	2	1
Spring barley	1	2	-

Material and Methods

Main information related to material and methods are summarized in the following table:

Table 3.2-30: Bridging trials – Material and Methods

		North-eastern EPPO zone	Maritime EPPO zone	South-eastern EPPO zone
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose		
	Specific guidelines	PP 1/93(3) Weeds in cereals		
Experimental design	Plot design	Randomized complete block (UTC included, imbricated or semi-adjacent)		
	Plot size	Winter soft wheat : 14.25 m² Spring barley: 15 m²	Winter soft wheat : 12.5 to 18 m² Spring barley: 12 to 12.5 m²	Winter soft wheat : 30 m²
	Number of replications	4 replications in all trials		
Crop	Trials per crop	Winter soft wheat (1) Spring barley (1)	Winter soft wheat (2) Spring barley (2)	Winter soft wheat (1)
	Varieties per	Winter soft wheat : Belissa	Winter soft wheat : Siskin,	Winter soft wheat : Basilio

	crop	Spring barley: Kucyk	Elixer Spring barley: Propino, Quench	
	Sowing period	Winter soft wheat : October Spring barley: April	Winter soft wheat : October / November Spring barley: April or June	Winter soft wheat : October
Application	Crop stage (BBCH)* at application	Winter soft wheat : BBCH 12 Spring barley: BBCH 39	Winter soft wheat : BBCH 31 or 32 Spring barley: BBCH 13 to 24	Winter soft wheat : BBCH 23
	Timing Pest stage at application (1)	Depending on the weed considered: Winter soft wheat : From BBCH 11 to BBCH 16 Spring barley: From BBCH 21 to BBCH 26	Depending on the weed considered: Winter soft wheat : From BBCH 00 to BBCH 61 Spring barley: From BBCH 11 to BBCH 13	Depending on the weed considered: Winter soft wheat : From BBCH 14 to BBCH 15
	Number of applications Intervals between applications	1 application	1 application	1 application
	Spray volumes	Winter soft wheat : 250 l/ha Spring barley: 400 l/ha	Winter soft wheat : 200-300 l/ha Spring barley: 200-300 l/ha	Winter soft wheat : 400 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%)	Visual efficacy (%), Phytotoxicity (%)	Visual efficacy (%), Phytotoxicity (%)
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation	Natural infestation	Natural infestation
	e.g. Field / Greenhouse...	Field trials	Field trials	Field trials

To compare the performance of MT-565SG-OR2-C applied with or without an adjuvant in spring, treatments analysed in trials are:

	MT-565SG-OR2-C 800 g/ha	MT-565SG-OR2-C 800 g/ha	MT-565SG-OR2-C 1000 g/ha	MT-565SG-OR2-C 1000 g/ha
Applied with	-	SarBio 90 EC 50 ml/100l	-	SarBio 90 EC 50 ml/100l

Results

Detailed results are presented in the Biological Assessment Dossier.

In the **North-eastern EPPO zone**, 2 trials were implemented on winter wheat and spring barley.
On winter wheat, MT-565SG-OR2-C at the recommended dose of 1 kg/ha provided a high to very high control of all 9 weeds observed in the trial. MT-565SG-OR2-C at 1 kg/ha without adjuvant appeared statistically equivalent to MT-565SG-OR2-C applied with adjuvant except for GALAP - +14,5%.
On spring barley, MT-565SG-OR2-C at 1 kg/ha without adjuvant allowed a high to very high control of the 6 weed species observed in the trial. As previously observed, MT-565SG-OR2-C at 1 kg/ha without adjuvant appeared statistically equivalent to MT-565SG-OR2-C applied with adjuvant except for POLCO - +14,5%.

In the **Maritime EPPO zone**, 4 trials were implemented on winter wheat (2) and spring barley (2).
On winter wheat, no significant difference appeared regarding the effectiveness of MT-565SG-OR2-C applied with or without adjuvant at 1 kg/ha.
The same conclusions could be drawn regarding data from spring barley. MT-565SG-OR2-C applied alone at 1 kg/ha was statistically equivalent to MT-565SG-OR2-C applied with an adjuvant at 1 kg/ha.

In the **South-eastern EPPO zone**, one trial was performed on winter wheat (1).
Once again, no significant differences were revealed between the performance of MT-565SG-OR2-C applied alone or combined with an adjuvant.

Conclusion

In presented 7 bridging trials, 19 weed species were evaluated in order to compare the influence of adjuvant on effectiveness of product MT-565SG-OR2-C. Only 2 valid results from total 37 showed statistical differences in efficacy, 1 on GALAP and 1 on POLCO.
Available data confirmed that applying MT-565SG-OR2-C in combination with an adjuvant did not significantly improve its effectiveness against weeds in spring, therefore it is justified to use available data set of trials where tested product was applied with the adjuvant to support registration of MT-565SG-OR2 in Central Zone to control annual dicotyledonous weeds in winter and spring cereals at target dose 1 kg/ha without use of an adjuvant.

Comments of zRMS:	**Use of adjuvants** Applicant presented 7 bridging trials in order to compare the influence of adjuvant on effectiveness of the product MT-565SG-OR2-C, Haksar Top 565 SG. Herbicide applied in winter and spring cereals at target dose 1 kg/ha demonstrated efficient control against majority of assessed weed species and provided similar weed control when compared to the mixture of this product with the adjuvant . Only 2 valid results showed statistical differences in efficacy, 1 on GALAP(+14,5%) and 1 on POLCO (+14,5%). Valid results from total 7 experiments, 17 species of weeds showed no statistical differences in efficacy. Obtained data confirmed that application MT-565SG-OR2-C, Haksar Top 565 SG in combination with the adjuvant did not significantly improve its effectiveness against weeds in spring. **The presented results of Haksar Top 565 SG bridging trials indicate compliance with GAP table and with the label of measure tested and Uniform principles.** **Expert opinion:** The results of the experiments cited in dRR indicate no statistically significantly better effectiveness after the application of the tested herbicide Haksar Top 565 SG with adjuvant. It will be up to the farmer to decide whether to use an adjuvant. . **It is appropriate that the label contains suggestions for the use of adjuvants.**

3.2.2 Minimum effective dose tests (KCP 6.2)

The identification of the minimum effective dose was conducted on the main target weeds - at least 2 valid data points.
Regarding the autumn application on winter cereals, the identification of the minimum effective dose is done at the first spring assessment (March).
Regarding spring application for both winter and spring cereals, the identification is done at the end of spring (May-June).
Indeed, in spring, temperatures become warmer and the percentage of humidity is usually high, giving to the crop and weeds ideal conditions to grow. Competition for resources between crop and weeds is therefore high at this period. Thus, identifying the minimum effective dose in spring is relevant because condi-

tions are particularly challenging. In the case of spring application, the minimum effective dose is identified at the second assessment in order to let time for the product to reach a representative level of its effectiveness.

3.2.2.1 Autumn application / Winter cereals

The minimum effective dose of MT-565SG-OR2-C applied after the emergence of winter cereals in autumn was investigated over 25 different weeds in North-eastern and Maritime EPPO zones.

In the **North-eastern EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 16 different weeds for which valid trials are available.
In this pool of 16 different, 13 are considered as major because they were observed in 2 trials and more. Conversely, 3 weeds were considered as minor because they were observed in 1 trial only.
For all weeds, data highlight that the minimum effective dose of MT-565SG-OR2-C is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) when applied in autumn on winter cereals (Table 3.2-31).

In the **Maritime EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 15 different weeds for which valid trials are available.
In this pool of 15 different weeds, 11 are considered as major because they were observed in 2 trials and more. Conversely, 4 weeds were considered as minor because they were observed in 1 trial only.
Data highlight that the minimum effective dose of MT-565SG-OR2-C is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) when applied in autumn on winter cereals (Table 3.2-31) for 14 weeds. This dosage can be lowered to 0.6 kg/ha for one weed (CAPBP) and to 0.8 kg/ha for 2 weeds (BRSNN / BRSNW; MATCH).

Consequently, the minimum effective dose of MT-565SG-OR2-C when sprayed in autumn post-emergence of winter cereals is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in both the North-Eastern and Maritime EPPO zones.

Table 3.2-31: Minimum effective dose evaluation – Summary – Autumn application / Winter cereals

Autumn application	***North-eastern EPPO zone***		***Maritime EPPO zone***	
Winter cereals	First spring assessment		First spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Nb of valid trials	Min eff dose determined
AETCY	-	-	1	1 kg/ha
ALOMY	-	-	1	1 kg/ha
ANTAR	5	1 kg/ha	-	-
APHAR	-	-	3	1 kg/ha
BRSNN / BRSNW	17	1 kg/ha	5	0,8 kg/ha
CAPBP	16	1 kg/ha	4	0,6 kg/ha
CENCY	10	1 kg/ha	3	1 kg/ha
GALAP	6	1 kg/ha	5	1 kg/ha
GERPU	-	-	1	1 kg/ha
LAMAM	6	1 kg/ha	-	-
LAMPU	9	~~0 kg/ha~~	1	1 kg/ha
LAMAM / LAMPU	*15*	*1 kg/ha*	-	-
MATCH	-	-	8	0,8 kg/ha
MATIN	11	1 kg/ha	2	1 kg/ha
MYOAR	-	-	2	1 kg/ha
PAPRH	7	1 kg/ha	-	-
SSYOF	-	-	2	1 kg/ha
STEME	14	1 kg/ha	8	1 kg/ha
TAROF	1	1 kg/ha	-	-
THLAR	12	1 kg/ha	-	-
VERHE	4	1 kg/ha	6	1 kg/ha
VERPE	1	1 kg/ha	5	1 kg/ha
VERHE / VERPE	*5*	*1 kg/ha*	*11*	*1 kg/ha*
VICTE	1	1 kg/ha	-	-
VIOAR	15	1 kg/ha	13	1 kg/ha

3.2.2.2 Spring application / Winter cereals

The minimum effective dose of MT-565SG-OR2-C applied after the emergence of winter cereals in spring was investigated over 42 different weeds in North-eastern, Maritime and South-eastern EPPO zones.

In the **North-eastern EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 30 different weeds for which valid trials are available.
In this pool of 30 different weeds, 17 are considered as major because they were observed in 2 trials and more. Conversely, 13 weeds were considered as minor because they were observed in 1 trial only.
For all weeds except GERPU and SPRAR, data highlight that the minimum effective dose of MT-565SG-OR2-C is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) when applied in spring on winter cereals (Table 3.2-31). To control efficiently GERPU and SPRAR, the dosage of MT-565SG-OR2-C could be lowered to 0.8 kg/ha (440 g/ha of MCPA + 12 g/ha of Tribenuron-methyl).

In the **Maritime EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 25 different weeds for which valid trials are available.
In this pool of 25 different weeds, 13 are considered as major because they were observed in 2 trials and more. Conversely, 12 weeds were considered as minor because they were observed in 1 trial only.
Data highlight that the minimum effective dose of MT-565SG-OR2-C is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) when applied in spring on winter cereals (Table 3.2-31) for 21 weeds. This dosage can be lowered to 0.6 kg/ha for 2 weeds (BRSNA / BRSNW and PAPRH) and to 0.8 kg/ha for 2 weeds (CAPBP and SPRAR).

In the **South-eastern EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 13 different weeds for which valid trials are available.
In this pool of 13 different weeds, 10 are considered as major because they were observed in 2 trials and more. Conversely, 3 weed were considered as minor because they were observed in 1 trial only.
Depending on the weed considered, 0.8 kg/ha (440 g/ha of MCPA + 12 g/ha of Tribenuron-methyl) for 3

weeds or 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) for 10 weeds were needed to efficiently control the target weed.

Consequently, the minimum effective dose of MT-565SG-OR2-C when sprayed in spring post-emergence of winter cereals is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) whatever the EPPO zone considered.

Table 3.2-32: Minimum effective dose evaluation – Summary – Spring application / Winter cereals

Spring application Winter cereals	***North-eastern EPPO zone*** Second spring assessment		***Maritime EPPO zone*** Second spring assessment		***South-eastern EPPO zone*** Second spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Nb of valid trials	Min eff dose determined	Nb of valid trials	Min eff dose determined
AGOGI	1	1 kg/ha	-	-	-	-
ANTAR	5	1 kg/ha	-	-	3	0,8 kg/ha
APHAR	-	-	1	1 kg/ha	-	-
ARBTH	1	1 kg/ha	-	-	-	-
BRSNA / BRSNW	6	1 kg/ha	1	0,6 kg/ha	-	-
CAPBP	6	1 kg/ha	1	0,8 kg/ha	-	-
CENCY	14	1 kg/ha	8	1 kg/ha	-	-
CENSS	1	1 kg/ha	-	-	-	-
CHEAL	-	-	1	1 kg/ha	-	-
CIRAR	-	-	-	-	3	1 kg/ha
CNSRE	1	1 kg/ha	-	-	2	1 kg/ha
CONAR	-	-	-	-	2	1 kg/ha
DESSO	1	1 kg/ha	-	-	3	0,8 kg/ha
FUMOF	2	1 kg/ha	-	-	-	-
GALAP	9	1 kg/ha	4	1 kg/ha	2	1 kg/ha
GERDI	-	-	3	1 kg/ha	-	-
GERMO	-	-	1	1 kg/ha	-	-
GERPU	1	0,8 kg/ha	-	-	-	-
GERDI / GERMO / GERPU	-	-	*4*	*1 kg/ha*	-	-
LAMPU	5	1 kg/ha	5	1 kg/ha	-	-
LITAR	1	1 kg/ha	-	-	-	-
MATCH	6	1 kg/ha	6	1 kg/ha	-	-
MATIN	6	1 kg/ha	4	1 kg/ha	1	1 kg/ha
MYOAR	3	1 kg/ha	3	1 kg/ha	-	-
PAPRH	2	1 kg/ha	6	0,6 kg/ha	5	1 kg/ha
POLAV	1	1 kg/ha	1	1 kg/ha	-	-
POLCO	-	-	1	1 kg/ha	4	0,8 kg/ha
POLPE	-	-	1	1 kg/ha	-	-
RAPSO	-	-	1	1 kg/ha	-	-
RUMAA	1	1 kg/ha	-	-	-	-
SENVU	-	-	1	1 kg/ha	-	-
SINAR	1	1 kg/ha	-	-	-	-
SPRAR	1	0,8 kg/ha	1	0,8 kg/ha	-	-
STEME	8	1 kg/ha	12	1 kg/ha	4	1 kg/ha
THLAR	6	1 kg/ha	2	1 kg/ha	-	-
VERAG	1	1 kg/ha	-	-	-	-
VERAR	2	1 kg/ha	3	1 kg/ha	1	1 kg/ha
VERHE	4	1 kg/ha	-	-	-	-
VERHT	1	1 kg/ha	-	-	-	-
VERPE	7	1 kg/ha	6	1 kg/ha	2	1 kg/ha
VERTR	-	-	-	-	1	1 kg/ha
VERAG / VERAR / VERHE / VERHT / VERPE	*15*	*1 kg/ha*	*9*	*1 kg/ha*	*4*	*1 kg/ha*
VICFM	-	-	1	1 kg/ha	-	-
VIOAR	12	1 kg/ha	3	1 kg/ha	-	-

3.2.2.3 Spring application / Spring cereals

The minimum effective dose of MT-565SG-OR2-C applied after the emergence of spring cereals in spring was investigated over 35 different weeds / groups of weeds in North-eastern, Maritime and South-eastern EPPO zones.

In the **North-eastern EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 19 different weeds for which valid trials are available.
In this pool of 21 different weeds, 18 are considered as major because they were observed in 2 trials and more. Conversely, 3 weeds were considered as minor because they were observed in 1 trial only.
Weeds were differently susceptible to MT-565SG-OR2-C depending on the specie considered. Indeed, 0.6 kg/ha allowed an acceptable efficacy for 11 weeds (ANTAR, BRSNA / BRSNS / BRSNW, CAPBP, LAMAM, MATCH, PAPRH, POLCO, STEME, VERAR, VERHE, VERPE). Three species CHEAL, POLAV and SINAR needed 0.8 kg/ha to be efficiently controlled and CENCY, FUMOF, GALAP, LYCAR, MATIN, VICIN and VIOAR needed 1 kg/ha.

In the **Maritime EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 17 different weeds for which valid trials are available.
In this pool of 17 different weeds, 11 are considered as major because they were observed in 2 trials and more. Conversely, 6 weeds were considered as minor because they were observed in 1 trial only.
A total of 6 weeds were highly susceptible to MT-565SG-OR2-C and required 0.6 kg/ha to be efficiently controlled (CAPBP, CHEAL, CENCY, LAMPU, SINAR, VIOAR). BRSNA / BRSNS / BRSNW and FUMOF needed 0.8 kg/ha to be highly controlled in spring cereals. Finally, MT-565SG-OR2-C at 1 kg/ha was needed to efficiently eradicate CIRAR, GAETE, MATCH, MATIN, POLCO, POLPE, SONOL, STEME, THLAR.

In the **South-eastern EPPO zone**, the minimum effective dose of MT-565SG-OR2-C was evaluated over 16 different weeds for which valid trials are available.
In this pool of 16 different weeds, 6 are considered as major because they were observed in 2 trials and more. Conversely, 9 weeds were considered as minor because they were observed in 1 trial only.
Only CHEAL and CHEHY was highly susceptible to MT-565SG-OR2-C at 0.6 kg/ha.
CONAR and XANOR / XANST were perfectly controlled by 0.8 kg/ha.
However, AMARE, AMBEL, ANGAR, BRSNA / BRSNS / BRSNW, CAPBP, CNISA, FUMOF, MAT-IN, PAPRH, POLCO and SINAR needed 1 kg/ha to be efficiently eradicated.

Consequently, the minimum effective dose of MT-565SG-OR2-C when sprayed in spring post-emergence of spring cereals is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) whatever the EPPO zone considered.

Table 3.2-33: Minimum effective dose evaluation – Summary – Spring application / Spring cereals

Spring application **Spring cereals** Weeds / Group of weeds	***North-eastern EPPO zone*** Second spring assessment Nb of valid trials	Min eff dose determined	***Maritime EPPO zone*** Second spring assessment Nb of valid trials	Min eff dose determined	***South-eastern EPPO zone*** Second spring assessment Nb of valid trials	Min eff dose determined
AMARE	-	-	-	-	1	1 kg/ha
AMBEL	-	-	-	-	1	1 kg/ha
ANGAR	-	-	-	-	1	1 kg/ha
ANTAR	2	0,6 kg/ha	-	-	-	-
BRSNA / BRSNS / BRSNW	11	0,6 kg/ha	2	0,8 kg/ha	2	1 kg/ha
CAPBP	9	0,6 kg/ha	1	0,6 kg/ha	1	1 kg/ha
CHEAL	14	0,8 kg/ha	3	0,6 kg/ha	3	0,6 kg/ha
CHEHY	-	-	-	-	2	0,6 kg/ha
CHEAL / CHEHY	-	-	-	-	*5*	*0,6 kg/ha*
CENCY	6	1 kg/ha	1	0,6 kg/ha	-	-
CIRAR	-	-	1	1 kg/ha	-	-
CNISA	-	-	-	-	1	1 kg/ha
CONAR	-	-	-	-	3	0,8 kg/ha
FUMOF	1	1 kg/ha	2	0,8 kg/ha	1	1 kg/ha
GAETE	-	-	2	1 kg/ha	-	-
GALAP	7	1 kg/ha	-	-	-	-
LAMAM	5	0,6 kg/ha	-	-	-	-
LAMPU	-	-	1	0,6 kg/ha	-	-
LAMAM / LAMPU	*5*	*0,6 kg/ha*	*1*	*0,6 kg/ha*	*1*	*1 kg/ha*
LYCAR	2	1 kg/ha	-	-	-	-
MATCH	4	0,6 kg/ha	2	1 kg/ha	-	-
MATIN	4	1 kg/ha	1	1 kg/ha	1	1 kg/ha
PAPRH	10	0,6 kg/ha	-	-	1	1 kg/ha
POLAV	2	0,8 kg/ha	-	-	-	-
POLCO	2	0,6 kg/ha	4	1 kg/ha	3	1 kg/ha
POLPE	-	-	2	1 kg/ha	-	-
SINAR	12	0,8 kg/ha	2	0,6 kg/ha	1	1 kg/ha
SONOL	-	-	1	1 kg/ha	-	-
STEME	5	0,6 kg/ha	6	1 kg/ha	-	-
THLAR	-	-	2	1 kg/ha	-	-
VERAR	5	0,6 kg/ha	-	-	-	-
VERHE	1	0,6 kg/ha	-	-	-	-
VERPE	2	0,6 kg/ha	-	-	-	-
VERAR / VERHE / VERPE	*8*	*0,6 kg/ha*	-	-	-	-
VICIN	1	1 kg/ha	-	-	-	-
VIOAR	10	1 kg/ha	2	0,6 kg/ha	-	-
XANOR	-	-	-	-	2	0,8 kg/ha
XANST	-	-	-	-	1	0,8 kg/ha
XANOR / XANST	-	-	-	-	*3*	*0,8 kg/ha*

Comments of zRMS:	**<u>Minimum effective dose</u>** The identification of the minimum effective dose of MT-565SG-OR2-C; HAKSAR TOP 565 SG was conducted on 3 different group: autumn application for winter cereals spring application for winter cereales spring application for spring cereals The main weeds (17-35 species) were assessed at the right growth stages of development (March and May-June). The number of experiments carried out and the weed species are correctly listed in the table 3.2.31-33 and are in line with Appendix 4. Various doses of MT-565SG-OR2-C; HAKSAR TOP 565 SG have been tested

	for : autumn application for winter cereals 0,6kg/ha, 0,8kg/ha, 1,0kg/ha, spring application for winter cereals 0,6kg/ha, 0,8kg/ha ,1,0kg/ha spring application for spring cereals 0,6kg /ha, 0,8kg /ha, 1,0kg/ha, The minimum effective dose of MT-565SG-OR2-C; HAKSAR TOP 565 SG is 1,0 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) is: when sprayed in autumn post emergence of winter cereals -1,0 kg/ha when sprayed in spring post emergence of winter cereals - 1.0kg/ha when sprayed in spring post-emergence of spring cereals - 1,0 kg/ha in North-Eastern, Maritime and South-eastern EPPO zones. **The minimum effective dose of MT-565SG-OR2-C, product Haksar Top 565 SG is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) . The dose is the same regardless of the Eppo zone.** **The results indicate a dose appropriately selected for use, and this dose is consistent with the GAP table and proposed label.**

3.2.3 Efficacy tests (KCP 6.2)

A total of 147 trials investigating the minimum effective dose and the effectiveness of MT-565SG-OR2-C against weeds were implemented in 2016 (44 trials), 2017 (96 trials) and 2018 (7 trials). Those trials were undertaken in winter wheat (45 trials), winter barley (21 trials), winter rye (23 trials), winter triticale (19 trials), spring wheat (6 trials), spring barley (27 trials) and oat (6 trials).
Trials were located in the Maritime EPPO zone (67 trials) in Germany (55 trials) and United Kingdom (12 trials), in the North-Eastern EPPO zone in Poland (65 trials) and in the South-Eastern EPPO zone (15 trials) in Hungary (9 trials) and in Romania (6 trials).

All trials were carried out by officially recognized organisations, in accordance with the Principles of Good Experimental Practices (GEP).

MT-565SG-OR2-C was applied:

- in autumn in 46 efficacy trials implemented on winter cereals
- in spring in 62 efficacy trials implemented on winter cereals
- in spring in 39 efficacy trials implemented on spring cereals.

Table 3.2-34: Details on trial methodology – North Eastern EPPO zone – Autumn trials – Efficacy trials

		Winter wheat	Winter barley	Winter rye	Winter triticale
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose			
	Specific guidelines	PP 1/093(3) Weeds in cereals			
Experimental design	Plot design	Randomized complete block (UTC included)			
	Plot size	21 m²	10 – 21 m²	10 – 21 m²	15 – 21 m²
	Number of replications	4 replications in all trials			
Crop	Trials per crop	5 trials	5 trials	5 trials	5 trials
	Varieties per crop	Muszelka, Hondia, Ostroga (missing in 2 trials)	Horus, Rosita, Meridian, Zenek, Gloria	Kier (2), Promotor, Stakkato (2)	Todan, Twingo (2), Grenado, Witon
	Sowing period	September - October	September	September	September
Application	Crop stage (BBCH)* at application	BBCH 13 – BBCH 24	BBCH 13 – BBCH 23	BBCH 13 – BBCH 23	BBCH 13 – BBCH 21
	Timing Pest stage at application (1)	Depending on the weed considered: From BBCH 11 to BBCH 16			
	Number of applications Intervals between applications	1 -			
	Spray volumes	200 – 400 l/ha	200 – 400 l/ha	230 – 400 l/ha	200 – 400 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%), groundcover (%), density of weeds (plants/m²)			
	Assessment dates	14 DA-A, 28 DA-A, 130 DA-A, 150 DA,A, 180 DA-A			
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation			
	e.g. Field / Greenhouse...	Field trials			

Table 3.2-35: Details on trial methodology – North Eastern EPPO zone – Spring trials – Efficacy trials

		Winter wheat	Winter barley	Winter rye	Winter triticale	Spring wheat	Spring barley
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose					
	Specific guidelines	PP 1/093(3) Weeds in cereals					
Experimental design	Plot design	Randomized complete block (UTC included)					
	Plot size	12 - 21 m²	12 – 15 m²	12 – 21 m²	12 – 21 m²	12 – 22.8 m²	15 – 24 m²
	Number of replications	4 replications in all trials					
Crop	Trials per crop	8 trials	5 trials	7 trials	5 trials	6 trials	6 trials
	Varieties per crop	Tonacja, Sailor, Ozon, Bemberka, Muszelka, Fidelius, Bogatka, Jankarta	Souleyka, Titus, Sandra, Joy, Bartosz	Daran, Dankowskie Zlote (2), Palazzo, Dańkowskie Diament, Brasetto, Horyzo	Borwo, Twingo, Gringo, Pisarro, Arktis	Tybalt, Izera, Arabella, Harenda	Orphelia, Tron, Basic, Propino, Ella, Eunova
	Sowing period	September - October	August - October	September - October	September - October	March - April	March - April
Application	Crop stage (BBCH)* at application	BBCH 12 – BBCH 21	BBCH 14 – BBCH 31	BBCH 15 – BBCH 39	BBCH 14 – BBCH 37	BBCH 13 – BBCH 39	BBCH 13 – BBCH 31
	Timing Pest stage at application (1)	Depending on the weed considered: From BBCH 11 to BBCH 65					
	Number of applications Intervals between applications	1 **in association with the adjuvant SarBio 90** -					
	Spray volumes	200 – 400 l/ha	250 – 300 l/ha	200 – 300 l/ha	200 – 300 l/ha	150 – 300 l/ha	200 – 300 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%), Groundcover (%), Density of weeds (plants/m²)					
	Assessment dates	10 DA-A, 14 DA-A, 30 DA-A, 45 DA-A, 90 DA-A					
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation					
	e.g. Field / Greenhouse...	Field trials					

Table 3.2-36: Details on trial methodology – Maritime EPPO zone – Autumn trials – Efficacy trials

		Winter wheat	Winter barley	Winter rye	Winter triticale
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose			
	Specific guidelines	PP 1/093(3) Weeds in cereals			
Experimental design	Plot design	Randomized complete block (UTC included)			
	Plot size	18 - 21 m²	12 – 18 m²	12 – 18 m²	12 – 21 m²
	Number of replications	4 replications in all trials			
Crop	Trials per crop	9 trials	6 trials	6 trials	4 trials
	Varieties per crop	Pamier, Ritmo, Edgar, Baranco, Patras, Julius, Elixer, RGT Reform	Malwinta, Sandra (2), Quadriga (2), Kosmos	Protector (2), SU Forsetti, Daniello KWS, Conduct, Cossani,	Agostino, Grenado, Silverado, Lombardo
	Sowing period	September - October	September - October	September - October	September - October
Application	Crop stage (BBCH)* at application	BBCH 12 – BBCH 22	BBCH 13 – BBCH 23	BBCH 13 – BBCH 23	BBCH 13 – BBCH 23
	Timing Pest stage at application (1)	Depending on the weed considered: From BBCH 07 to BBCH 68			
	Number of applications Intervals between applications	1 -			
	Spray volumes	200 – 300 l/ha	200 – 400 l/ha	200 - 400 l/ha	200 – 400 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%), groundcover (%), density of weeds (plants/m²)			
	Assessment dates	14 DA-A, 28 DA-A, 130 DA-A, 150 DA,A, 180 DA-A, 263 DA-A			
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation			
	e.g. Field / Greenhouse...	Field trials			

Table 3.2-37: Details on trial methodology – Maritime EPPO zone – Spring trials – Efficacy trials

		Winter wheat	**Winter barley**	**Winter rye**	**Winter triticale**	**Spring barley**
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose				
	Specific guidelines	PP 1/093(3) Weeds in cereals				
Experimental design	Plot design	Randomized complete block (UTC included)				
	Plot size	10.5 – 30 m²	10 – 15 m²	10.5 – 36 m²	10.5 – 15 m²	10.5 – 20 m²
	Number of replications	4 replications in all trials				
Crop	Trials per crop	11 trials	5 trials	5 trials	5 trials	11 trials
	Varieties per crop	Anapolis (2), JB Diego, Kerubino, Ritmo, Capo, Patras, Santiago, Revelation, Dickens, Skyfall	KWS Tenoa, Lomerit, Azrah, Tenor	Dukato(3), Daniello, Amilo	Lombardo, Logo, Massimo	Solist, Simba, Barke, Concerto, Planet, Chapeau, KWS Irina, Quench
	Sowing period	September - November	September - October	September - October	September – October	March – April
Application	Crop stage (BBCH)* at application	BBCH 27 – BBCH 37	BBCH 26 – BBCH 37	BBCH 23 – BBCH 35	BBCH 27 – BBCH 39	BBCH 14 – BBCH 32
	Timing Pest stage at application (1)	Depending on the weed considered: From BBCH 13 to BBCH 65				
	Number of applications Intervals between applications	1 **in association with the adjuvant SarBio 90** -				
	Spray volumes	200 – 400 l/ha	300 – 400 l/ha	200 – 400 l/ha	300 – 400 l/ha	200 – 400 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%), groundcover (%), density of weeds (plants/m²)				
	Assessment dates	14 DA-A, 28 DA-A, 50 DA-A, 70 DA-A				
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation				
	e.g. Field / Greenhouse...	Field trials				

Table 3.2-38: Details on trial methodology – South Eastern EPPO zone – Spring trials – Efficacy trials

		Winter wheat	Spring barley
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/225(2) Minimum effective dose	
	Specific guidelines	PP 1/093(3) Weeds in cereals	
Experimental design	Plot design	Randomized complete block (UTC included)	
	Plot size	12 – 21 m²	12 – 21 m²
	Number of replications	4 replications in all trials	
Crop	Trials per crop	7 trials	7 trials
	Varieties per crop	MV Verbunkos, Glosa, MV Kokarda (2), Izvor (2) Not specified in 1 trial	Conchita, Paula, Scarlett, Bolyhos, Maltea
	Sowing period	October - November	March
Application	Crop stage (BBCH)* at application	BBCH 21 – BBCH 32	BBCH 23 – BBCH 37
	Timing Pest stage at application (1)	Depending on the weed considered: From BBCH 11 to BBCH 61	
	Number of applications Intervals between applications	1 **in association with the adjuvant SarBio 90** -	
	Spray volumes	200 – 250 l/ha	200 – 250 l/ha
Assessment	Assessment types	Visual efficacy (%), Phytotoxicity (%), groundcover (%), density of weeds (plants/m²)	
	Assessment dates	14 DA-A, 28 DA-A, 50 DA-A, 60 DA-A	
Other relevant information	e.g. Natural / artificial innoculation…	Natural infestation	
	e.g. Field / Greenhouse...	Field trials	

Comments of zRMS:	<u>**Methods**</u> All trials were conducted in the field conditions and natural infestation of weeds.The crop safety and efficacy of MT-565SG-OR2-C, HAKSAR TOP 565 SG has been tested on a different varieties of cereals. Experiments included standard fungicides which were appropriately selected from among the products registered in Poland, Germany, UK, Romania. **The methods used in the trials were appropriate and trials submitted for nuisance dicotyledonous weeds control evaluation of MT-65SG-OR2-C, product name HAKSAR TOP 565 SG are satisfactorily representative. Experiments complied with GEP requirements, while the efficacy evaluation methods agreed with specific EPPO guidelines and uniform principles**. <u>Note:</u> The EPPO methodologies cited in the dRR have the correct edition (version) numbers, while most reports show numbers for outdated editions.

3.2.3.1 Autumn application / Winter cereals

Introduction

The effectiveness of MT-565SG-OR2-C applied in autumn on winter cereals was studied in 45 trials. Those trials were performed from 2016 to 2017 in Poland (20) and Germany (25).
The herbicidal performance of MT-565SG-OR2-C was investigated in 4 different winter cereals including winter wheat (14), winter rye (11), winter triticale (9) and winter barley (11).

Anthemis arvensis (ANTAR)

Anthemis arvensis was observed in 5 trials implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter barley, winter rye and winter triticale.

<u>Short-term effect (about 22-28 days after application)</u>

All 5 trials presented an autumn assessment. Sufficient density of *Anthemis arvensis* (5-7 plants/m²) was observed in these 5 trials which are considered valid for this assessment timing.

Table 3.2-39: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – ANTAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 22-28 days after application **Harmful organism:** ANTAR				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenu-ron methyl	MCPA + Tribenu-ron methyl	MCPA + Tribenu-ron methyl	Diflufenican + Chlortoluron
	Dose FP /ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values	5	5	5	5
	Minimum value	60,0	65,0	75,0	70,0
	Maximum value	71,3	73,8	81,3	76,3
	Mean	**68,3**	**71,8**	**76,5**	**71,3**
	Standard deviation	4,7	3,8	2,7	2,8
	Nb of **dose effects** compared to 1000 g	2/5 (1 num)	1/5	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 4 trials = (3 num) 0 trial <	-

<u>Long-term effect (about 117-169 days after application)</u>

All 5 trials were assessed in spring. Sufficient density of *Anthemis arvensis* (5-7 plants/m²) was observed in these 5 trials which are considered valid for this assessment timing.

Table 3.2-40: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – ANTAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-169 days after application **Harmful organism:** ANTAR				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenu-ron methyl	MCPA + Tribenu-ron methyl	MCPA + Tribenu-ron methyl	Diflufenican + Chlortoluron
	Dose FP /ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					

Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	5 77,5 100,0 **84,3** 9,1	5 92,5 100,0 **94,0** 3,4	5 100,0 100,0 **100,0** 0,0	5 97,5 100,0 **99,0** 1,0
	Nb of **dose effects** compared to 1000 g	4/5 (4 num)	0/5	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = (5 num) 0 trial <	-

Aphanes arvensis (APHAR)

Aphanes arvensis was observed in 3 trials implemented in Germany, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter barley and winter triticale.

<u>Short-term effect (about 21-27 days after application)</u>

All 3 trials presented an autumn assessment. Sufficient density of *Aphanes arvensis* (7.8-187.5 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.
On trial was nevertheless excluded because of the absence of efficacy observed following reference application.

Table 3.2-41: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – APHAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-27 days after application **Harmful organism:** APHAR					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	2	2	2	1	1
	Minimum value Maximum value Mean Standard deviation	1,3 13,8 **7,5** 8,8	3,8 17,5 **10,7** 9,7	5,0 27,5 **16,3** 15,9	45,0 100,0 **72,5** 38,9	
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 0 trial = 2 trials <	-	-

<u>Long-term effect (about 110-125 days after application)</u>

All 3 trials were assessed in spring. Sufficient density of *Aphanes arvensis* (6.5-191.3 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-42: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – APHAR

Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 110-125 days after application **Harmful organism:** APHAR					
Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron

	Dose FP kg or l/ha Dose g a.i./ha	600 g 330 + 9 g	800 g 440 + 12 g	1000 g 550 + 15 g	2,5 l 62,5 + 1000 g	2,5 l 100 + 1500 g
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	3 42,5 88,8 **60,4** 24,9	3 43,8 99,0 **78,5** 30,2	3 98,6 100,0 **99,5** 0,7	2 99,4 100,0 **99,8** 0,3	1
	Nb of **dose effects** compared to 1000 g	3/3	2/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-

Brassica napus (BRSNN and BRSNW)

Brassica napus was observed in 29 trials performed in Poland (17) and Germany (12), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter rye, winter soft wheat, winter barley and winter triticale.

Short-term effect (about 21-30 days after application)

All 29 trials presented an autumn assessment. Sufficient density of *Brassica napus* (5-25 plants/m²) was observed in 27 trials out of 29 that are considered valid for this assessment timing. In the Maritime EPPO zone, one trial was nevertheless not grouped with others, since the tested and the reference products both achieved 0% efficacy at this period.

Table 3.2-43: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – BRSNN / BRSNW

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-30 days after application **Harmful organism:** BRSNN / BRNSW					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha Dose g a.i./ha	600 g 330 + 9 g	800 g 440 + 12 g	1000 g 550 + 15 g	2,5 l 62,5 + 1000 g	2,5 l 100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	17 13,8 76,3 **45,2** 21,8	17 16,3 85,0 **52,7** 22,6	17 18,8 92,5 **65,3** 22,8	17 17,5 79,3 **61,1** 17,2	- - - - -
	Nb of **dose effects** compared to 1000 g	16/17 (9 num)	10/17 (4 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	11 trials > (9 num) 3 trials = 3 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	9 22,5 95,8 **67,6** 22,4	9 40,0 99,0 **70,9** 20,8	9 42,5 95,8 **75,8** 18,7	2 47,5 99,0 **73,3** 36,4	7
	Nb of **dose effects** compared to 1000 g	3/9	3/9	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > 4 trials = 0 trial <	-	-

POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	26 13,8 95,8 **52,9** 24,1	26 16,3 99,0 **59,0** 23,3	26 18,8 95,8 **68,9** 21,7	19 17,5 99,0 **59,6** 20,7	7
	Nb of **dose effects** compared to 1000 g	19/26 (9 num)	13/26 (4 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	16 trials > (9 num) 7 trials = 3 trials <	-	-

Long-term effect (about 117-176 days after application)

26 trials out of 29 presented an assessment to assess long-term effect. Sufficient density of *Brassica napus* (5-21.5 plants/m²) was observed in 22 trials out of 26 that are considered valid for this assessment timing.

Table 3.2-44: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – BRSNN / BRSNW

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-176 days after application **Harmful organism:** BRSNN / BRNSW					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	17 17,0 81,3 **63,1** 23,6	17 30,0 93,8 **80,7** 17,8	17 72,3 98,8 **93,8** 6,4	17 70,0 99,5 **81,9** 11,6	- - - - -
	Nb of **dose effects** compared to 1000 g	17/17 (9 num)	8/17	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	10 trials > (9 num) 6 trials = 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	5 63,3 100,0 **92,7** 16,4	5 86,7 100,0 **97,3** 5,9	5 83,3 100,0 **96,6** 7,4	1 86,7 100,0 **97,3** 5,9	4
	Nb of **dose effects** compared to 1000 g	1/5	0/5	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	22 17,0 100,0 **69,8** 25,2	22 30,0 100,0 **84,4** 17,3	22 72,3 100,0 **94,5** 6,6	18 70,0 100,0 **85,4** 12,4	4
	Nb of **dose effects** compared to 1000 g	18/22 (9 num)	8/26	-	-	-
	Nb of trials where	-	-	10 trials > (9	-	-

	MT-565SG-OR2-C is >, = or < compared to standard			num) 11 trials = 1 trial <		

Capsella bursa-pastoris (CAPBP)

Capsella bursa-pastoris was observed in 21 trials performed in Poland (16) and Germany (5), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter rye, winter soft wheat, winter barley and winter triticale.

<u>Short-term effect (about 21-30 days after application)</u>

A total of 20 trials out of 21 presented an autumn assessment. Sufficient density of *Capsella bursa-pastoris* (6.5-19 plants/m²) was observed in these 20 trials that are considered valid for this assessment timing.

Table 3.2-45: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – CAPBP

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-30 days after application **Harmful organism:** CAPBP					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP/ha **Dose g a.i./ha**	600 g 330 + 9 g	800 g 440 + 12 g	1000 g 550 + 15 g	2,5 l 62,5 + 1000 g	2,5 l 100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	16 15,0 72,5 **55,2** 20,5	16 22,5 81,3 **61,2** 18,6	16 55,0 92,5 **73,3** 10,5	16 47,8 86,3 **69,5** 8,3	- - - - -
	Nb of **dose effects** compared to 1000 g	8/16 (1 num)	8/16 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > (2 num) 11 trials = (7 num) 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	4 22,5 83,8 **55,0** 27,7	4 32,5 92,5 **61,4** 29,6	4 42,5 97,5 **66,9** 27,5	1 32,5 88,7 **62,2** 26,6	3
	Nb of **dose effects** compared to 1000 g	2/4	1/4	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 3 trials = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	20 15,0 83,8 **55,1** 21,2	20 22,5 92,5 **61,2** 20,3	20 42,5 97,5 **72,1** 14,6	17 32,5 88,7 **69,1** 12,7	3
	Nb of **dose effects** compared to 1000 g	10/20 (1 num)	9/20 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > (2 num) 14 trials = (7 num) 1 trial <	-	-

<u>Long-term effect (about 117-169 days after application)</u>

All 21 trials presented a spring assessment timing. Sufficient density of *Capsella bursa-pastoris* (4.75-22.3 plants/m²) was observed in these 21 trials which are considered valid for this assessment timing.

Table 3.2-46: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – CAPBP

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-169 days after application **Harmful organism:** CAPBP					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	16 18,8 100,0 **71,1** 22,4	16 30,0 100,0 **84,8** 17,6	16 85,0 100,0 **95,2** 5,1	16 80,0 100,0 **93,9** 7,5	- - - - -
	Nb of **dose effects** compared to 1000 g	15/16 (9 num)	6/16	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > (1 num) 11 trials = (9 num) 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	5 100,0 100,0 **100,0** 0,0	5 100,0 100,0 **100,0** 0,0	5 100,0 100,0 **100,0** 0,0	1 100,0 100,0 **100,0** 0,0	4
	Nb of **dose effects** compared to 1000 g	0/4	0/4	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	21 18,8 100,0 **78,0** 23,1	21 30,0 100,0 **88,4** 16,6	21 85,0 100,0 **96,4** 4,9	17 80,0 100,0 **95,3** 7,0	4
	Nb of **dose effects** compared to 1000 g	15/21 (9 num)	6/21	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > (1 num) 16 trials = (9 num) 1 trial <	-	-

Cyanus segetum (CENCY)

Cyanus segetum was observed in 16 trials performed in Poland (11) and Germany (5), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter rye, winter soft wheat and winter barley.

<u>Short-term effect (about 16-29 days after application)</u>

16 trials presented an autumn assessment. Sufficient density of *Cyanus segetum* (6.5-19 plants/m²) was observed in 15 trials that are considered valid for this assessment timing. An insufficient density at application was observed in 1 trial (Poland), which was therefore not studied.

Table 3.2-47: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – CENCY

<table>
<tr><td></td><td colspan="6">Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 16-29 days after application
Harmful organism: CENCY</td></tr>
<tr><td></td><td>Treatment</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>Legato Pro 425 SC</td><td>Carmina 640</td></tr>
<tr><td></td><td>Active ingredient</td><td>MCPA + Tribe-nuron methyl</td><td>MCPA + Tribe-nuron methyl</td><td>MCPA + Tribe-nuron methyl</td><td>Diflufenican + Chlortoluron</td><td>Diflufenican + Chlortoluron</td></tr>
<tr><td></td><td>Dose FP kg or l/ha</td><td>600 g</td><td>800 g</td><td>1000 g</td><td>2,5 l</td><td>2,5 l</td></tr>
<tr><td></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>62,5 + 1000 g</td><td>100 + 1500 g</td></tr>
<tr><td colspan="7">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="7">Data grouping
(PL)</td><td>Number of values</td><td>10</td><td>10</td><td>10</td><td>10</td><td>-</td></tr>
<tr><td>Minimum value</td><td>8,8</td><td>15,8</td><td>28,8</td><td>38,8</td><td>-</td></tr>
<tr><td>Maximum value</td><td>65,0</td><td>75,0</td><td>80,0</td><td>78,8</td><td>-</td></tr>
<tr><td>Mean</td><td>43,5</td><td>52,0</td><td>60,2</td><td>65,4</td><td>-</td></tr>
<tr><td>Standard deviation</td><td>24,3</td><td>24,3</td><td>20,5</td><td>10,9</td><td>-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>10/10 (5 num)</td><td>5/10</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>1 trial > (1 num)
5 trials = (4 num)
4 trials <</td><td>-</td><td>-</td></tr>
<tr><td colspan="7">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="7">Data grouping
(DE)</td><td>Number of values</td><td>5</td><td>5</td><td>5</td><td>1</td><td>4</td></tr>
<tr><td>Minimum value</td><td>11,3</td><td>17,5</td><td>22,5</td><td colspan="2">21,3</td></tr>
<tr><td>Maximum value</td><td>76,3</td><td>77,5</td><td>85,0</td><td colspan="2">85,0</td></tr>
<tr><td>Mean</td><td>48,0</td><td>59,7</td><td>66,0</td><td colspan="2">63,4</td></tr>
<tr><td>Standard deviation</td><td>24,9</td><td>25,2</td><td>26,1</td><td colspan="2">26,8</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>2/5</td><td>1/5</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>1 trial >
3 trials =
1 trial <</td><td>-</td><td>-</td></tr>
<tr><td colspan="7">POLAND + GERMANY</td></tr>
<tr><td rowspan="7">Data grouping
(PL, DE)</td><td>Number of values</td><td>15</td><td>15</td><td>15</td><td>11</td><td>4</td></tr>
<tr><td>Minimum value</td><td>8,8</td><td>15,8</td><td>22,5</td><td colspan="2">21,3</td></tr>
<tr><td>Maximum value</td><td>76,3</td><td>77,5</td><td>85,0</td><td colspan="2">85,0</td></tr>
<tr><td>Mean</td><td>45,0</td><td>54,5</td><td>62,1</td><td colspan="2">64,7</td></tr>
<tr><td>Standard deviation</td><td>23,7</td><td>24,0</td><td>21,8</td><td colspan="2">16,8</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>12/15 (5 num)</td><td>6/15 (5 sign)</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials > (1 num)
8 trials = (4 num)
5 trials <</td><td>-</td><td>-</td></tr>
</table>

<u>Long-term effect (about 117-173 days after application)</u>

15 trials presented a spring assessment timing. Sufficient density of *Cyanus segetum* (5-10.5 plants/m²) was observed in 13 trials which are considered valid for this assessment timing. An insufficient density at application or assessment was observed in the two remaining trials, which were therefore not studied.

Table 3.2-48: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – CENCY

Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 117-173 days after application
Harmful organism: CENCY

	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	10	10	10	10	-
	Minimum value	11,8	60,0	75,0	75,0	-
	Maximum value	78,8	96,3	92,5	97,5	-
	Mean	**59,1**	**77,3**	**87,3**	**84,3**	-
	Standard deviation	21,3	12,1	6,1	7,1	-
	Nb of **dose effects** compared to 1000 g	10/10 (5 num)	5/10	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > (1 num) 7 trials = (4 num) 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	3	3	3	-	3
	Minimum value	51,3	68,8	72,0	-	75,8
	Maximum value	100,0	100,0	100,0	-	100,0
	Mean	**83,8**	**89,6**	**90,7**	**-**	**86,5**
	Standard deviation	28,1	18,0	16,2	-	12,4
	Nb of **dose effects** compared to 1000 g	1/3	0/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values	13	13	13	10	3
	Minimum value	11,8	60,0	72,0	75,0	
	Maximum value	100,0	100,0	100,0	100,0	
	Mean	**64,8**	**80,1**	**88,1**	**84,8**	
	Standard deviation	24,3	13,9	8,6	8,0	
	Nb of **dose effects** compared to 1000 g	11/13 (5 num)	5/13	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > (1 num) 9 trials = (4 num) 1 trial <	-	-

Galium aparine (GALAP)

Galium aparine was observed in 15 trials performed in Poland (8) and Germany (7), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter triticale.

<u>Short-term effect (about 16-28 days after application)</u>

Sufficient density of *Galium aparine* (5.5-35 plants/m²) was observed in 14 trials out of 15 which are considered valid for this assessment timing.

Moreover, 4 trials performed in Germany were excluded from the analysis because the standard reference CARMINA 640 or LEGATO PRO 425 SC reached low and unexplained level of efficacy.

Table 3.2-49: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – GALAP

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 16-28 days after application **Harmful organism:** GALAP					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	7	7	7	7	-
	Minimum value	5,0	16,3	22,5	40,0	-
	Maximum value	61,3	67,5	75,0	80,0	-
	Mean	**34,5**	**43,4**	**53,2**	**62,3**	-
	Standard deviation	24,6	22,9	21,5	17,1	-
	Nb of **dose effects** compared to 1000 g	6/7 (1 num)	4/7	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = (1 num) 4 trials < (1 num)	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	3	3	3	2	1
	Minimum value	1,0	0,3	1,5	2,3	
	Maximum value	20,0	27,5	31,3	50,0	
	Mean	**11,2**	**15,9**	**17,6**	**30,8**	
	Standard deviation	9,6	14,0	15,0	25,2	
	Nb of **dose effects** compared to 1000 g	1/3	0/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 2 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values	10	10	10	9	1
	Minimum value	1,0	0,3	1,5	2,3	
	Maximum value	61,3	67,5	75,0	80,0	
	Mean	**27,5**	**35,1**	**42,5**	**52,9**	
	Standard deviation	23,5	23,8	25,6	23,8	
	Nb of **dose effects** compared to 1000 g	7/10	4/10	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = (1 num) 6 trials < (1 num)	-	-

Long-term effect (about 117-169 days after application)

Sufficient density of *Galium aparine* (6-108.8 plants/m²) was observed in 12 trials out of 15 which are considered valid for this assessment timing.
Moreover, one trial performed in Germany was also excluded from the analysis because the standard reference CARMINA 640 reached low and unexplained level of efficacy.

Table 3.2-50: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – GALAP

Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 112-146 days after application
Harmful organism: GALAP

	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	6	6	6	6	-
	Minimum value	27,5	41,3	70,0	72,5	-
	Maximum value	70,0	73,8	85,0	85,0	-
	Mean	**51,7**	**61,5**	**79,2**	**80,4**	-
	Standard deviation	16,9	12,4	5,8	5,3	-
	Nb of **dose effects** compared to 1000 g	6/6 (2 num)	4/6 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 6 trials = (2 num) 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	5	5	5	4	1
	Minimum value	20,0	20,0	30,0	85,0	
	Maximum value	80,0	84,8	93,8	99,5	
	Mean	**49,3**	**56,5**	**69,5**	**91,9**	
	Standard deviation	26,9	27,5	25,9	5,3	
	Nb of **dose effects** compared to 1000 g	3/5	3/5	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 3 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values	11	11	11	10	1
	Minimum value	20,0	20,0	30,0	72,5	
	Maximum value	80,0	84,8	93,8	99,5	
	Mean	**50,6**	**59,2**	**74,8**	**85,6**	
	Standard deviation	20,8	19,6	17,6	7,8	
	Nb of **dose effects** compared to 1000 g	9/11 (2 num)	7/11 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 9 trials = (2 num) 3 trials <	-	-

***Lamium amplexicaule / Lamium purpureum* (LAMAM / LAMPU)**

Lamium amplexicaule / Lamium purpureum was observed in 19 trials performed in Poland (15) and Germany (4), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter triticale and winter rye.

<u>Short-term effect (about 21-28 days after application)</u>

During autumn, sufficient density of *Lamium amplexicaule / Lamium purpureum* (5-12.75 plants/m²) was observed in 16 trials out of 19 which are considered valid for this assessment timing.

Table 3.2-51: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – LAMAM/LAMPU

<table>
<tr><td colspan="2"></td><td colspan="5">Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 21-28 days after application
Harmful organism: LAMAM-LAMPU</td></tr>
<tr><td colspan="2"></td><td>Treatment</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>Legato Pro 425 SC</td></tr>
<tr><td colspan="2"></td><td>Active ingredient</td><td>MCPA + Tribe-nuron methyl</td><td>MCPA + Tribe-nuron methyl</td><td>MCPA + Tribe-nuron methyl</td><td>Diflufenican + Chlortoluron</td></tr>
<tr><td colspan="2"></td><td>Dose FP kg or l/ha</td><td>600 g</td><td>800 g</td><td>1000 g</td><td>2,5 l</td></tr>
<tr><td colspan="2"></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>62,5 + 1000 g</td></tr>
<tr><td colspan="7">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="5">Data grouping
(PL)</td><td>LAMAM</td><td>Number of values
Mean</td><td>6
65,2</td><td>6
68,2</td><td>6
74,4</td><td>6
67,7</td></tr>
<tr><td>LAMPU</td><td>Number of values
Mean</td><td>9
44,8</td><td>9
52,4</td><td>9
67,6</td><td>9
67,0</td></tr>
<tr><td rowspan="3">LAMAM-LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>15
6,5
72,5
53,0
20,7</td><td>15
21,3
85,0
58,7
18,4</td><td>15
44,8
92,5
70,3
11,9</td><td>15
50,8
82,5
67,3
9,9</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>9/15 (1 num)</td><td>7/15</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>3 trials > (1 num)
9 trials = (6 num)
3 trials <</td><td>-</td></tr>
<tr><td colspan="7">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="3">Data grouping
(DE)</td><td rowspan="3">LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>1
0,0
0,0
0,0
-</td><td>1
0,0
0,0
0,0
-</td><td>1
0,0
0,0
0,0
-</td><td>1
0,0
0,0
0,0
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/1</td><td>0/1</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
1 trial =
0 trial <</td><td>-</td></tr>
<tr><td colspan="7">POLAND + GERMANY</td></tr>
<tr><td rowspan="5">Data grouping
(PL, DE)</td><td>LAMAM</td><td>Number of values
Mean</td><td>6
65,2</td><td>6
68,2</td><td>6
74,4</td><td>6
67,7</td></tr>
<tr><td>LAMPU</td><td>Number of values
Mean</td><td>10
40,3</td><td>10
47,2</td><td>10
60,9</td><td>10
60,3</td></tr>
<tr><td rowspan="3">LAMAM-LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>16
0,0
72,5
49,6
23,9</td><td>16
0,0
85,0
55,1
23,0</td><td>16
0,0
92,5
65,9
21,0</td><td>16
0,0
82,5
63,1
19,4</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>9/16 (1 num)</td><td>7/16</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>3 trials > (1 num)
10 trials = (6 num)
3 trials <</td><td>-</td></tr>
</table>

<u>Long-term effect (about 117-169 days after application)</u>

In spring, sufficient density of *Lamium amplexicaule / Lamium purpureum* (5-17 plants/m²) was observed in 16 trials out of 19 which are considered valid for this assessment timing.

Table 3.2-52: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – LAMAM/LAMPU

<table>
<tr><td colspan="3"></td><td colspan="4">Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 117-169 days after application
Harmful organism: LAMAM-LAMPU</td></tr>
<tr><td colspan="2"></td><td>Treatment</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>MT-565SG-OR2-C</td><td>Legato Pro 425 SC</td></tr>
<tr><td colspan="2"></td><td>Active ingredient</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>Diflufenican + Chlortoluron</td></tr>
<tr><td colspan="2"></td><td>Dose FP kg or l/ha</td><td>600 g</td><td>800 g</td><td>1000 g</td><td>2,5 l</td></tr>
<tr><td colspan="2"></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>62,5 + 1000 g</td></tr>
<tr><td colspan="7">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="6">Data grouping (PL)</td><td>LAMAM</td><td>Number of values
Mean</td><td>6
78,9</td><td>6
88,4</td><td>6
96,9</td><td>6
96,8</td></tr>
<tr><td>LAMPU</td><td>Number of values
Mean</td><td>9
58,4</td><td>9
68,2</td><td>9
86,8</td><td>9
86,8</td></tr>
<tr><td rowspan="3">LAMAM-LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>15
7,3
83,8
66,6
20,7</td><td>15
21,3
91,3
76,3
18,8</td><td>15
71,3
98,8
90,9
8,1</td><td>15
58,8
100,0
90,8
10,9</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>14/15 (7 num)</td><td>10/15 (3 num)</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
11 trials = (7 num)
2 trials <</td><td>-</td></tr>
<tr><td colspan="7">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="3">Data grouping (DE)</td><td rowspan="3">LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>1
92,5
92,5
92,5
-</td><td>1
90,0
90,0
90,0
-</td><td>1
96,5
96,5
96,5
-</td><td>1
100,0
100,0
100,0
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/1</td><td>0/1</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
1 trial =
0 trial <</td><td>-</td></tr>
<tr><td colspan="7">POLAND + GERMANY</td></tr>
<tr><td rowspan="5">Data grouping (PL, DE)</td><td>LAMAM</td><td>Number of values
Mean</td><td>6
78,9</td><td>6
88,4</td><td>6
96,9</td><td>6
96,8</td></tr>
<tr><td>LAMPU</td><td>Number of values
Mean</td><td>10
61,8</td><td>10
70,4</td><td>10
87,8</td><td>10
88,1</td></tr>
<tr><td rowspan="3">LAMAM-LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>16
7,3
92,5
68,2
21,0</td><td>16
21,3
91,3
77,1
18,5</td><td>16
71,3
98,8
91,2
8,0</td><td>16
58,8
100,0
91,3
10,8</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>14/16 (7 num)</td><td>10/16 (3 num)</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
12 trials = (7 num)
2 trials <</td><td>-</td></tr>
</table>

Matricaria chamomilla (MATCH)

Matricaria chamomilla was observed in 12 trials performed in Germany, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter rye, winter soft wheat, winter barley and winter triticale.

Short-term effect (about 16-28 days after application)

All trials presented an autumn assessment. Sufficient density of *Matricaria chamomilla* (7.25-153 plants/m²) was observed in 8 trials that are considered valid for this assessment timing. An insufficient density at application and assessment was observed in four trials, which were therefore not studied. In one trial conducted on winter triticale, no efficacy was still recorded after the application of the test item and standard reference. This trial was therefore not included in the data groupings.

Table 3.2-53: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – MATCH

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 16-28 days after application **Harmful organism:** MATCH					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	7	7	7	1	6
	Minimum value	30,0	37,5	37,5	35,0	
	Maximum value	60,0	82,5	87,5	99,0	
	Mean	**44,5**	**57,7**	**62,0**	**70,8**	
	Standard deviation	10,8	15,8	19,1	20,7	
	Nb of **dose effects** compared to 1000 g	4/7	1/7	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 3 trials = 3 trials <	-	-

Long-term effect (about 120-176 days after application)

All trials presented a spring assessment timing. Sufficient density of *Cyanus segetum* (5.3-19.5 plants/m²) was observed in 8 trials which are considered valid for this assessment timing. An insufficient density at application and/or assessment was observed in the four remaining trials, which were therefore not studied.

Table 3.2-54: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – MATCH

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 120-176 days after application **Harmful organism:** MATCH					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	8	8	8	2	6
	Minimum value	45,0	61,3	69,3	66,3	
	Maximum value	100,0	100,0	100,0	100,0	
	Mean	**85,0**	**88,7**	**90,8**	**95,7**	
	Standard deviation	21,8	16,5	13,1	11,9	
	Nb of **dose effects** compared to 1000 g	3/8	0/8	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 6 trials = 2 trials <	-	-

Tripleurospermum inodorum (MATIN)

Tripleurospermum maritimum was observed in 13 trials performed in Poland (11) and Germany (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter rye, winter soft wheat, winter barley and winter triticale.

<u>Short-term effect (about 21-29 days after application)</u>

An autumn assessment was carried out in all trials. Sufficient density of *Tripleurospermum maritimum* (5-14.5 plants/m²) was observed in all trials that are considered valid for this assessment timing.

Table 3.2-55: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – MATIN

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-29 days after application **Harmful organism:** MATIN					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	11 8,8 71,3 **49,9** 23,3	11 22,5 83,8 **56,9** 21,0	11 33,8 91,3 **66,3** 18,9	11 41,3 85,0 **65,9** 13,7	- - - **-** -
	Nb of **dose effects** compared to 1000 g	8/11 (2 num)	6/11	-	-	
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > (2 num) 5 trials = (3 num) 4 trials <	-	
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 63,8 75,0 **69,4** 8,0	2 73,8 77,5 **75,6** 2,7	2 80,0 81,3 **80,6** 0,9	- - - **-** -	2 90,0 99,0 **94,5** 6,4
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 0 trial = 2 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	13 8,8 75,0 **52,9** 22,6	13 22,5 83,8 **59,8** 20,4	13 33,8 91,3 **68,5** 18,0	11 41,3 99,0 **70,3** 16,6	2
	Nb of **dose effects** compared to 1000 g	9/13 (2 num)	6/13	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > (2 num) 5 trials = (3 num) 6 trials <	-	-

<u>Long-term effect (about 117-146 days after application)</u>

A spring assessment was performed in all trials and sufficient density of the weed (5-10.75 plants/m²) was observed in the latter, which are considered valid for this assessment timing.

Table 3.2-56: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – MATIN

	Trial timing: Autumn

	Crops: Winter cereals **Assessment timing:** 117-146 days after application **Harmful organism:** MATIN					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	11 31,3 82,5 **65,9** 16,1	11 58,8 93,8 **79,8** 12,5	11 81,3 100,0 **92,8** 7,1	11 77,5 100,0 **92,8** 7,4	- - - - -
	Nb of **dose effects** compared to 1000 g	11/11 (5 num)	6/11	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 11 trials = (5 num) 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0	- - - - -	2 100,0 100,0 **100,0** 0,0
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	13 31,3 100,0 **71,1** 19,5	13 58,8 100,0 **82,9** 13,7	13 81,3 100,0 **93,9** 7,0	11 77,5 100,0 **93,9** 7,2	2
	Nb of **dose effects** compared to 1000 g	11/13 (5 num)	6/13	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 13 trials = (5 num) 0 trial <	-	-

Myosotis arvensis (MYOAR)

Myosotis arvensis was observed in 3 trials implemented in Germany, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter barley and winter rye.
One trial was excluded from the analysis due to the low infection observed at the time of application (<5 plants/m²).

<u>Short-term effect (about 27-28 days after application)</u>

Sufficient density of *Myosotis arvensis* (7-26 plants/m²) was observed in 2 trials out of 3 which are considered valid for this assessment timing during autumn.

Table 3.2-57: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – MYOAR

Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 27-28 days after application **Harmful organism:** MYOAR				
Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Carmina 640**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron

	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 330 + 9 g	800 g 440 + 12 g	1000 g 550 + 15 g	2,5 l 100 + 1500 g
MARITIME EPPO ZONE					
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 37,5 55,0 **46,3** 12,4	2 37,5 61,3 **49,4** 16,8	2 37,5 60,0 **48,8** 15,9	2 37,5 57,5 **47,5** 14,1
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 131-143 days after application)

Sufficient density of *Myosotis arvensis* (11.5-23.5 plants/m²) was observed in 2 trials out of 3 which are considered valid for this assessment timing during spring.

Table 3.2-58: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – MYOAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 131-143 days after application **Harmful organism:** MYOAR				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 330 + 9 g	800 g 440 + 12 g	1000 g 550 + 15 g	2,5 l 100 + 1500 g
MARITIME EPPO ZONE					
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 92,5 100,0 **96,3** 5,3	2 96,3 100,0 **98,1** 2,7	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

***Papaver rhoeas* (PAPRH)**

Papaver rhoeas was observed in 7 trials all performed Poland (7), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter rye and winter triticale.
During spring, sufficient density of the weed (4.5-17 plants/m²) was observed in all trials, which are considered valid for this assessment timing.

Short-term effect (about 21-28 days after application)

During autumn, sufficient density of the weed (4.5-17 plants/m²) was observed in all trials, which are considered valid for this assessment timing.

Table 3.2-59: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – PAPRH

Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-28 days after application

	Harmful organism: PAPRH				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	7 10,0 71,3 **47,7** 22,6	7 15,0 75,0 **54,8** 21,1	7 20,0 80,0 **62,7** 20,3	7 15,5 72,5 **44,8** 27,2
	Nb of **dose effects** compared to 1000 g	4/7	4/7	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 4 trials = (3 num) 0 trial <	-

<u>Long-term effect (about 117-145 days after application)</u>

During spring, sufficient density of the weed (4.5-17 plants/m²) was observed in all trials, which are considered valid for this assessment timing.

Table 3.2-60: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – PAPRH

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-145 days after application **Harmful organism:** PAPRH				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	7 35,0 77,5 **66,1** 14,8	7 55,0 92,5 **78,8** 13,1	7 77,5 100,0 **89,3** 8,3	7 22,5 98,8 **77,9** 26,6
	Nb of **dose effects** compared to 1000 g	7/7 (3 num)	3/7	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 5 trials = (3 num) 0 trial <	-

Sisymbrium officinale (SSYOF)

Sisymbrium officinale was observed in 2 trials implemented in Germany, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter barley and winter rye.

<u>Short-term effect (about 26-28 days after application)</u>

Sufficient density of *Sisymbrium officinale* (8-8.25 plants/m²) was observed in all 2 trials which are considered valid for this assessment timing.

Table 3.2-61: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – SSYOF

Trial timing: Autumn **Crops:** Winter cereals

	Assessment timing: 26-28 days after application **Harmful organism:** SSYOF				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	100 + 1500 g
MARITIME EPPO ZONE					
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 72,5 96,3 **84,4** 16,8	2 82,5 100,0 **91,3** 12,4	2 82,5 98,8 **90,6** 11,5	2 90,0 100,0 **95,0** 7,1
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 143-173 days after application)

Sufficient density of *Sisymbrium officinale* (4.75-8 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-62: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – SSYOF

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 143-173 days after application **Harmful organism:** SSYOF				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	100 + 1500 g
MARITIME EPPO ZONE					
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0	2 100,0 100,0 **100,0** 0,0
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

***Stellaria media* (STEME)**

Stellaria media was observed in 26 trials implemented in Poland (14) and Germany (12), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter rye and winter triticale.
Two trials performed in Germany were excluded from the analysis because the weed density at application was low (<5 plants/m²).

Short-term effect (about 21-30 days after application)

All 24 trials presented an autumn assessment. Sufficient density of *Stellaria media* (5.75-65 plants/m²) was observed in all 24 trials which are considered valid for this assessment timing.
However, one trial was excluded at this assessment timing because the effectiveness of the test product

and the reference was null.

Table 3.2-63: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – STEME

Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 21-30 days after application
Harmful organism: STEME

	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	14	14	14	14	-
	Minimum value	6,3	17,5	32,5	42,5	-
	Maximum value	72,5	83,8	93,8	85,0	-
	Mean	**52,7**	**61,6**	**69,6**	**70,8**	-
	Standard deviation	22,3	20,5	17,2	13,1	-
	Nb of **dose effects** compared to 1000 g	9/14 (2 num)	8/14 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 9 trials = (6 num) 4 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	9	9	9	3	6
	Minimum value	3,3	4,5	5,0	16,3	
	Maximum value	88,8	90,0	91,3	100,0	
	Mean	**54,2**	**58,0**	**56,3**	**70,4**	
	Standard deviation	25,5	25,8	31,6	29,0	
	Nb of **dose effects** compared to 1000 g	3/8	2/8	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 6 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number ofvalues	23	23	23	17	6
	Minimum value	3,3	4,5	5,0	16,3	
	Maximum value	88,8	90,0	93,8	100,0	
	Mean	**53,3**	**60,2**	**64,4**	**70,7**	
	Standard deviation	23,0	22,3	24,1	20,2	
	Nb of **dose effects** compared to 1000 g	12/23 (2 num)	10/23	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 12 trials = (6 num) 10 trials <	-	-

Long-term effect (about 117-181 days after application)

A total of 24 out of 26 trials showed an assessment early in spring. Sufficient density of *Stellaria media* was observed in 22 trials out of 24 which are considered valid for this assessment timing.

Table 3.2-64: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – STEME

Trial timing: Autumn
Crops: Winter cereals
Assessment timing: 117-181 days after application

	Harmful organism: STEME					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	14 48,8 100,0 **74,5** 14,3	14 68,8 100,0 **87,9** 13,1	14 83,8 100,0 **95,0** 6,6	14 85,0 100,0 **95,7** 4,8	- - - **-** -
	Nb of **dose effects** compared to 1000 g	13/14 (7 num)	6/14	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 11 trials = (7 num) 3 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	8 60,0 100,0 **94,2** 13,9	8 50,0 100,0 **93,4** 17,5	8 80,0 100,0 **97,4** 7,0	3 100,0 100,0 **100,0** 0,0	5
	Nb of **dose effects** compared to 1000 g	2/8 (1 num)	1/8 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 7 trials = 1 trial < (1 num)	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	22 48,8 100,0 **81,6** 16,9	22 50,0 100,0 **89,9** 14,7	22 80,0 100,0 **95,9** 6,7	17 85,0 100,0 **97,3** 4,3	5
	Nb of **dose effects** compared to 1000 g	15/22 (8 num)	7/22 (1 num)	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 18 trials = (7 num) 4 trials < (1 num)	-	-

Thlaspi arvense (THLAR)

Thlaspi arvense was observed in 13 trials implemented in Poland (12) and in Germany (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter rye and winter triticale.
In the single trial performed in Germany, the density at application was lower than 5 plants/m² therefore, this trial was automatically excluded from the analysis.

<u>Short-term effect (about 21-29 days after application)</u>

Sufficient density of *Thlaspi arvense* (5-18.75 plants/m²) was observed in all 12 trials which are considered valid for this assessment timing.

Table 3.2-65: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – THLAR

Trial timing: Autumn

	Crops: Winter cereals **Assessment timing:** 21-29 days after application **Harmful organism:** THLAR				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	12 11,3 71,3 **44,4** 25,2	12 18,8 75,0 **50,9** 21,3	12 27,5 81,8 **66,2** 17,7	12 36,3 78,0 **64,2** 13,1
	Nb of **dose effects** compared to 1000 g	8/12 (1 num)	7/12	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > (1 num) 7 trials = (4 num) 3 trials <	-

Long-term effect (about 117-142 days after application)

In spring, sufficient density of *Thlaspi arvense* (5-15.25 plants/m²) was observed in all 12 trials which are considered valid for this assessment timing.

Table 3.2-66: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – THLAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-142 days after application **Harmful organism:** THLAR				
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	12 20,0 85,0 **57,5** 25,0	12 27,5 96,3 **74,1** 22,7	12 85,0 100,0 **91,9** 5,5	12 80,8 100,0 **93,9** 6,0
	Nb of **dose effects** compared to 1000 g	12/12 (5 num)	7/12	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 10 trials = (5 num) 1 trial <	-

Veronica hederifolia / Veronica persica (VERHE / VERPE)

Veronica hederifolia / Veronica persica was observed in 19 trials implemented in Poland (5) and Germany (14), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter rye and winter triticale.

Short-term effect (about 21-34 days after application)

During autumn, sufficient density of *Veronica hederifolia / Veronica persica* (5-122.5 plants/m²) was observed in 17 trials out of 19 which are considered valid for this assessment timing.
Two trials performed in Germany were excluded because of the low density at application and assessment (< 5 plants/m²).

Table 3.2-67: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – VERHE / VERPE

		Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 21-34 days after application **Harmful organism:** VERHE-VERPE					
		Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlorto-luron	Diflufenican + Chlorto-luron
		Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	VERHE	Number of values Mean	4 **46,6**	4 **54,0**	4 **66,1**	4 **62,7**	- -
	VERPE	Number of values Mean	1 **7,0**	1 **8,8**	1 **13,8**	1 **12,5**	- -
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	5 7,0 57,5 **38,7** 19,0	5 8,8 66,3 **45,0** 21,4	5 13,8 77,5 **55,7** 25,0	5 12,5 78,8 **52,7** 24,5	- - - - -
		Nb of **dose effects** compared to 1000 g	5/5 (3 num)	4/5 (2 num)	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 4 trials = (2 num) 0 trial <	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	VERHE	Number of values Mean	6 **12,4**	6 **23,6**	6 **26,9**	2 **29,8**	4
	VERPE	Number of values Mean	6 **26,3**	6 **24,9**	6 **28,6**	4 **59,2**	2
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	12 0,0 70,0 **19,3** 18,2	12 0,5 47,5 **24,2** 12,0	12 0,0 40,0 **27,7** 10,8	6 1,3 100,0 **45,8** 32,3	6
		Nb of **dose effects** compared to 1000 g	4/12	1/12	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 7 trials = 5 trials <	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	VERHE	Number of values Mean	10 **27,2**	10 **35,8**	10 **42,5**	6 **44,4**	4
	VERPE	Number of values Mean	7 **28,1**	7 **28,4**	7 **33,2**	5 **59,6**	2
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	17 0,0 70,0 **27,6** 20,3	17 0,5 66,3 **32,7** 17,3	17 0,0 77,5 **38,7** 20,2	11 1,3 100,0 **50,1** 27,5	6
		Nb of **dose effects** compared to 1000 g	9/17 (3 num)	5/17 (2 num)	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 11 trials = (2 num) 5 trials <	-	-

<u>Long-term effect (about 112-169 days after application)</u>

During spring, sufficient density of *Veronica hederifolia / Veronica persica* (5-108.8 plants/m²) was observed in 16 trials out of 19 which are considered valid for this assessment timing.
Three trials performed in Germany were excluded because of the low density at application and assessment (< 5 plants/m²).

Table 3.2-68: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – VERHE / VERPE

		Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 112-169 days after application **Harmful organism:** VERHE-VERPE					
		Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlorto-luron	Diflufenican + Chlorto-luron
		Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	VERHE	Number of values Mean	4 **62,5**	4 **66,3**	4 **79,4**	4 **75,3**	- -
	VERPE	Number of values Mean	1 **62,5**	1 **74,3**	1 **82,8**	1 **89,5**	- -
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	5 50,0 100,0 **62,5** 21,7	5 52,5 100,0 **67,9** 19,9	5 67,5 100,0 **80,1** 12,9	5 65,0 100,0 **78,2** 15,7	- - - - -
		Nb of **dose effects** compared to 1000 g	4/5 (3 num)	4/5 (3 num)	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 3 trials = (2 num) 1 trial <	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	VERHE	Number of values Mean	6 **37,9**	6 **49,0**	6 **62,7**	3 **95,6**	3
	VERPE	Number of values Mean	5 **45,4**	5 **60,4**	5 **71,6**	3 **100,0**	2
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	11 0,7 78,8 **41,3** 23,5	11 32,5 87,5 **54,2** 16,7	11 30,0 96,5 **66,7** 23,3	6 92,5 100,0 **97,9** 3,0	5
		Nb of **dose effects** compared to 1000 g	7/11	4/11	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 8 trials <	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	VERHE	Number of values Mean	10 **47,8**	10 **55,9**	10 **69,4**	7 **87,5**	3
	VERPE	Number of values Mean	6 **45,1**	6 **63,4**	6 **70,1**	3 **97,9**	3
	VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	16 0,7 100,0 **47,9** 24,4	16 32,5 100,0 **58,4** 18,3	16 30,0 100,0 **70,9** 21,1	11 65,0 100,0 **91,5** 12,6	5
		Nb of **dose effects** compared to 1000 g	11/16 (3 num)	8/16 (3 num)	-	-	-

		Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 112-169 days after application **Harmful organism:** VERHE-VERPE					
		Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlorto-luron	Diflufenican + Chlorto-luron
		Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > (1 num) 6 trials = (2 num) 9 trials <	-	-

Viola arvensis (VIOAR)

Viola arvensis was observed in 29 trials implemented in Poland (14) and Germany (15), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in autumn on winter wheat, winter barley, winter rye and winter triticale.

<u>Short-term effect (about 16-30 days after application)</u>

The efficacy of MT-565SG-OR2-C was assessed in 28 trials out of 29 during autumn.
At this timing, sufficient density of *Viola arvensis* (5.25-219 plants/m²) was observed in 26 trials out of 28 which are considered valid for this assessment timing.

Table 3.2-69: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – VIOAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 16-30 days after application **Harmful organism:** VIOAR					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	14 11,3 71,3 **46,9** 24,2	14 17,5 75,0 **54,6** 22,8	14 28,8 87,5 **66,2** 17,2	14 47,5 86,3 **73,8** 10,5	- - - **-** -
	Nb of **dose effects** compared to 1000 g	9/14	8/14	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 8 trials = (5 num) 5 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	12 0,0 95,0 **35,4** 25,8	12 1,3 80,0 **39,3** 22,2	12 0,0 76,3 **44,4** 23,8	3 1,3 99,0 **48,3** 24,6	9
	Nb of **dose effects** compared to 1000 g	5/12	2/12	-	-	-
	Nb of trials where MT-565SG-OR2-	-	-	0 trial > 8 trials =	-	-

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 16-30 days after application **Harmful organism:** VIOAR					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
	C is >, = or < compared to standard			4 trials <		
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values	26	26	26	17	9
	Minimum value	0,0	1,3	0,0	1,3	
	Maximum value	95,0	80,0	87,5	99,0	
	Mean	**41,6**	**47,5**	**56,2**	**62,0**	
	Standard deviation	25,1	23,4	22,9	22,2	
	Nb of **dose effects** compared to 1000 g	14/26	10/26	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 16 trials = (5 num) 9 trials <	-	-

Long-term effect (about 117-176 days after application)

The efficacy of MT-565SG-OR2-C was assessed in all 29 during spring.
At this timing, sufficient density of *Viola arvensis* (5.75-114 plants/m²) was observed in 28 trials out of 29 which are considered valid for this assessment timing.

Table 3.2-70: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – VIOAR

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-176 days after application **Harmful organism:** VIOAR					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	15	15	15	15	-
	Minimum value	8,8	26,3	56,3	62,5	-
	Maximum value	100,0	100,0	100,0	100,0	-
	Mean	**61,9**	**75,6**	**89,7**	**91,8**	-
	Standard deviation	25,9	20,0	12,2	10,7	-
	Nb of **dose effects** compared to 1000 g	14/15 (6 num)	8/15	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 13 trials = (6 num) 2 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values	13	13	13	4	9
	Minimum value	0,0	25,0	43,3	68,8	
	Maximum value	100,0	100,0	100,0	100,0	
	Mean	**46,7**	**53,1**	**68,4**	**97,2**	
	Standard deviation	27,5	23,4	20,3	8,6	
	Nb of **dose effects**	6/13	6/13	-	-	-

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 117-176 days after application **Harmful organism:** VIOAR					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
	compared to 1000 g					
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 11 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	28 0,0 100,0 **54,8** 27,3	28 25,0 100,0 **65,2** 24,1	28 43,3 100,0 **79,8** 19,4	19 62,5 100,0 **94,3** 10,0	9
	Nb of **dose effects** compared to 1000 g	20/28 (6 num)	14/28	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 15 trials = (6 num) 13 trials <	-	-

Minor weeds

Six weeds were observed in 1 or 2 trials, were qualified as minor weeds and therefore data were grouped together. These weeds were: *Aethusa cynapium* (AETCY), ALOMY (*Alopecurus myosuroides*), GERPU (*Geranium pusillum*), GERRT (*Geranium rotundifolium*), TAROF (*Taraxacum officinale*), VICTE (*Vicia tetrasperma*).

Those weeds were observed over 6 trials implemented in the North-eastern (2) and in Maritime (4) EPPO zones.

<u>Short-term effect (about 22-27 days after application)</u>

During autumn, 3 trials were valid (TAROF, VICTE and AETCY). Those trials were implemented in North-eastern (2) and Maritime (1) EPPO zones.

Table 3.2-71: Grouped data – Efficacy trials – Autumn application / Winter cereals – Short-term effect – Minor weeds

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 22-27 days after application **Harmful organism:** Minor weeds					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 26,3 60,0 **43,2** 23,8	2 46,3 65,0 **55,7** 13,2	2 55,0 76,3 **65,6** 15,0	2 51,3 76,3 **63,8** 17,6	- - - **-** -

	Nb of **dose effects** compared to 1000 g	2/2	1/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	1 86,3 86,3 **86,3** -	1 93,3 93,3 **93,3** -	1 93,5 93,5 **93,5** -	1 99,0 99,0 **99,0** -	- - - - -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	3 26,3 86,3 **57,5** 30,1	3 46,3 93,3 **68,2** 23,7	3 55,0 93,5 **74,9** 19,3	3 51,3 99,0 **75,5** 23,9	- - - - -
	Nb of **dose effects** compared to 1000 g	2/3	1/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-

Long-term effect (about 112-169 days after application)

During spring, 5 trials were valid (TAROF, VICTE, AETCY, ALOMY, GERPU). Those trials were implemented in North-eastern (2) and Maritime (3) EPPO zones.
A total of 1 trial out of 6 were excluded from the analysis due to the low weed pressure observed at application (TAROF in Maritime EPPO zone).

Table 3.2-72: Grouped data – Efficacy trials – Autumn application / Winter cereals – Long-term effect – Minor weeds

	Trial timing: Autumn **Crops:** Winter cereals **Assessment timing:** 112-169 days after application **Harmful organism:** Minor weeds					
	Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Legato Pro 425 SC**	**Carmina 640**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Diflufenican + Chlortoluron	Diflufenican + Chlortoluron
	Dose FP kg or l/ha	600 g	800 g	1000 g	2,5 l	2,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	62,5 + 1000 g	100 + 1500 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 17,5 100,0 **58,8** 58,3	2 27,5 100,0 **63,8** 51,3	2 31,3 100,0 **65,7** 48,6	2 33,8 98,8 **66,3** 45,9	- - - - -
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-
MARITIME EPPO ZONE						

Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	3 86,3 100,0 **93,4** 6,9	3 92,5 100,0 **97,3** 4,2	3 94,3 100,0 **97,9** 3,2	2 100,0 100,0 **100,0** 0,0	1
	Nb of **dose effects** compared to 1000 g	2/3	0/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 1 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	5 17,5 100,0 **79,5** 35,1	5 27,5 100,0 **83,9** 31,7	5 31,3 100,0 **85,0** 30,1	4 33,8 100,0 **86,5** 29,5	1
	Nb of **dose effects** compared to 1000 g	3/5	0/5	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 1 trial <	-	-

Conclusion – Autumn application – winter cereals

The efficacy of MT-565SG-OR2-C applied after the emergence of winter cereals in autumn was investigated over 25 different weeds in North-eastern and Maritime EPPO zones.

It has been previously demonstrated that the minimum effective dose of MT-565SG-OR2-C applied post-emergence of winter cereals in autumn for the control of dicotyledonous weeds is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl).

In the **North-eastern EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 16 different weeds for which valid trials are available.
In this pool of 16 different weeds, 13 are considered as major because they were observed in 2 trials and more. Conversely, 3 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in winter cereals, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) during autumn reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 4 major weeds (ANTAR, CAPBP, LAMAM, STEME)
- Good efficacy (85-94.9% efficacy) against 7 major weeds (BRSNN / BRSNW, CENCY, LAMPU, MATIN, PAPRH, THLAR, VIOAR)
- Acceptable efficacy (70-84.9% efficacy) against 2 major weeds (GALAP, VERHE)

In the **Maritime EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 15 different weeds for which valid trials are available.
In this pool of 15 different weeds, 11 are considered as major because they were observed in 2 trials and more. Conversely, 4 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in winter cereals, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) during autumn reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 7 major weeds (APHAR, BRSNN / BRSNW, CAPBP, MATIN, MYOAR, SSYOF, STEME)
- Good efficacy (85-94.9% efficacy) against 2 major weeds (CENCY, MATCH)
- Acceptable efficacy (70-84.9% efficacy) against 1 major weed (VERPE)
- Limited efficacy (50-69.6% efficacy) against 3 major weeds (GALAP, VERHE, VIOAR)

In both North-eastern and Maritime EPPO zones, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) offered a very high control (> 95% efficacy) or a high control (85-94.9% efficacy) of the majority of weeds.

In **Poland and Germany**, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) during autumn provided a very good control of ANTAR, APHAR, CAPBP, LAMAM and STEME, a good control of BRSNN / BRSNW, CENCY, LAMPU, MATIN, an acceptable control of GALAP, VERPE, VIOAR and a limited control of VERHE.

Consequently, it is justified to claim the registration of one application of MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in autumn on winter cereals for the control of dicotyledonous weeds.

Table 3.2-73: Efficacy evaluation – Summary – Autumn application / Winter cereals

Autumn application Winter cereals	***North-eastern EPPO zone*** First spring assessment			***Maritime EPPO zone*** First spring assessment			***Special grouping - Poland + Germany*** First spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
AETCY	-	-	-	1	1 kg/ha	94,3	-	-
ALOMY	-	-	-	1	1 kg/ha	99,5	-	-
ANTAR	5	1 kg/ha	100	-	-	-	-	-
APHAR	-	-	-	3	1 kg/ha	99,5	-	-
BRSNN / BRSNW	17	1 kg/ha	93,8	5	0,8 kg/ha	96,6	22	94,5
CAPBP	16	1 kg/ha	96,2	4	0,6 kg/ha	100	21	96,4
CENCY	10	1 kg/ha	87,3	3	1 kg/ha	90,7	13	88,1
GALAP	6	1 kg/ha	79,2	5	1 kg/ha	69,5	11	74,8
GERPU	-	-	-	1	1 kg/ha	100	-	-
LAMAM	6	1 kg/ha	96,9	-	-	-	6	96,9
LAMPU	9	0 kg/ha	86,8	1	1 kg/ha	96,5	10	87,8
LAMAM / LAMPU	*15*	*1 kg/ha*	*90,9*	-	-	-	*16*	*91,2*
MATCH	-	-	-	8	0,8 kg/ha	90,8	-	-
MATIN	11	1 kg/ha	92,8	2	1 kg/ha	100	13	93,9
MYOAR	-	-	-	2	1 kg/ha	100	-	-
PAPRH	7	1 kg/ha	89,3	-	-	-	-	-
SSYOF	-	-	-	2	1 kg/ha	100	-	-
STEME	14	1 kg/ha	95	8	1 kg/ha	97,4	22	95,9
TAROF	1	1 kg/ha	100	-	-	-	-	-
THLAR	12	1 kg/ha	91,9	-	-	-	-	-
VERHE	4	1 kg/ha	79,4	6	1 kg/ha	62,7	10	69,4
VERPE	1	1 kg/ha	82,8	5	1 kg/ha	71,6	6	70,1
VERHE / VERPE	*5*	*1 kg/ha*	*80,1*	*11*	*1 kg/ha*	*66,7*	*16*	*70,9*
VICTE	1	1 kg/ha	31,3	-	-	-	-	-
VIOAR	15	1 kg/ha	89,7	13	1 kg/ha	68,4	28	79,8

(dark green)	Highly Susceptible (HS)	95-100%
(light green)	Susceptible (S)	85-94,9%
(yellow)	Moderately Susceptible (MS)	70-84,9%
(orange)	Moderately Tolerant (MT)	50-69,9%
(red)	Tolerant (T)	0-49,9%

3.2.3.2 Spring application / Winter cereals

Introduction

The effectiveness of MT-565SG-OR2-C applied in spring on winter cereals was studied in 63 trials. Those trials were performed from 2016 to 2018 in Poland (27), Germany (22), United Kingdom (6), Hungary (5) and Romania (3).
The herbicidal performance of MT-565SG-OR2-C was investigated in 4 different winter cereals including winter wheat (31), winter rye (12), winter triticale (10) and winter barley (10).

Anthemis arvensis (ANTAR)

Anthemis arvensis was observed in 8 trials implemented in Poland (5) and Romania (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley and winter rye.

Short-term effect (about 14 days after application)

Sufficient density of *Anthemis arvensis* (4.5-12.5 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.

Table 3.2-74: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – ANTAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** ANTAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL Chwastox Turbo 340 SL**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l 2,5 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	5 30,0 63,8 **45,5** 12,1	5 35,0 66,3 **49,8** 12,5	5 35,0 81,3 **51,8** 18,2	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	2 31,3 61,3 **46,3** 21,2	2 46,3 63,8 **55,1** 12,4	2 55,0 66,3 **60,7** 8,0	2 51,3 81,3 **66,3** 21,2	- - - - -
	Nb of **dose effects** compared to 1000 g	1/2	2/5	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 1 trial <	-	-
SOUTH EASTERN EPPO ZONE						
Data grouping (RO)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 62,5 86,3 **70,4** 0,0	3 63,8 89,0 **73,8** 3,4	- - - - -	3 61,3 85,0 **71,8** 5,5
	Number of values Minimum value Maximum value Mean Standard deviation	2 51,3 63,8 **63,8** 8,8	2 62,5 86,3 **86,3** 16,8	2 63,8 89,0 **89,0** 17,9	- - - - -	2 61,3 85,0 **85,0** 16,8
	Nb of **dose effects** compared to 1000 g	2/2	1/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 1 trial <	-	-

Long-term effect (about 23-28 days after application)

About one month after application, sufficient density of *Anthemis arvensis* (4.5-12 plants/m²) was observed in all 8 trials.

Table 3.2-75: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – ANTAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 23-28 days after application

	Harmful organism: ANTAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL Chwastox Turbo 340 SL**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l 2,5 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	-	5	5	5	-
	Minimum value	-	72,5	87,5	85,0	-
	Maximum value	-	87,5	91,3	99,3	-
	Mean	-	**82,5**	**88,9**	**91,7**	-
	Standard deviation	-	5,8	1,7	5,5	-
	Number of values	2	2	2	2	-
	Minimum value	73,8	83,8	87,5	85,0	-
	Maximum value	80,0	87,5	91,3	99,3	-
	Mean	**76,9**	**85,7**	**89,4**	**92,2**	-
	Standard deviation	4,4	2,6	2,7	10,1	-
	Nb of **dose effects** compared to 1000 g	1/2	3/5	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 1 trial <	-	-
SOUTH EASTERN EPPO ZONE						
Data grouping (RO)	Number of values	-	3	3	-	3
	Minimum value	-	100,0	100,0	-	99,5
	Maximum value	-	100,0	100,0	-	100,0
	Mean	-	**100,0**	**100,0**	-	**99,7**
	Standard deviation	-	0,0	0,0	-	0,4
	Number of values	2	2	2	-	2
	Minimum value	91,3	100,0	100,0	-	99,5
	Maximum value	97,0	100,0	100,0	-	99,5
	Mean	**97,0**	**100,0**	**100,0**	-	**99,5**
	Standard deviation	4,1	0,0	0,0	-	0,0
	Nb of **dose effects** compared to 1000 g	1/2	0/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 1 trial <	-	-

Brassica napus rapifera / Brassica napus (BRSNA / BRSNW)

Brassica napus rapifera / Brassica napus was observed in 10 trials implemented in Poland (9) and Germany (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley and winter rye.

<u>Short-term effect (about 14 days after application)</u>

Sufficient density of *Brassica napus rapifera / Brassica napus* (6-10.5 plants/m²) was observed in 9 trials out of 10 which are considered valid for this assessment timing. One trial performed in Poland was excluded due to the low density observed at application or assessment.

Table 3.2-76: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – BRSNA / BRSNW

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** BRSNA-BRSNW					
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**
Active ingredient	MCPA +	MCPA +	MCPA +	MCPA+	MCPA

			Tribenuron methyl	Tribenuron methyl	Tribenuron methyl	Dicamba	
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	BRSNA	Number of values	2	2	2	2	-
		Mean	**61,9**	**65,1**	**66,9**	**76,9**	**-**
	BRSNW	Number of values	-	4	4	4	-
		Mean	**-**	**35,3**	**37,8**	**35,3**	**-**
		Number of values	2	2	2	2	-
		Mean	**32,5**	**38,8**	**40,0**	**35,7**	**-**
	BRSNA-BRSNW	Number of values	-	6	6	6	-
		Minimum value	-	27,5	25,0	21,3	-
		Maximum value	-	68,8	68,8	82,5	-
		Mean	**-**	**45,2**	**47,5**	**49,2**	**-**
		Standard deviation	-	17,4	17,9	23,6	-
		Number of values	4	4	4	4	-
		Minimum value	25,0	27,5	25,0	21,3	-
		Maximum value	67,5	68,8	68,8	82,5	-
		Mean	**47,2**	**51,9**	**53,5**	**56,3**	**-**
		Standard deviation	18,6	18,0	19,8	26,9	-
		Nb of **dose effects** compared to 1000 g	2/4	0/6	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 2 trials <	-	-
MARITIME EPPO ZONE							
Data group-ing (DE)	BRSNW	Number of values	1	1	1	-	1
		Minimum value	100,0	100,0	100,0	-	100,0
		Maximum value	100,0	100,0	100,0	-	100,0
		Mean	**100,0**	**100,0**	**100,0**	**-**	**100,0**
		Standard deviation	-	-	-	-	-
		Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	BRSNA	Number of values	2	2	2	2	-
		Mean	**61,9**	**65,1**	**66,9**	**76,9**	**-**
	BRSNW	Number of values	-	5	5	4	1
		Mean	**-**	**48,3**	**50,3**	**48,3**	
		Number of values	3	3	3	2	1
		Mean	**55,0**	**59,2**	**60,0**	**57,1**	
	BRSNA-BRSNW	Number of values	-	7	7	6	1
		Minimum value	-	27,5	25,0	21,3	
		Maximum value	-	100,0	100,0	100,0	
		Mean	**-**	**53,1**	**55,0**	**56,4**	
		Standard deviation	-	26,1	25,7	28,9	
		Number of values	5	5	5	4	1
		Minimum value	25,0	27,5	25,0	21,3	
		Maximum value	100,0	100,0	100,0	100,0	
		Mean	**57,8**	**61,5**	**62,8**	**65,0**	
		Standard deviation	28,6	26,6	27,0	30,4	
		Nb of **dose effects** compared to 1000 g	2/5	0/7	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = 2 trials <	-	-

Long-term effect (about 28-35 days after application)

About one month after application (28-35 days after application), sufficient density of *Capsella bursa-pastoris* was observed in 7 trials out of 10 trials which are considered valid for this assessment timing.

Table 3.2-77: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – BRSNA / BRSNW

		Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 28-35 days after application **Harmful organism:** BRSNA-BRSNW					
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	BRSNA	Number of values	2	2	2	2	-
		Mean	**84,4**	**91,9**	**96,6**	**99,0**	-
	BRSNW	Number of values	-	4	4	4	-
		Mean	-	**84,1**	**90,0**	**90,0**	-
		Number of values	2	2	2	2	-
		Mean	**80,0**	**83,2**	**88,2**	**87,6**	-
	BRSNA-BRSNW	Number of values	-	6	6	6	-
		Minimum value	-	81,3	86,3	85,0	-
		Maximum value	-	93,8	98,8	100,0	-
		Mean	-	**86,7**	**92,2**	**93,0**	-
		Standard deviation	-	4,5	4,2	7,0	-
		Number of values	4	4	4	4	-
		Minimum value	80,0	81,3	86,3	86,3	-
		Maximum value	87,5	93,8	98,8	99,5	-
		Mean	**82,2**	**87,5**	**92,4**	**93,3**	-
		Standard deviation	3,6	5,5	5,4	6,7	-
		Nb of **dose effects** compared to 1000 g	3/4	4/6	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 2 trials <	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	BRSNW	Number of values	1	1	1	-	1
		Minimum value	100,0	100,0	100,0	-	100,0
		Maximum value	100,0	100,0	100,0	-	100,0
		Mean	**100,0**	**100,0**	**100,0**	-	**100,0**
		Standard deviation	-	-	-	-	-
		Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	BRSNA	Number of values	2	2	2	2	-
		Mean	**84,4**	**91,9**	**96,6**	**99,0**	-
	BRSNW	Number of values	-	5	5	4	1
		Mean	-	**87,3**	**92,0**	**92,0**	
		Number of values	3	3	3	2	1
		Mean	**86,7**	**88,8**	**92,1**	**91,7**	
	BRSNA-BRSNW	Number of values	-	7	7	6	1
		Minimum value	-	81,3	86,3	85,0	
		Maximum value	-	100,0	100,0	100,0	

		Mean Standard deviation	- -	**88,6** 6,5	**93,3** 4,8	**94,0** 7,0	
		Number of values Minimum value Maximum value Mean Standard deviation	5 80,0 100,0 **85,8** 8,5	5 81,3 100,0 **90,0** 7,3	5 86,3 100,0 **93,9** 5,8	4 86,3 100,0 **94,6** 6,5	1
		Nb of **dose effects** compared to 1000 g	3/5	4/7	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = 2 trials <	-	-

Capsella bursa-pastoris (CAPBP)

Capsella bursa-pastoris was observed in 10 trials implemented in Poland (7) and Germany (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley and winter triticale.

Short-term effect (about 14-17 days after application)

About one month after application (14-17 days after application), sufficient density of *Capsella bursa-pastoris* (5-29.2 plants/m²) was observed in 8 trials out of 10 trials which are considered valid for this assessment timing.
One trial performed in Poland was also excluded from the analysis due to the low efficacy observed after the standard reference application.

Table 3.2-78: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – CAPBP

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14-17 days after application **Harmful organism:** CAPBP						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Chwastox Extra 300 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l	3 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 + 100 g	900 g	750 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 42,5 75,0 **52,3** 12,4	6 43,8 76,3 **57,7** 13,8	6 18,8 72,5 **47,1** 17,4	- - - - -	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	4 33,8 75,0 **50,3** 18,2	4 42,5 75,0 **56,6** 13,5	4 45,0 76,3 **63,2** 13,9	4 18,8 72,5 **48,5** 22,2	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	2/4	2/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 3 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping	Number of values Minimum value	- -	1 65,0	1 65,0	- -	- -	1 40,0

(DE)	Maximum value Mean Standard deviation	- - -	65,0 **65,0** -	65,0 **65,0** -	- - -	- - -	40,0 **40,0** -
	Nb of **dose effects** compared to 1000 g	-	0/1	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 0 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	7 42,5 75,0 **54,1** 12,3	7 43,8 76,3 **58,8** 12,9	6	- 18,8 72,5 **46,1** 16,1	1
	Number of values Minimum value Maximum value Mean Standard deviation	4 33,8 75,0 **50,3** 18,2	4 42,5 75,0 **56,6** 13,5	4 45,0 76,3 **63,2** 13,9	4 18,8 72,5 **48,5** 22,2	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	2/4	2/7	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 3 trials = 0 trial <	-	-	-

Long-term effect (about 27-28 days after application)

About one month after application (27-28 days after application), sufficient density of *Capsella bursa-pastoris* (5-29.2 plants/m²) was observed in 8 trials out of 10 trials which are considered valid for this assessment timing.
One trial performed in Poland was also excluded from the analysis due to the low efficacy observed after the standard reference application.

Table 3.2-79: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – CAPBP

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 27-28 days after application **Harmful organism:** CAPBP						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Chwastox Extra 300 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	2,5 l 750 + 100 g	3 l 900 g	1,5 l 750 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 62,5 90,0 **78,2** 10,8	6 72,5 98,8 **85,2** 9,3	6 62,5 95,0 **77,3** 13,0	- - - - -	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	4 62,5 90,0 **73,1** 12,5	4 71,3 90,0 **79,4** 8,5	4 72,5 90,0 **81,9** 8,3	4 62,5 86,3 **76,6** 10,2	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	3/4	2/6	-	-	-	-

	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 3 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	1 95,0 95,0 **95,0** -	1 95,0 95,0 **95,0** -	- - - **-** -	- - - **-** -	1 93,5 93,5 **93,5** -
	Nb of **dose effects** compared to 1000 g	-	0/1	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	7 62,5 95,0 **80,6** 11,7	7 72,5 98,8 **86,6** 9,3	6	- 62,5 95,0 **79,6** 13,4	1
	Number of values Minimum value Maximum value Mean Standard deviation	4 62,5 90,0 **73,1** 12,5	4 71,3 90,0 **79,4** 8,5	4 72,5 90,0 **81,9** 8,3	4 62,5 86,3 **76,6** 10,2	- - - **-** -	- - - **-** -
	Nb of **dose effects** compared to 1000 g	3/4	2/7	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 4 trials = 0 trial <	-	-	-

Cyanus segetum (CENCY)

Cyanus segetum was observed in 29 trials implemented in Poland (17), Germany (11) and Romania (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter rye, winter triticale.

<u>Short-term effect (about 9-14 days after application)</u>

Shortly after application, sufficient density of *Cirsium arvense* (5-65.6 plants/m²) was observed in 27 trials out of 29 which are considered valid for this assessment timing. One trial implemented in Poland and one in Romania were excluded due to the low weed density assessed at application or assessment. In addition, 5 trials performed in Poland (2) and Germany (3) were also excluded due to the low performance of the standard reference.

Table 3.2-80: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – CENCY

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 9-14 days after application **Harmful organism:** CENCY						
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**Chwastox Extra 300 SL**	**U46M-Fluid**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA

	Dose FP kg or l/ha **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	1,25 l / 2,5 l 825 + 112,5 g / 750 + 100 g	3 l 900 g	1.5 l 750 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	14	14	14	-	-
	Minimum value	-	20,0	20,0	18,8	-	-
	Maximum value	-	68,8	81,3	82,5	-	-
	Mean	-	**46,5**	**52,7**	**51,8**	-	-
	Standard deviation	-	18,1	20,8	22,9	-	-
	Number of values	9	9	9	9	-	-
	Minimum value	21,3	21,3	25,0	18,8	-	-
	Maximum value	61,3	68,8	73,8	76,3	-	-
	Mean	**43,8**	**48,9**	**54,2**	**54,3**	-	-
	Standard deviation	14,6	16,4	17,1	22,9	-	-
	Nb of **dose effects** compared to 1000 g	4/9	3/14	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 8 trials = 2 trials <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	Number of values	-	8	8	-	-	8
	Minimum value	-	10,0	12,5	-	-	5,0
	Maximum value	-	100,0	100,0	-	-	100,0
	Mean	-	**70,6**	**73,6**	-	-	**65,7**
	Standard deviation	-	28,0	27,5	-	-	31,6
	Number of values	6	6	6	-	-	6
	Minimum value	10,0	10,0	12,5	-	-	5,0
	Maximum value	98,8	100,0	100,0	-	-	100,0
	Mean	**66,8**	**71,9**	**75,0**	-	-	**64,4**
	Standard deviation	32,4	32,7	31,9	-	-	36,9
	Nb of **dose effects** compared to 1000 g	2/6	2/8	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 5 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL + DE)	Number of values	-	22	22	14	-	8
	Minimum value	-	10,0	12,5		5,0	
	Maximum value	-	100,0	100,0		100,0	
	Mean	-	**55,3**	**60,3**		**56,9**	
	Standard deviation	-	24,6	25,0		26,5	
	Number of values	15	15	15	9		6
	Minimum value	10,0	10,0	12,5		5,0	
	Maximum value	98,8	100,0	100,0		100,0	
	Mean	**53,0**	**58,1**	**62,5**		**58,4**	
	Standard deviation	25,1	25,9	25,3		28,5	
	Nb of **dose effects** compared to 1000 g	6/15	5/22	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	7 trials > 13 trials = 2 trials <	-	-	-

Long-term effect (about 21-49 days after application)

About one month after application, sufficient density of *Cirsium arvense* (10.8-15.6 plants/m²) was observed in 27 trials out of 29 which are considered valid for this assessment timing. One trial implemented in Poland and one in Romania were excluded due to the low weed density assessed at application or assessment. In addition, 5 trials performed in Poland (2) and Germany (3) were also excluded due to the low performance of the standard reference.

Table 3.2-81: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – CENCY

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-49 days after application **Harmful organism:** CENCY						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**Chwastox Extra 300 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	3 l	1.5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g / 750 + 100 g	900 g	750 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	14	14	14	-	-
	Minimum value	-	65,0	75,0	75,0	-	-
	Maximum value	-	94,0	95,5	96,3	-	-
	Mean	-	**80,1**	**86,0**	**85,6**	-	-
	Standard deviation	-	8,7	5,7	7,7	-	-
	Number of values	9	9	9	9	-	-
	Minimum value	72,5	76,3	75,0	75,0	-	-
	Maximum value	90,0	90,0	93,8	96,3	-	-
	Mean	**78,1**	**83,0**	**85,6**	**86,0**	-	-
	Standard deviation	5,8	4,5	5,8	8,2	-	-
	Nb of **dose effects** compared to 1000 g	5/9	6/14	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 11 trials = 1 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	Number of values	-	8	8	-	-	8
	Minimum value	-	78,8	86,3	-	-	82,5
	Maximum value	-	100,0	100,0	-	-	100,0
	Mean	-	**91,8**	**94,5**	-	-	**92,1**
	Standard deviation	-	9,8	5,8	-	-	7,1
	Number of values	6	6	6	-	-	6
	Minimum value	50,0	78,8	87,5	-	-	82,5
	Maximum value	100,0	100,0	100,0	-	-	100,0
	Mean	**85,6**	**92,5**	**96,2**	-	-	**92,2**
	Standard deviation	19,7	10,6	5,4	-	-	8,4
	Nb of **dose effects** compared to 1000 g	2/6	2/8	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 6 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL + DE)	Number of values	-	22	22	14	-	8
	Minimum value	-	65,0	75,0		75,0	
	Maximum value	-	100,0	100,0		100,0	
	Mean	-	**84,3**	**89,1**		**87,9**	
	Standard deviation	-	10,6	7,0		8,0	
	Number of values	15	15	15	9	-	6
	Minimum value	50,0	76,3	75,0		75,0	
	Maximum value	100,0	100,0	100,0		100,0	
	Mean	**81,1**	**86,8**	**89,8**		**88,5**	
	Standard deviation	13,1	8,7	7,6		8,6	
	Nb of **dose effects** compared to 1000 g	7/15	8/22	-	-	-	-
	Nb of trials where	-	-	4 trials >	-	-	-

	MT-565SG-OR2-C is >, = or < compared to standard			17 trials = 1 trial <			

Cirsium arvense (CIRAR)

Cirsium arvense was observed in 3 trials implemented in Romania (1) and Hungary (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat.

Short-term effect (about 14 days after application)

Sufficient density of *Cirsium arvense* (11.2-14.4 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-82: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – CIRAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** CIRAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	15 g 549,75 g	11,325-12 g 440,25 g
SOUTH EASTERN EPPO ZONE						
Data grouping (RO, HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 71,3 85,0 **79,2** 7,1	3 75,0 85,0 **80,4** 5,1	2 68,8 85,0 **77,1** 8,1	1
	Number of values Minimum value Maximum value Mean Standard deviation	2 66,3 82,5 **74,4** 11,5	2 81,3 85,0 **83,2** 2,6	2 81,3 85,0 **83,2** 2,6	1 77,5 85,0 **81,3** 5,3	1
	Nb of **dose effects** compared to 1000 g	1/2	0/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-

Long-term effect (about 23-26 days after application)

About one month after application, sufficient density of *Cirsium arvense* (10.8-15.6 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-83: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – CIRAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 23-26 days after application **Harmful organism:** CIRAR					
Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Granstar 50 SX Mecomorn 750**	**Rival Star 75 GD**

		SarBio 90 EC	**SarBio 90 EC**	**SarBio 90 EC**	**SL Trend 90**	**Dicopur M**
	Active ingredient **Dose FP kg or l/ha** **Dose g a.i./ha**	MCPA + Tribe-nuron methyl 600 g 50 ml/100 l 330 + 9 g	MCPA + Tribe-nuron methyl 800 g 50 ml/100 l 440 + 12 g	MCPA + Tribe-nuron methyl 1000 g 50 ml/100 l 550 + 15 g	Tribenuron-methyl MCPA 30 g 733 ml 100 ml/100 l 15 g 549,75 g	Tribenuron-methyl MCPA 15,1-16 g 587 ml 11,325-12 g 440,25 g
SOUTH EASTERN EPPO ZONE						
Data grouping (RO, HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 78,8 100,0 **87,1** 11,3	3 82,5 100,0 **90,0** 9,0	2 78,8 100,0 **87,1** 11,3	1
	Number of values Minimum value Maximum value Mean Standard deviation	2 80,0 100,0 **90,0** 14,1	2 78,8 100,0 **89,4** 15,0	2 87,5 100,0 **93,8** 8,8	1 78,8 100,0 **89,4** 15,0	1
	Nb of **dose effects** compared to 1000 g	1/2	1/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 3 trials = 0 trial <	-	-

Consolida regalis (CNSRE)

Consolida regalis was observed in 3 trials implemented in Poland (1) and in Hungary (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat and winter rye.
Since *Consolida regalis* was observed in only 1 trial of the North-eastern EPPO zone, results obtained in Poland were reported in the Minor weed section.

<u>Short-term effect (about 14 days after application)</u>

Sufficient density of *Consolida regalis* (15-17 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-84: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – CNSRE

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** CNSRE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
	Active ingredient **Dose FP kg or l/ha** **Dose g a.i./ha**	MCPA + Tribenu-ron methyl 600 g 50 ml/100 l 330 + 9 g	MCPA + Tribenuron methyl 800 g 50 ml/100 l 440 + 12 g	MCPA + Tribenuron methyl 1000 g 50 ml/100 l 550 + 15 g	Tribenuron-methyl MCPA 30 g 733 ml 100 ml/100 l 15 g 549,75 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	2 65,0 72,5 **68,8** 5,3	2 70,0 77,5 **73,8** 5,3	2 77,5 77,5 **77,5** 0,0	2 72,5 73,8 **73,2** 0,9
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-
	Nb of trials where	-	-	1 trial >	-

	MT-565SG-OR2-C is >, = or < compared to standard			1 trial = 0 trial <	

Long-term effect (about 27 days after application)

Sufficient density of *Consolida regalis* (17 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-85: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – CNSRE

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 27 days after application **Harmful organism:** CNSRE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	30 g 733 ml 100 ml/100 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	15 g 549,75 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	2 68,8 76,3 **72,5** 5,3	2 70,0 85,0 **77,5** 10,6	2 76,3 86,3 **81,3** 7,0	2 72,5 85,0 **78,8** 8,8
	Nb of **dose effects** compared to 1000 g	2/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Convolvulus arvensis (CONAR)

Convolvulus arvensis was observed in 3 trials implemented in Germany (1) and Romania (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter soft wheat.
Since *Convolvulus arvensis* was observed in only 1 trial of the Maritime EPPO zone, results obtained in Germany were reported in the Minor weed section.

Short-term effect (about 14 days after application)

Sufficient density of *Convolvulus arvensis* (7.5-8 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-86: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – CONAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** CONAR				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Rival Star 75 GD Dicopur M**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	15,1-16 g 587 ml
Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	11,325-12 g

					440,25 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	2 20,0 21,0 **20,5** 0,7	2 21,8 24,3 **23,0** 1,8	2 20,5 24,8 **22,6** 3,0
	Number of values Minimum value Maximum value Mean Standard deviation	1 20,0 20,0 **20,0** -	1 21,0 21,0 **21,0** -	1 21,8 21,8 **21,8** -	1 20,5 20,5 **20,5** -
	Nb of **dose effects** compared to 1000 g	0/1	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 27 days after application)

Sufficient density of *Convolvulus arvensis* (7.5-8 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-87: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – CONAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 27 days after application **Harmful organism:** CONAR				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	11,325-12 g 440,25 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	2 62,5 89,3 **75,9** 18,9	2 60,0 90,0 **75,0** 21,2	2 60,0 87,5 **73,8** 19,4
	Number of values Minimum value Maximum value Mean Standard deviation	1 63,8 63,8 **63,8** -	1 89,3 89,3 **89,3** -	1 90,0 90,0 **90,0** -	1 87,5 87,5 **87,5** -
	Nb of **dose effects** compared to 1000 g	1/1	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Descurainia sophia (DESSO)

Descurainia sophia was observed in 4 trials implemented in Poland (1) and Hungary (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat and winter triticale.
Since *Descurainia sophia* was observed in only 1 trial of the North-eastern EPPO zone, results obtained in Poland were reported in the Minor weed section.

Short-term effect (about 14 days after application)

Sufficient density of *Descurainia sophia* (11-29.2 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-88: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – DESSO

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing: 14** days after application **Harmful organism:** DESSO				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	30 g 733 ml 100 ml/100 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	15 g 549,75 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 72,5 95,3 **86,8** 12,4	3 78,8 95,0 **89,2** 9,1	3 90,0 91,3 **90,7** 0,9
	Number of values Minimum value Maximum value Mean Standard deviation	2 68,8 95,0 **81,9** 18,6	2 72,5 95,3 **83,9** 16,1	2 78,8 95,0 **86,9** 11,5	- - - - -
	Nb of **dose effects** compared to 1000 g	1/2	0/3	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-

Long-term effect (about 26-28 days after application)

Sufficient density of *Descurainia sophia* (11-26.4 plants/m²) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-89: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – DESSO

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 26-28 days after application **Harmful organism:** DESSO				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	30 g 733 ml 100 ml/100 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	15 g 549,75 g
SOUTH EASTERN EPPO ZONE					
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 92,5 96,3 **94,0** 2,0	3 93,8 98,3 **96,3** 2,3	3 95,3 99,8 **97,6** 3,2
	Number of values Minimum value Maximum value Mean	2 78,8 100,0 **89,4**	2 92,5 96,3 **94,4**	2 93,8 98,3 **96,0**	- - - -

	Standard deviation	15,0	2,7	3,2	-
	Nb of **dose effects** compared to 1000 g	1/2	0/3	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-

Fumaria officinalis (FUMOF)

Fumaria officinalis was observed in 2 trials implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat and winter rye.

<u>Short-term effect (about 14 days after application)</u>

Sufficient density of *Fumaria officinalis* (5 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-90: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – FUMOF

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** FUMOF			
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l
	Dose g a.i./ha	440 + 12 g	550 + 15 g	750 + 100 g
NORTH-EASTERN EPPO ZONE				
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 22,5 30,0 **26,3** 5,3	2 27,5 42,5 **35,0** 10,6	2 25,0 32,5 **28,8** 5,3
	Nb of **dose effects** compared to 1000 g	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	0 trial > 2 trials = 0 trial <	-

<u>Long-term effect (about 28 days after application)</u>

Sufficient density of *Fumaria officinalis* (5 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-91: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – FUMOF

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 28 days after application **Harmful organism:** FUMOF			
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l
	Dose g a.i./ha	440 + 12 g	550 + 15 g	750 + 100 g
NORTH-EASTERN EPPO ZONE				
Data grouping (PL)	Number of values Minimum value	2 62,5	2 70,0	2 75,0

	Maximum value Mean Standard deviation	62,5 **62,5** 0,0	81,3 **75,7** 8,0	81,3 **78,2** 4,5
	Nb of **dose effects** compared to 1000 g	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	0 trial > 2 trials = 0 trial <	-

Galium aparine (GALAP)

Galium aparine was observed in 21 trials implemented in Poland (11), Germany (6), UK (2) and Romania (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye, winter triticale.

<u>Short-term effect (about 9-14 days after application)</u>

At the first assessment timing, sufficient density of *Galium aparine* was observed in 20 trials out of 21 which are considered valid for this assessment timing (one trial performed in Germany excluded).
In addition, 5 trials implemented in Poland (2), Germany (1) and UK (2) were also excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-92: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – GALAP

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 9-14 days after application **Harmful organism:** GALAP						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL Chwastox Turbo 340 SL**	**U46M-Fluid**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l 2.5 l	1.5 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	9 20,0 70,0 **39,7** 22,6	9 25,0 75,0 **44,3** 21,5	9 20,0 75,0 **45,4** 24,3	- - - **-** -	- - - **-** -
	Number of values Minimum value Maximum value Mean Standard deviation	6 10,0 60,0 **38,1** 20,9	6 20,0 70,0 **48,8** 22,8	6 26,3 75,0 **53,2** 21,4	6 20,0 75,0 **54,2** 25,6	- - - **-** -	- - - **-** -
	Nb of **dose effects** compared to 1000 g	6/6	1/9	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 8 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	4 33,3 72,5 **58,0** 18,3	4 40,0 77,5 **60,6** 19,7	- - - **-** -	4 3,8 78,8 **40,7** 41,9	- - - **-** -
	Number of values	2	2	2	-	2	-

	Minimum value	30,0	55,0	47,5	-	3,8	-
	Maximum value	60,0	71,3	77,5	-	75,0	-
	Mean	**45,0**	**63,2**	**62,5**	**-**	**39,4**	**-**
	Standard deviation	21,2	11,5	21,2	-	50,3	-
	Nb of **dose effects** compared to 1000 g	2/2	1/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trial > 2 trials = 0 trial <	-	-	-
SOUTH-EASTERN EPPO ZONE							
Data grouping (RO)	Number of values	-	2	2	-	-	2
	Minimum value	-	20,0	20,0	-	-	20,0
	Maximum value	-	20,0	21,3	-	-	20,0
	Mean	**-**	**20,0**	**20,6**	**-**	**-**	**20,0**
	Standard deviation	-	0,0	0,9	-	-	0,0
	Number of values	1	1	1	-	-	1
	Minimum value	20,0	20,0	21,3	-	-	20,0
	Maximum value	20,0	20,0	21,3	-	-	20,0
	Mean	**20,0**	**20,0**	**21,3**	**-**	**-**	**20,0**
	Standard deviation	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	0/1	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL + DE)	Number of values	-	13	13	9	4	-
	Minimum value	-	20,0	25,0	3,8		-
	Maximum value	-	72,5	77,5	78,8		-
	Mean	**-**	**45,4**	**49,3**	**44,0**		**-**
	Standard deviation	-	22,4	21,6	28,9		-
	Number of values	8	8	8	6	2	-
	Minimum value	10,0	20,0	26,3	3,8		-
	Maximum value	60,0	71,3	77,5	75,0		-
	Mean	**39,9**	**52,4**	**55,5**	**50,5**		**-**
	Standard deviation	19,7	20,9	20,2	29,6		-
	Nb of **dose effects** compared to 1000 g	8/8	2/13	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 10 trials = 0 trial <	-	-	-

Long-term effect (about 21-29 days after application)

At the second assessment timing, sufficient density of *Galium aparine* was observed in 20 trials out of 21 which are considered valid for this assessment timing (one trial performed in Germany excluded).
In addition, 5 trials implemented in Poland (2), Germany (1) and UK (2) were also excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-93: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – GALAP

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-29 days after application **Harmful organism:** GALAP						
Treatment	**MT-565SG-OR2-C SarBio 90**	**MT-565SG-OR2-C SarBio 90**	**MT-565SG-OR2-C SarBio 90**	**Premier D 750 SL Chwastox**	**U46M -Fluid**	**Rival Star 75 GD Dicopur M**

		EC	**EC**	**EC**	**Turbo 340 SL**		
	Active ingredient	MCPA + Tribenu-ron methyl 600 g	MCPA + Tribenu-ron methyl 800 g	MCPA + Tribenu-ron methyl 1000 g	MCPA+ Dicamba	MCPA	Tribenu-ron-methyl MCPA
	Dose FP kg or l/ha	50 ml/100 l	50 ml/100 l	50 ml/100 l	1,25 l / 2.5 l	1.5 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g / 750 + 100 g	750 g	11,325-12 g 440,25 g
	NORTH EASTERN EPPO ZONE						
Data group-ing (PL)	Number of values	-	9	9	9	-	-
	Minimum value	-	36,3	50,0	40,0	-	-
	Maximum value	-	89,5	95,0	96,3	-	-
	Mean	-	**66,4**	**78,8**	**84,2**	-	-
	Standard deviation	-	20,6	14,0	17,2	-	-
	Number of values	6	6	6	6	-	-
	Minimum value	20,0	36,3	50,0	40,0	-	-
	Maximum value	82,5	89,5	95,0	96,3	-	-
	Mean	**64,4**	**74,4**	**81,7**	**82,7**	-	-
	Standard deviation	23,7	20,3	16,9	21,5	-	-
	Nb of **dose effects** compared to 1000 g	6/6	8/9	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 4 trials <	-	-	-
	MARITIME EPPO ZONE						
Data group-ing (DE)	Number of values	-	4	4	-	4	-
	Minimum value	-	53,8	63,8	-	17,5	-
	Maximum value	-	78,8	92,5	-	93,8	-
	Mean	-	**69,4**	**77,9**	-	**62,7**	-
	Standard deviation	-	11,6	12,8	-	37,2	-
	Number of values	2	2	2	-	2	-
	Minimum value	21,3	53,8	63,8	-	17,5	-
	Maximum value	73,8	78,8	83,8	-	93,8	-
	Mean	**47,6**	**66,3**	**73,8**	-	**55,7**	-
	Standard deviation	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	2/2	2/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 1 trial = 1 trial <	-	-	-
	SOUTH-EASTERN EPPO ZONE						
Data group-ing (RO)	Number of values	-	2	2	-	-	2
	Minimum value	-	33,8	52,5	-	-	52,5
	Maximum value	-	51,3	52,5	-	-	52,5
	Mean	-	**42,5**	**52,5**	-	-	**52,5**
	Standard deviation	-	12,4	0,0	-	-	0,0
	Number of values	1	1	1	-	-	1
	Minimum value	20,0	51,3	52,5	-	-	52,5
	Maximum value	20,0	51,3	52,5	-	-	52,5
	Mean	**20,0**	**51,3**	**52,5**	-	-	**52,5**
	Standard deviation	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	1/1	1/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-
	POLAND + GERMANY						
Data group-ing (PL + DE)	Number of values	-	13	13	9	4	-
	Minimum value	-	36,3	50,0	17,5		-
	Maximum value	-	89,5	95,0	96,3		-
	Mean	-	**67,3**	**78,5**	**77,6**		-
	Standard deviation	-	17,8	13,1	25,5		-
	Number of values	8	8	8	6	2	-
	Minimum value	20,0	36,3	50,0	17,5		-
	Maximum value	82,5	89,5	95,0	96,3		-
	Mean	**60,2**	**72,4**	**79,7**	**77,6**		-
	Standard deviation	25,7	18,8	15,6	25,5		-
	Nb of **dose effects** compared to 1000 g	8/8	12/13	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 5 trials = 5 trials <	-	-	-

Geranium dissectum / Geranium molle / Geranium pusillum (GERDI / GERMO / GERPU)

Geranium dissectum / Geranium molle / Geranium pusillum was observed in 8 trials implemented in Poland (2), Germany (6), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter triticale.

<u>Short-term effect (about 12-14 days after application)</u>

At the first assessment timing, sufficient density of *Geranium dissectum / Geranium molle / Geranium pusillum* was observed in 7 trials out of 8 which are considered valid for this assessment timing.
In addition, 2 trials implemented in Poland (1) and Germany (1) were excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-94: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – GERDI / GERMO / GERPU

		Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 12-14 days after application **Harmful organism:** GERDI-GERMO-GERPU					
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**U46M-Fluid**	**Premier D 750 SL / Chwastox Turbo 340 SL**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA+ Dicamba
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1500 ml	1,25 l / 2,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 g	825 + 112,5 g 750 + 100 g
MARITIME EPPO ZONE							
Data grouping (DE)	GERDI	Number of values Mean	- -	3 **45,8**	3 **49,6**	3 **42,9**	- -
		Number of values Mean	2 **36,3**	2 **53,8**	2 **56,9**	2 **56,9**	- -
	GERMO	Number of values Mean	1 **94,5**	1 **97,3**	1 **98,3**	1 **100,0**	- -
	GERDI-GERMO	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	4 30,0 97,3 **58,7** 28,5	4 35,0 98,3 **61,8** 28,2	4 15,0 100,0 **57,2** 34,9	- - - - -
		Number of values Minimum value Maximum value Mean Standard deviation	3 15,0 94,5 **55,7** 39,8	3 47,5 97,3 **68,3** 25,9	3 45,0 98,3 **70,7** 26,7	3 52,5 100,0 **71,3** 25,3	- - - - -
		Nb of **dose effects** compared to 1000 g	2/3	1/4	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 1 trial = 1 trial <	-	-
NORTH-EASTERN EPPO ZONE							
Data grouping (PL)	GERPU	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	1 22,5 22,5 **22,5** -	1 25,0 25,0 **25,0** -	- - - - -	1 30,0 30,0 **30,0** -
		Nb of **dose effects** compared to 1000 g	-	0/1	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or <	-	-	0 trial > 1 trial = 0 trial <	-	-

		compared to standard					
POLAND + GERMANY							
Data grouping (DE, PL)	GERDI	Number of values	-	3	3	3	-
		Mean	**-**	**45,8**	**49,6**	**42,9**	**-**
		Number of values	2	2	2	2	-
		Mean	**36,3**	**53,8**	**56,9**	**56,9**	**-**
	GERMO	Number of values	1	1	1	1	-
		Mean	**94,5**	**97,3**	**98,3**	**100,0**	**-**
	GERPU	Number of values	-	1	1	-	1
		Mean	**-**	**22,5**	**25,0**	**-**	**30,0**
	GERDI-GERMO-GERPU	Number of values	-	5	5	4	1
		Minimum value	-	22,5	25,0	15,0	
		Maximum value	-	97,3	98,3	100,0	
		Mean	**-**	**51,5**	**54,4**	**51,8**	
		Standard deviation	-	29,5	29,4	32,6	
		Number of values	3	3	3	3	-
		Minimum value	15,0	47,5	45,0	52,5	-
		Maximum value	94,5	97,3	98,3	100,0	-
		Mean	**55,7**	**68,3**	**70,7**	**71,3**	**-**
		Standard deviation	39,8	25,9	26,7	25,3	-
		Nb of **dose effects** compared to 1000 g	2/3	1/5	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 2 trials = 1 trial <	-	-

<u>Long-term effect (about 21-35 days after application)</u>

At the second assessment timing, sufficient density of *Geranium dissectum / Geranium molle / Geranium pusillum* was observed in all 8 trials which are considered valid for this assessment timing.
However, 3 trials implemented in Poland (1) and Germany (2) were excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-95: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – GERDI / GERMO / GERPU

		Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-35 days after application **Harmful organism:** GERDI-GERMO-GERPU					
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**U46M-Fluid**	**Premier D 750 SL / Chwastox Turbo 340 SL**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA+ Dicamba
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1500 ml	1,25 l / 2,5 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 g	825 + 112,5 g 750 + 100 g
MARITIME EPPO ZONE							
Data grouping (DE)	GERDI	Number of values	-	3	3	3	-
		Mean	**-**	**57,8**	**63,4**	**76,9**	**-**
		Number of values	2	2	2	2	-
		Mean	**67,5**	**79,3**	**75,5**	**69,4**	**-**
	GERMO	Number of values	1	1	1	1	-
		Mean	**100,0**	**100,0**	**100,0**	**100,0**	**-**
	GERDI-GERMO	Number of values	-	4	4	4	-
		Minimum value	-	15,0	39,3	68,8	-
		Maximum value	-	100,0	100,0	100,0	-
		Mean	**-**	**68,4**	**72,6**	**82,7**	**-**
		Standard deviation	-	38,1	30,1	15,7	-
		Number of values	3	3	3	3	-
		Minimum value	57,5	67,5	55,0	68,8	-

		Maximum value Mean Standard deviation	100,0 **78,3** 21,3	100,0 **86,2** 16,8	100,0 **83,7** 24,9	100,0 **79,6** 17,7	- - -
		Nb of **dose effects** compared to 1000 g	2/3	1/4	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 2 trials <	-	-
NORTH-EASTERN EPPO ZONE							
Data group-ing (PL)	GERPU	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	1 92,5 92,5 **92,5** -	1 98,0 98,0 **98,0** -	- - - **-** -	1 99,0 99,0 **99,0** -
		Nb of **dose effects** compared to 1000 g	-	0/1	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY							
Data group-ing (DE, PL)	GERDI	Number of values Mean	- **-**	3 **57,8**	3 **63,4**	3 **76,9**	- **-**
		Number of values Mean	2 **67,5**	2 **79,3**	2 **75,5**	2 **69,4**	- **-**
	GERMO	Number of values Mean	1 **100,0**	1 **100,0**	1 **100,0**	1 **100,0**	- **-**
	GERPU	Number of values Mean	- **-**	1 **92,5**	1 **98,0**	- **-**	1 **99,0**
	GERDI-GERMO-GERPU	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	5 15,0 100,0 **73,2** 34,7	5 39,3 100,0 **77,7** 28,4	4 68,8 100,0 **86,0** 15,4	1
		Number of values Minimum value Maximum value Mean Standard deviation	3 57,5 100,0 **78,3** 21,3	3 67,5 100,0 **86,2** 16,8	3 55,0 100,0 **83,7** 24,9	3 68,8 100,0 **79,6** 17,7	- - - **-** -
		Nb of **dose effects** compared to 1000 g	2/3	1/5	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 2 trials <	-	-

Lamium amplexicaule / Lamium purpureum (LAMAM / LAMPU)

Lamium amplexicaule / Lamium purpureum was observed in 18 trials implemented in Poland (5), Germany (10), UK (2) and Hungary (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter triticale and winter rye.

<u>Short-term effect (about 10-14 days after application)</u>

At the first assessment timing, sufficient density of *Lamium amplexicaule / Lamium purpureum* was observed in 17 out of 18 which are considered valid for this assessment timing.
One trial implemented in Hungary being the only available in the South-eastern EPPO zone will be analysed in the "minor weeds" chapter.
However, 6 trials implemented in UK (1) and Germany (5) were excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-96: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – LAMAM / LAMPU

<table>
<tr><td colspan="2"></td><td colspan="7">Trial timing: Spring
Crops: Winter cereals
Assessment timing: 10-14 days after application
Harmful organism: LAMAM-LAMPU</td></tr>
<tr><td colspan="2"></td><td>Treatment</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>Premier D 750 SL / Chwastox Turbo 340 SL</td><td>U46M-Fluid</td><td>Agritox</td></tr>
<tr><td colspan="2"></td><td>Active ingredient

Dose FP kg or l/ha

Dose g a.i./ha</td><td>MCPA + Tribenuron methyl
600 g
50 ml/100 l

330 + 9 g</td><td>MCPA + Tribenuron methyl
800 g
50 ml/100 l

440 + 12 g</td><td>MCPA + Tribenuron methyl
1000 g
50 ml/100 l

550 + 15 g</td><td>MCPA+ Dicamba
1,25 l / 2,5 l
825 + 112,5 g
750 + 100 g</td><td>MCPA

1,5 l

750 g</td><td>MCPA

3,3 l

1650 g</td></tr>
<tr><td colspan="9">NORTH-EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="4">Data grouping (PL)</td><td rowspan="4">LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>-
-
-
-
-</td><td>5
22,5
66,3
43,8
18,6</td><td>5
22,5
70,0
46,0
19,7</td><td>5
21,3
70,0
42,8
21,2</td><td>-
-
-
-
-</td><td>-
-
-
-
-</td></tr>
<tr><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>3
22,5
52,5
41,7
16,6</td><td>3
22,5
66,3
49,6
23,7</td><td>3
22,5
70,0
51,7
25,5</td><td>3
21,3
70,0
50,4
25,7</td><td>-
-
-
-
-</td><td>-
-
-
-
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>2/3</td><td>2/5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
2 trials =
1 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="9">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="7">Data grouping (DE, UK)</td><td>LAMAM</td><td>Number of values
Mean</td><td>-
-</td><td>1
72,5</td><td>1
75,0</td><td>-
-</td><td>1
45,0</td><td>-
-</td></tr>
<tr><td rowspan="2">LAMPU</td><td>Number of values
Mean</td><td>-
-</td><td>4
54,6</td><td>4
55,0</td><td>-
-</td><td colspan="2">3 | 1
26,0</td></tr>
<tr><td>Number of values
Mean</td><td>2
61,3</td><td>2
70,7</td><td>2
70,0</td><td>-
-</td><td colspan="2">1 | 1
35,7</td></tr>
<tr><td rowspan="4">LAMAM + LAMPU</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>-
-
-
-
-</td><td>5
21,3
85,0
51,5
28,9</td><td>5
25,0
82,5
55,5
24,3</td><td>-
-
-
-
-</td><td colspan="2">4 | 1
5,0
66,3
29,8
25,2</td></tr>
<tr><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>2
48,8
73,8
61,3
17,7</td><td>2
56,3
85,0
70,7
20,3</td><td>2
57,5
82,5
70,0
17,7</td><td>-
-
-
-
-</td><td colspan="2">1 | 1
5,0
66,3
35,7
43,3</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/2</td><td>0/5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
3 trials =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="9">POLAND + GERMANY</td></tr>
<tr><td rowspan="3">Data grouping (PL, DE)</td><td>LAMAM</td><td>Number of values
Mean</td><td>-
-</td><td>1
72,5</td><td>1
75,0</td><td>-
-</td><td>1
45,0</td><td>-
-</td></tr>
<tr><td rowspan="2">LAMPU</td><td>Number of values
Mean</td><td>-
-</td><td>8
39,9</td><td>8
43,8</td><td colspan="3">5 | 3 | -
31,4</td></tr>
<tr><td>Number of values</td><td>4</td><td>4</td><td>4</td><td>3</td><td>1</td><td>-</td></tr>
</table>

		Mean	**43,5**	**51,3**	**53,1**		**39,1**	
		Number of values	-	9	9	5	4	-
		Minimum value	-	21,3	22,5		5,0	
		Maximum value	-	72,5	75,0		70,0	
		Mean	-	**43,5**	**47,2**		**32,9**	
		Standard deviation	-	20,4	19,5		21,7	
		Number of values	4	4	4	3	1	-
		Minimum value	22,5	22,5	22,5		5,0	
		Maximum value	52,5	66,3	70,0		70,0	
	LAMAM + LAMPU	Mean	**43,5**	**51,3**	**53,1**		**39,1**	
		Standard deviation	14,1	19,6	21,1		30,9	
		Nb of **dose effects** compared to 1000 g	2/4	2/9	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 4 trials = 1 trial <	-	-	-

Long-term effect (about 22-30 days after application)

At the second assessment timing, sufficient density of *Lamium purpureum* was observed in 17 out of 18 which are considered valid for this assessment timing.
One trial implemented in Hungary being the only available in the South-eastern EPPO zone will be analysed in the "minor weeds" chapter.
However, 9 trials implemented in UK (1) and Germany (8) were excluded due to the low efficacy observed following the application of the standard reference.

Table 3.2-97: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – LAMAM / LAMPU

		Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 22-30 days after application **Harmful organism:** LAMPU						
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH-EASTERN EPPO ZONE								
		Number of values	-	5	5	5	-	-
		Minimum value	-	77,5	86,3	65,0	-	-
		Maximum value	-	99,0	100,0	99,0	-	-
		Mean	-	**87,8**	**94,3**	**90,6**	-	-
		Standard deviation	-	8,0	6,3	14,5	-	-
		Number of values	3	3	3	3	-	-
		Minimum value	77,5	83,8	88,8	92,5	-	-
Data grouping (PL)	LAMPU	Maximum value	87,5	90,0	100,0	98,8	-	-
		Mean	**83,8**	**87,5**	**95,4**	**96,3**	-	-
		Standard deviation	5,5	3,3	5,9	3,3	-	-
		Nb of **dose effects** compared to 1000 g	3/3	4/5	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE								
Data grouping (DE, UK)	LAMPU	Number of values	-	2	2	-	1	1
		Minimum value	-	100,0	100,0	-	99,0	
		Maximum value	-	100,0	100,0	-	99,0	

		Mean Standard deviation	- -	**100,0** 0,0	**100,0** 0,0	- -	**99,0** 0,0	
		Number of values Minimum value Maximum value Mean Standard deviation	1 100,0 100,0 **100,0** -	1 100,0 100,0 **100,0** -	1 100,0 100,0 **100,0** -	- - - **-** -	- - - **-** -	1 99,0 99,0 **99,0** -
		Nb of **dose effects** compared to 1000 g	0/1	0/2	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY								
Data grouping (PL, DE)	LAMPU	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	6 77,5 100,0 **89,9** 8,7	6 86,3 100,0 **95,3** 6,1	5	1 65,0 99,0 **92,0** 13,4	0
		Number of values Minimum value Maximum value Mean Standard deviation	3 77,5 87,5 **83,8** 5,5	3 83,8 90,0 **87,5** 3,3	3 88,8 100,0 **95,4** 5,9	3 92,5 98,8 **96,3** 3,3	- - - **-** -	- - - **-** -
		Nb of **dose effects** compared to 1000 g	3/3	4/6	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 4 trials = 0 trial <	-	-	-

Matricaria chamomilla (MATCH)

Matricaria chamomilla was observed in 13 trials implemented in Poland (7) and Germany (6), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter triticale and winter rye.

<u>Short-term effect (about 12-14 days after application)</u>

At the first assessment timing, sufficient density of *Matricaria chamomilla* was observed in 12 trials which are considered valid for this assessment timing.

Table 3.2-98: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – MATCH

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 12-14 days after application **Harmful organism:** MATCH					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 + 100 g	750 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	6 50,0 91,5 **69,2** 13,6	6 62,5 94,0 **74,2** 11,6	6 55,0 77,5 **67,9** 10,2	- - - **-** -
	Number of values Minimum value Maximum value Mean Standard deviation	5 50,0 63,8 **59,3** 5,4	5 50,0 72,5 **64,8** 9,0	5 62,5 76,3 **70,3** 7,1	5 55,0 77,5 **66,3** 10,4	- - - **-** -
	Nb of **dose effects** compared to 1000	4/5	2/6	-	-	-

	g					
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 5 trials = 0 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 18,8 75,0 **35,5** 23,1	6 21,3 75,0 **44,4** 22,1	- - - - -	6 7,5 67,5 **25,9** 22,9
	Number of values Minimum value Maximum value Mean Standard deviation	4 17,5 75,0 **37,8** 26,3	4 18,8 75,0 **41,9** 26,9	4 21,3 75,0 **47,5** 26,4	- - - - -	4 7,5 67,5 **27,2** 27,8
	Nb of **dose effects** compared to 1000 g	4/4	3/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 3 trials = 0 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	12 18,8 91,5 **52,3** 25,2	12 21,3 94,0 **59,3** 22,9	6 7,5 77,5 **46,9** **27,7**	6
	Number of values Minimum value Maximum value Mean Standard deviation	9 17,5 75,0 **49,7** 20,0	9 18,8 75,0 **54,6** 21,4	9 21,3 76,3 **60,2** 20,8	5 7,5 77,5 **48,9** **27,7**	4
	Nb of **dose effects** compared to 1000 g	8/9	5/12	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 8 trials = 0 trials <	-	-

<u>Long-term effect (about 19-49 days after application)</u>

At the second assessment timing, sufficient density of *Matricaria chamomilla* was observed in 12 out of 13 which are considered valid for this assessment timing.

Table 3.2-99: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – MATCH

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 19-49 days after application **Harmful organism:** MATCH					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	2,5 l 750 + 100 g	1,5 l 750 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 62,5 95,0 **84,8** 11,6	6 75,0 98,0 **90,5** 8,8	6 65,0 97,5 **87,8** 14,2	- - - - -

	Number of values Minimum value Maximum value Mean Standard deviation	5 60,0 86,3 **75,8** 10,1	5 62,5 92,5 **82,8** 11,7	5 75,0 96,3 **89,0** 9,0	5 65,0 97,5 **86,0** 15,1	- - - **-** -
	Nb of **dose effects** compared to 1000 g	5/5	4/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 4 trials = 0 trials <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	6 27,5 93,8 **57,7** 25,9	6 40,0 92,5 **59,4** 19,7	- - - **-** -	6 0,0 70,0 **29,2** 26,7
	Number of values Minimum value Maximum value Mean Standard deviation	4 25,0 88,8 **48,5** 29,0	4 27,5 93,8 **57,8** 32,9	4 40,0 92,5 **56,3** 24,5	- - - **-** -	4 10,0 70,0 **40,3** 25,7
	Nb of **dose effects** compared to 1000 g	1/4	2/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > 1 trial = 0 trials <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	12 27,5 95,0 **71,3** 23,8	12 40,0 98,0 **75,0** 22,0	6 0,0 97,5 **58,5** **36,8**	6
	Number of values Minimum value Maximum value Mean Standard deviation	10 25,0 88,8 **63,6** 23,9	10 27,5 93,8 **71,7** 25,4	10 40,0 96,3 **74,5** 23,8	5 10,0 97,5 **65,7** **30,7**	5
	Nb of **dose effects** compared to 1000 g	6/10	6/12	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	7 trials > 5 trials = 0 trials <	-	-

Tripleurospermum inodorum (MATIN)

Tripleurospermum inodorum was observed in 12 trials implemented in Poland (7), Germany (3), UK (1) and Hungary (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter triticale and winter rye.

Short-term effect (about 10-14 days after application)

At the first assessment timing, sufficient density of *Tripleurospermum inodorum* was observed in all 12 which are considered valid for this assessment timing.
One trial implemented in Hungary will be presented in the section "minor weeds" as this trial was the only one available in the South-eastern EPPO zone.
In addition, one trial implemented in Poland was excluded due to the low and unexpected efficacy observed with the reference product.

Table 3.2-100: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – MATIN

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 10-14 days after application **Harmful organism:** MATIN						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l 2.5 l	1.5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	6	6	6	-	-
	Minimum value	-	22,5	22,5	22,5	-	-
	Maximum value	-	66,3	77,1	82,5	-	-
	Mean	-	**39,2**	**43,7**	**40,8**	-	-
	Standard deviation	-	15,5	18,3	21,7	-	-
	Number of values	3	3	3	3	-	-
	Minimum value	20,0	22,5	22,5	22,5	-	-
	Maximum value	40,0	46,3	47,5	45,0	-	-
	Mean	**26,7**	**32,9**	**36,7**	**32,5**	-	-
	Standard deviation	11,5	12,2	12,8	11,5	-	-
	Nb of **dose effects** compared to 1000 g	1/3	2/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 5 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE, UK)	Number of values	-	4	4	-	3	1
	Minimum value	-	20,0	15,0	-	12,5	
	Maximum value	-	68,3	83,8	-	73,8	
	Mean	-	**51,5**	**55,3**	-	**34,1**	
	Standard deviation	-	21,5	29,4	-	27,4	
	Number of values	2	2	2	-	1	1
	Minimum value	60,0	60,0	67,5	-	12,5	
	Maximum value	75,0	68,3	83,8	-	73,8	
	Mean	**67,5**	**64,2**	**75,7**	-	**43,2**	
	Standard deviation	10,6	5,9	11,5	-	43,3	
	Nb of **dose effects** compared to 1000 g	1/2	0/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 2 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL, DE, UK)	Number of values	-	9	9	6	3	-
	Minimum value	-	20,0	15,0	12,5		
	Maximum value	-	66,3	77,1	82,5		
	Mean	-	**41,4**	**44,4**	**34,2**		
	Standard deviation	-	16,9	20,0	20,3		
	Number of values	4	4	4	3	1	-
	Minimum value	20,0	22,5	22,5	12,5		
	Maximum value	60,0	60,0	67,5	45,0		
	Mean	**35,0**	**39,7**	**44,4**	**27,5**		
	Standard deviation	19,1	16,8	18,6	13,7		
	Nb of **dose effects** compared to 1000 g	1/4	2/9	-	-	-	-
	Nb of trials where MT-565SG-OR2-	-	-	2 trials > 6 trials =	-	-	-

	C is >, = or < compared to standard			0 trial <			

Long-term effect (about 21-30 days after application)

At the second assessment timing, sufficient density of *Tripleurospermum inodorum* was observed in 11 out of 12 which are considered valid for this assessment timing.
One trial implemented in Hungary will be presented in the section “minor weeds” as this trial was the only one available in the South-eastern EPPO zone.
In addition, 2 trials implemented in Poland were excluded due to the low and unexpected efficacy observed with the reference product.

Table 3.2-101: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – MATIN

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-30 days after application **Harmful organism:** MATIN						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l 2.5 l	1.5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	5 66,3 87,5 **80,8** 9,1	5 77,5 96,3 **87,5** 7,6	5 78,8 100,0 **88,8** 8,7	- - - - -	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	2 75,0 76,3 **75,7** 0,9	2 85,0 87,5 **86,3** 1,8	2 85,0 93,8 **89,4** 6,2	2 87,5 95,0 **91,3** 5,3	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	2/2	4/5	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE, UK)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	4 58,8 100,0 **84,2** 18,0	4 76,3 100,0 **89,7** 9,9	- - - - -	3 22,5 100,0 **53,0** 33,3	1
	Number of values Minimum value Maximum value Mean Standard deviation	2 95,0 100,0 **97,5** 3,5	2 93,0 100,0 **96,5** 4,9	2 92,5 100,0 **96,3** 5,3	- - - - -	1 22,5 100,0 **61,3** 54,8	1
	Nb of **dose effects** compared to 1000 g	0/2	1/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 1 trial = 0 trial <	-	-	-

POLAND + GERMANY							
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	8 58,8 93,0 **80,1** 11,8	8 76,3 96,3 **87,1** 7,4	5	3 22,5 100,0 **69,5** 28,4	-
	Number of values Minimum value Maximum value Mean Standard deviation	3 75,0 95,0 **82,1** 11,2	3 85,0 93,0 **88,5** 4,1	3 85,0 93,8 **90,4** 4,8	2	1 22,5 95,0 **68,3** 39,9	-
	Nb of **dose effects** compared to 1000 g	2/4	5/8	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 5 trials = 0 trial <	-	-	-

Myosotis arvensis (MYOAR)

Myosotis arvensis was observed in 6 trials implemented in Poland (3) and Germany (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye and winter triticale.

<u>Short-term effect (about 12-14 days after application)</u>

At the first spring assessment, sufficient density of *Myosotis arvensis* was observed in all 6 trials which are considered valid for this assessment timing.

Table 3.2-102: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – MYOAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 12-14 days after application **Harmful organism:** MYOAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g
NORTH-EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 32,5 52,5 **40,0** 10,9	3 32,5 65,0 **44,2** 18,1	3 33,8 75,0 **47,9** 23,4	- - - - -
	Nb of **dose effects** compared to 1000 g	-	1/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	3 21,3 70,0 **47,1** 24,5	3 27,5 70,0 **48,3** 21,3	3 31,3 72,5 **54,6** 21,1	- - - - -	3 0,0 26,3 **12,1** 13,3

	Nb of **dose effects** compared to 1000 g	2/3	2/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 0 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 27,5 70,0 **44,2** 15,8	6 31,3 72,5 **49,4** 18,5	3 0,0 75,0 **30,0** 26,0	3
	Number of values Minimum value Maximum value Mean Standard deviation	3 21,3 70,0 **47,1** 24,5	3 27,5 70,0 **48,3** 21,3	3 31,3 72,5 **54,6** 21,1	- - - - -	3 0,0 26,3 **12,1** 13,3
	Nb of **dose effects** compared to 1000 g	2/3	3/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 2 trials = 1 trial <	-	-

Long-term effect (about 24-28 days after application)

At the second spring assessment, sufficient density of *Myosotis arvensis* was observed in all 6 trials which are considered valid for this assessment timing.

Table 3.2-103: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – MYOAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 24-28 days after application **Harmful organism:** MYOAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g
NORTH-EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 52,5 99,0 **80,1** 24,4	3 65,0 99,0 **87,6** 19,6	3 73,8 99,0 **90,5** 14,5	- - - - -
	Nb of **dose effects** compared to 1000 g	-	2/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trial = 1 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	3 27,5 81,3 **54,6** 26,9	3 36,3 90,0 **63,4** 26,9	3 42,5 90,0 **70,0** 24,6	- - - - -	3 0,0 26,3 **12,1** 13,3

	Nb of **dose effects** compared to 1000 g	2/3	2/3	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 0 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 36,3 99,0 **71,7** 24,7	6 42,5 99,0 **78,8** 22,1	3 0,0 99,0 **51,3** 44,7	3
	Number of values Minimum value Maximum value Mean Standard deviation	3 27,5 81,3 **54,6** 26,9	3 36,3 90,0 **63,4** 26,9	3 42,5 90,0 **70,0** 24,6	- - - - -	3 0,0 26,3 **12,1** 13,3
	Nb of **dose effects** compared to 1000 g	2/3	4/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 2 trials = 1 trial <	-	-

Papaver rhoeas (PAPRH)

Papaver rhoeas was observed in 19 trials implemented in Poland (6), Germany (5), UK (2), Hungary (3) and Romania (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye and winter triticale.

<u>Short-term effect (about 10-14 days after application)</u>

At the first spring assessment, sufficient density of *Papaver rhoeas* was observed in 17 trials out of 19 which are considered valid for this assessment timing. One trial performed in Poland and one performed in Romania did not match the validity criteria.
Moreover, 3 trials implemented in Poland and one implemented in UK were excluded due to the low performance of the reference product.

Table 3.2-104: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – PAPRH

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 10-14 days after application **Harmful organism:** PAPRH								
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g	15 g 549,75 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE								

Data grouping (PL)	Number of values	2	2	2	2	-	-	-	-
	Minimum value	56,3	62,5	62,5	65,0	-	-	-	-
	Maximum value	60,0	67,5	70,0	68,8	-	-	-	-
	Mean	**58,2**	**65,0**	**66,3**	**66,9**	-	-	-	-
	Standard deviation	2,6	3,5	5,3	2,7	-	-	-	-
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 1 trial <	-	-	-	-	-
MARITIME EPPO ZONE									
Data grouping (DE, UK)	Number of values	-	6	6	-	5	1	-	-
	Minimum value	-	20,0	20,0			10,0		
	Maximum value	-	86,3	83,8			73,8		
	Mean	-	**55,6**	**59,0**			**37,3**		
	Standard deviation	-	24,2	24,7			23,4		
	Number of values	4	4	4	-	3	1	-	-
	Minimum value	27,5	37,5	40,0			20,0		
	Maximum value	75,0	86,3	83,8			73,8		
	Mean	**61,6**	**63,5**	**68,5**			**46,0**		
	Standard deviation	22,9	21,6	19,8			23,5		
	Nb of **dose effects** compared to 1000 g	1/4	1/6	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 2 trials = 0 trial <	-	-	-	-	-
SOUTH EASTERN EPPO ZONE									
Data grouping (HU, RO)	Number of values	-	5	5	-	-	-	3	2
	Minimum value	-	60,0	64,5	-	-	-	60,0	
	Maximum value	-	97,3	95,3	-	-	-	92,5	
	Mean	-	**75,6**	**78,0**	-	-	-	**76,3**	
	Standard deviation	-	16,3	13,6	-	-	-	13,8	
	Number of values	3	3	3	-	-	-	2	1
	Minimum value	47,5	60,0	64,5	-	-	-	60,0	
	Maximum value	88,8	97,3	95,3	-	-	-	92,5	
	Mean	**69,2**	**77,0**	**79,1**	-	-	-	**76,7**	
	Standard deviation	20,7	18,9	15,5	-	-	-	16,3	
	Nb of **dose effects** compared to 1000 g	2/3	2/5	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 0 trial <	-	-	-	-	-
POLAND + GERMANY									
Data grouping (PL, DE)	Number of values	-	7	7	2	5	-	-	-
	Minimum value	-	20,0	20,0			10,0		
	Maximum value	-	75,0	80,0			68,8		
	Mean	-	**53,9**	**57,5**			**40,5**		
	Standard deviation	-	19,0	20,7			22,7		
	Number of values	5	5	5	2	3	-	-	-
	Minimum value	27,5	37,5	40,0			20,0		
	Maximum value	75,0	75,0	80,0			68,8		
	Mean	**57,5**	**59,5**	**64,5**			**48,8**		
	Standard deviation	18,3	14,3	15,0			20,7		
	Nb of **dose effects** compared to 1000 g	2/5	1/7	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	6 trials > 1 trial = 0 trial <	-	-	-	-	-

Long-term effect (about 26-30 days after application)

At the second spring assessment, sufficient density of *Papaver rhoeas* was observed in 17 trials out of 19 which are considered valid for this assessment timing. One trial performed in Poland and one performed in Romania did not match the validity criteria.
Moreover, 3 trials implemented in Poland and one implemented in UK were excluded due to the low performance of the reference product.

Table 3.2-105: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – PAPRH

<table>
<tr><td></td><td colspan="9">Trial timing: Spring
Crops: Winter cereals
Assessment timing: 26-30 days after application
Harmful organism: PAPRH</td></tr>
<tr><td></td><td>Treatment</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>Premier D 750 SL / Chwastox Turbo 340 SL</td><td>U46M-Fluid</td><td>Agritox</td><td>Granstar 50 SX Mecomorn 750 SL Trend 90</td><td>Rival Star 75 GD Dicopur M</td></tr>
<tr><td></td><td>Active ingredient</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA+ Dicamba</td><td>MCPA</td><td>MCPA</td><td>Tribenuron-methyl MCPA</td><td>Tribenuron-methyl MCPA</td></tr>
<tr><td></td><td>Dose FP kg or l/ha</td><td>600 g 50 ml/100 l</td><td>800 g 50 ml/100 l</td><td>1000 g 50 ml/100 l</td><td>1,25 l / 2,5 l</td><td>1,5 l</td><td>3,3 l</td><td>30 g 733 ml 100 ml/100 l</td><td>15,1-16 g 587 ml</td></tr>
<tr><td></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>825 + 112,5 g 750 + 100 g</td><td>750 g</td><td>1650 g</td><td>15 g 549,75 g</td><td>11,325-12 g 440,25 g</td></tr>
<tr><td colspan="10">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="7">Data grouping (PL)</td><td>Number of values</td><td>2</td><td>2</td><td>2</td><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Minimum value</td><td>81,3</td><td>86,3</td><td>90,0</td><td>90,0</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Maximum value</td><td>82,5</td><td>86,3</td><td>95,5</td><td>99,3</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Mean</td><td>81,9</td><td>86,3</td><td>92,8</td><td>94,7</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Standard deviation</td><td>0,8</td><td>0,0</td><td>3,9</td><td>6,6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>2/2</td><td>2/2</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
2 trials =
0 trial <</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="10">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="12">Data grouping (DE, UK)</td><td>Number of values</td><td>-</td><td>6</td><td>6</td><td>-</td><td>5</td><td>1</td><td>-</td><td>-</td></tr>
<tr><td>Minimum value</td><td>-</td><td>70,0</td><td>60,0</td><td colspan="5">10,0</td></tr>
<tr><td>Maximum value</td><td>-</td><td>100,0</td><td>100,0</td><td colspan="5">100,0</td></tr>
<tr><td>Mean</td><td>-</td><td>90,4</td><td>87,4</td><td colspan="5">60,3</td></tr>
<tr><td>Standard deviation</td><td>-</td><td>11,0</td><td>15,9</td><td colspan="5">34,7</td></tr>
<tr><td>Number of values</td><td>4</td><td>4</td><td>4</td><td>-</td><td>3</td><td>1</td><td>-</td><td>-</td></tr>
<tr><td>Minimum value</td><td>76,3</td><td>88,8</td><td>60,0</td><td colspan="5">50,0</td></tr>
<tr><td>Maximum value</td><td>100,0</td><td>100,0</td><td>100,0</td><td colspan="5">100,0</td></tr>
<tr><td>Mean</td><td>89,2</td><td>94,4</td><td>88,3</td><td colspan="5">77,3</td></tr>
<tr><td>Standard deviation</td><td>12,1</td><td>5,9</td><td>19,0</td><td colspan="5">26,0</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>2/4</td><td>1/6</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>3 trials >
3 trials =
0 trial <</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="10">SOUTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="6">Data grouping (HU, RO)</td><td>Number of values</td><td>-</td><td>5</td><td>5</td><td>-</td><td>-</td><td>-</td><td>3</td><td>2</td></tr>
<tr><td>Minimum value</td><td>-</td><td>90,0</td><td>92,5</td><td>-</td><td>-</td><td>-</td><td colspan="2">83,8</td></tr>
<tr><td>Maximum value</td><td>-</td><td>96,3</td><td>99,5</td><td>-</td><td>-</td><td>-</td><td colspan="2">99,3</td></tr>
<tr><td>Mean</td><td>-</td><td>93,6</td><td>97,1</td><td>-</td><td>-</td><td>-</td><td colspan="2">94,7</td></tr>
<tr><td>Standard deviation</td><td>-</td><td>2,4</td><td>2,7</td><td>-</td><td>-</td><td>-</td><td colspan="2">6,3</td></tr>
<tr><td>Number of values</td><td>3</td><td>3</td><td>3</td><td>-</td><td>-</td><td>-</td><td>2</td><td>1</td></tr>
</table>

	Minimum value Maximum value Mean Standard deviation	81,3 93,8 **87,3** 6,3	90,0 95,3 **93,0** 2,7	92,5 98,3 **96,2** 3,2	- - **-** -	- - **-** -	- - **-** -	83,8 98,8 **93,0** 8,1	
	Nb of **dose effects** compared to 1000 g	2/3	1/5	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 0 trial <	-	-	-	-	-
POLAND + GERMANY									
Data grouping (PL, DE)	Number of values	-	7	7	2	5	-	-	-
	Minimum value Maximum value Mean Standard deviation	- - **-** -	70,0 99,0 **87,9** 9,2	60,0 99,0 **87,1** 14,0			10,0 99,3 **64,4** 33,5		
	Number of values	5	5	5	2	3	-	-	-
	Minimum value Maximum value Mean Standard deviation	76,3 99,0 **84,1** 8,7	86,3 99,0 **90,0** 5,2	60,0 99,0 **87,7** 15,8			50,0 99,3 **79,7** 23,1		
	Nb of **dose effects** compared to 1000 g	4/5	3/7	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 4 trials = 0 trial <	-	-	-	-	-

Spergula arvensis (SPRAR)

Spergula arvensis was observed in 2 trials implemented in Poland (1) and in Germany (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter barley and winter rye.

<u>Short-term effect (about 14 days after application)</u>

Sufficient density of *Spergula arvensis* (6.3-72.8 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-106: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – SPRAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 14 days after application **Harmful organism:** SPRAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 + 100 g	750 g
NORTH-EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	1 21,3 21,3 **21,3** -	1 20,0 20,0 **20,0** -	1 22,5 22,5 **22,5** -	1 22,5 22,5 **22,5** -	- - - **-** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-

	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	1 56,3 56,3 **56,3** -	1 57,5 57,5 **57,5** -	1 60,0 60,0 **60,0** -	- - - - -	1 60,0 60,0 **60,0** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 21,3 56,3 **38,8** 24,7	2 20,0 57,5 **38,8** 26,5	2 22,5 60,0 **41,3** 26,5	1 22,5 60,0 **41,3** 26,5	1
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-

<u>Long-term effect (about 28 days after application)</u>

Sufficient density of *Spergula arvensis* (6.3-75 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-107: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – SPRAR

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 28 days after application **Harmful organism:** SPRAR					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2,5 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 + 100 g	750 g
NORTH-EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	1 82,5 82,5 **82,5** -	1 86,3 86,3 **86,3** -	1 87,5 87,5 **87,5** -	1 86,3 86,3 **86,3** -	- - - - -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping	Number of values	1	1	1	-	1

(DE)	Minimum value Maximum value Mean Standard deviation	90,0 90,0 **90,0** -	97,5 97,5 **97,5** -	98,8 98,8 **98,8** -	- - **-** -	72,5 72,5 **72,5** -
	Nb of **dose effects** compared to 1000 g	1/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 0 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 82,5 90,0 **86,3** 5,3	2 86,3 97,5 **91,9** 7,9	2 87,5 98,8 **93,2** 8,0	1 72,5 86,3 **79,4** 9,8	1
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-

Stellaria media (STEME)

Stellaria media was observed in 30 trials implemented in Poland (10), Germany (13), UK (3), Hungary (2) and Romania (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye and winter triticale.

Short-term effect (about 10-14 days after application)

At the first spring assessment timing, sufficient density of *Stellaria media* was observed in 28 trials out of 30 which are considered valid for this assessment timing.
Two trials implemented in Germany, one in Poland and one in UK were excluded due to the low performance of the standard reference.

Table 3.2-108: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – STEME

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 10-14 days after application **Harmful organism:** STEME								
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g	15 g 549,75 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE									
Data grouping	Number of values Minimum value	- -	8 22,5	8 30,0	8 21,3	- -	- -	- -	- -

(PL)	Maximum value	-	72,5	75,0	76,3	-	-	-	-
	Mean	-	**49,9**	**54,7**	**54,4**	-	-	-	-
	Standard deviation	-	15,8	15,1	21,2	-	-	-	-
	Number of values	7	7	7	7	-	-	-	-
	Minimum value	27,5	22,5	30,0	21,3	-	-	-	-
	Maximum value	67,5	72,5	75,0	76,3	-	-	-	-
	Mean	**46,1**	**50,9**	**55,4**	**54,7**	-	-	-	-
	Standard deviation	14,9	16,8	16,2	22,9	-	-	-	-
	Nb of **dose effects** compared to 1000 g	4/7	3/8	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 5 trials = 2 trials <	-	-	-	-	-
MARITIME EPPO ZONE									
	Number of values	-	12	12	0	10	2	0	0
	Minimum value	-	0,0	0,0	-	0,0		-	-
	Maximum value	-	100,0	100,0	-	100,0		-	-
	Mean	-	**51,2**	**54,3**	-	**35,2**		-	-
	Standard deviation	-	36,1	34,4	-	31,1		-	-
	Number of values	8	8	8	0	6	2	0	0
	Minimum value	0,0	0,0	0,0	-	0,0		-	-
Data grouping (DE, UK)	Maximum value	100,0	100,0	100,0	-	100,0		-	-
	Mean	**52,7**	**56,1**	**59,4**	-	**41,9**		-	-
	Standard deviation	36,3	37,9	35,4	-	36,2		-	-
	Nb of **dose effects** compared to 1000 g	3/8	2/12	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > 6 trials = 1 trial <	-	-	-	-	-
SOUTH EASTERN EPPO ZONE									
	Number of values	-	4	4	-	-	-	2	2
	Minimum value	-	53,8	58,8	-	-	-	56,3	
	Maximum value	-	78,8	81,3	-	-	-	77,5	
	Mean	-	**65,7**	**69,4**	-	-	-	**67,8**	
	Standard deviation	-	12,5	11,1	-	-	-	10,7	
	Number of values	2	2	2	-	-	-	1	1
	Minimum value	51,3	56,3	58,8	-	-	-	56,3	
Data grouping (CZ, RO)	Maximum value	76,3	78,8	81,3	-	-	-	77,5	
	Mean	**63,8**	**67,5**	**70,0**	-	-	-	**66,9**	
	Standard deviation	17,7	15,9	15,9	-	-	-	15,0	
	Nb of **dose effects** compared to 1000 g	1/2	1/4	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 0 trial <	-	-	-	-	-
POLAND + GERMANY									
	Number of values	-	18	18	8	10	0	0	0
	Minimum value	-	0,0	0,0	0,0		-	-	-
	Maximum value	-	100,0	100,0	100,0		-	-	-
	Mean	-	**48,2**	**52,5**	**40,2**		-	-	-
	Standard deviation	-	29,4	28,3	28,9		-	-	-
	Number of values	13	13	13	7	6	2	2	0
	Minimum value	0,0	0,0	0,0	0,0		-	-	-
Data grouping (PL, DE)	Maximum value	100,0	100,0	100,0	100,0		-	-	-
	Mean	**47,1**	**50,8**	**55,3**	**43,9**		-	-	-
	Standard deviation	28,8	29,8	28,3	30,6		-	-	-
	Nb of **dose effects** compared to 1000 g	7/13	5/18	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	6 trials > 9 trials = 3 trials <	-	-	-	-	-

Long-term effect (about 21-49 days after application)

At the second spring assessment timing, sufficient density of *Stellaria media* was observed in 28 trials out of 30 which are considered valid for this assessment timing.
Two trials implemented in Germany, one in Poland and one in UK were excluded due to the low performance of the standard reference.

Table 3.2-109: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – STEME

	Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-49 days after application **Harmful organism:** STEME								
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g	15 g 549,75 g	11,325-12 g 440,25 g
NORTH EASTERN EPPO ZONE									
Data grouping (PL)	Number of values	-	8	8	8	-	-	-	-
	Minimum value	-	73,8	87,5	88,8	-	-	-	-
	Maximum value	-	93,8	98,0	97,5	-	-	-	-
	Mean	-	**86,9**	**93,1**	**93,1**	-	-	-	-
	Standard deviation	-	6,7	4,1	3,7	-	-	-	-
	Number of values	7	7	7	7	-	-	-	-
	Minimum value	76,3	73,8	87,5	88,8	-	-	-	-
	Maximum value	91,3	93,8	98,0	97,5	-	-	-	-
	Mean	**85,6**	**87,9**	**93,3**	**93,5**	-	-	-	-
	Standard deviation	6,1	6,6	4,4	3,8	-	-	-	-
	Nb of **dose effects** compared to 1000 g	5/7	4/8	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 8 trials = 0 trial <	-	-	-	-	-
MARITIME EPPO ZONE									
Data grouping (DE, UK)	Number of values	-	12	12	0	10	2	0	0
	Minimum value	-	22,5	47,5	-	13,8		-	-
	Maximum value	-	100,0	100,0	-	100,0		-	-
	Mean	-	**84,6**	**88,1**	-	**62,6**		-	-
	Standard deviation	-	21,7	15,2	-	29,7		-	-
	Number of values	8	8	8	0	6	2	0	0
	Minimum value	20,0	22,5	47,5	-	13,8		-	-
	Maximum value	100,0	100,0	100,0	-	100,0		-	-
	Mean	**76,9**	**81,9**	**86,4**	-	**61,7**		-	-
	Standard deviation	28,6	26,3	18,3	-	32,1		-	-
	Nb of **dose effects** compared to 1000 g	2/8	1/12	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	7 trials > 5 trials = 0 trial <	-	-	-	-	-

SOUTH EASTERN EPPO ZONE									
Data grouping (HU, RO)	Number of values	-	4	4	-	-	-	2	2
	Minimum value	-	90,0	96,8	-	-	-	95,5	
	Maximum value	-	100,0	100,0	-	-	-	100,0	
	Mean	**-**	**96,4**	**98,9**	**-**	**-**	**-**	**97,8**	
	Standard deviation	-	4,5	1,5	-	-	-	2,6	
	Number of values	2	2	2	-	-	-	1	1
	Minimum value	90,5	96,5	98,8	-	-	-	95,5	
	Maximum value	96,3	100,0	100,0	-	-	-	100,0	
	Mean	**93,4**	**98,3**	**99,4**	**-**	**-**	**-**	**97,8**	
	Standard deviation	4,1	2,5	0,8	-	-	-	3,2	
	Nb of **dose effects** compared to 1000 g	1/4	1/5	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 0 trial <	-	-	-	-	-
POLAND + GERMANY									
Data grouping (PL, DE)	Number of values	-	18	18	8	10	0	0	0
	Minimum value	-	22,5	47,5	13,8		-	-	-
	Maximum value	-	100,0	100,0	100,0		-	-	-
	Mean	-	**85,7**	**90,5**	**73,9**		-	-	-
	Standard deviation	-	17,1	11,9	28,5		-	-	-
	Number of values	13	13	13	7	6	2	2	0
	Minimum value	20,0	22,5	47,5	13,8		-	-	-
	Maximum value	100,0	100,0	100,0	100,0		-	-	-
	Mean	**80,5**	**84,8**	**90,0**	**75,8**		**-**	**-**	**-**
	Standard deviation	21,8	19,8	13,8	28,7		-	-	-
	Nb of **dose effects** compared to 1000 g	7/13	5/18	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	7 trials > 11 trials = 0 trial <	-	-	-	-	-

Thlaspi arvense (THLAR)

Thlaspi arvense was observed in 8 trials implemented in Poland (6), Germany (1) and UK (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley and winter triticale.

<u>Short-term effect (about 12-14 days after application)</u>

Sufficient density of *Thlaspi arvense* (4.8-72.8 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.

Table 3.2-110: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – THLAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 10-14 days after application **Harmful organism:** THLAR						
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l

	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values	-	6	6	6	-	-
	Minimum value	-	27,5	25,0	26,3	-	-
	Maximum value	-	60,0	72,5	81,3	-	-
	Mean	-	**40,6**	**52,5**	**49,2**	-	-
	Standard deviation	-	13,3	15,6	19,5	-	-
	Number of values	2	2	2	2	-	-
	Minimum value	25,0	36,3	55,0	47,5	-	-
	Maximum value	27,5	40,0	56,3	50,0	-	-
	Mean	**25,0**	**40,0**	**55,0**	**50,0**	-	-
	Standard deviation	1,8	2,6	0,9	1,8	-	-
	Nb of **dose effects** compared to 1000 g	2/2	4/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 3 trials = 1 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE, UK)	Number of values	2	2	2	-	1	1
	Minimum value	67,5	68,8	76,3	-	57,5	
	Maximum value	75,0	86,3	83,8	-	73,8	
	Mean	**71,3**	**77,6**	**80,1**	-	**65,7**	
	Standard deviation	5,3	12,4	5,3	-	11,5	
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values	-	7	7	6	1	-
	Minimum value	-	27,5	25,0	26,3		-
	Maximum value	-	68,8	76,3	81,3		-
	Mean	-	**44,7**	**55,9**	**53,1**		-
	Standard deviation	-	16,1	16,8	20,6		-
	Number of values	3	3	3	2	1	-
	Minimum value	25,0	36,3	55,0	47,5		-
	Maximum value	67,5	68,8	76,3	76,3		-
	Mean	**40,0**	**48,4**	**62,5**	**57,9**		-
	Standard deviation	23,8	17,8	11,9	16,0		-
	Nb of **dose effects** compared to 1000 g	3/3	5/7	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 3 trial = 1 trial <	-	-	-

Long-term effect (about 24-28 days after application)

Sufficient density of *Thlaspi arvense* (4.8-79.3 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.

Table 3.2-111: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – THLAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 24-30 days after application **Harmful organism:** THLAR						
Treatment	**MT-565SG-OR2-C SarBio 90**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox**	**U46M-Fluid**	**Agritox**

		EC			Turbo 340 SL		
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	6	6	6	-	-
	Minimum value	-	60,0	72,5	81,3	-	-
	Maximum value	-	90,0	100,0	91,8	-	-
	Mean	-	**80,9**	**90,8**	**86,8**	**-**	**-**
	Standard deviation	-	10,7	9,9	3,9	-	-
	Number of values	2	2	2	2	-	-
	Minimum value	87,5	87,5	97,5	87,5	-	-
	Maximum value	87,5	90,0	100,0	90,0	-	-
	Mean	**87,5**	**90,0**	**100,0**	**90,0**	**-**	**-**
	Standard deviation	0,0	1,8	1,8	1,8	-	-
	Nb of **dose effects** compared to 1000 g	2/2	5/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 2 trials = 1 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	Number of values	2	2	2	-	1	1
	Minimum value	96,3	96,3	96,0	-	75,0	
	Maximum value	100,0	100,0	100,0	-	100,0	
	Mean	**98,2**	**98,2**	**98,0**	**-**	**87,5**	
	Standard deviation	2,6	2,6	2,8	-	17,7	
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	Number of values	-	7	7	6	1	-
	Minimum value	-	60,0	72,5	81,3		-
	Maximum value	-	96,3	100,0	96,0		-
	Mean	-	**83,1**	**91,5**	**88,1**		-
	Standard deviation	-	11,4	9,2	5,0		-
	Number of values	3	3	3	2	1	-
	Minimum value	87,5	87,5	96,0	87,5		-
	Maximum value	96,3	96,3	100,0	96,0		-
	Mean	**90,4**	**91,3**	**97,8**	**91,2**		-
	Standard deviation	5,1	4,5	2,0	4,4		-
	Nb of **dose effects** compared to 1000 g	2/3	5/7	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 2 trials = 1 trial <	-	-	-

Veronica sp. (VERAG / VERAR / VERHE / VERHT / VERPE)

Veronica species were observed in 42 trials implemented in Poland (22), Germany (13), UK (3), Romania (1) and Hungary (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye and winter triticale.

<u>Short-term effect (about 10-14 days after application)</u>

At the first spring assessment timing, sufficient density of *Veronica* species was observed in 40 trials out of 42 which are considered valid for this assessment timing.
In addition, 5 trials performed in Poland and 4 trials performed in Germany or UK were excluded due to the low performance of the reference product against *Veronica* species.

Table 3.2-112: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – VERAG / VERAR / VERHE / VERHT / VERPE

Trial timing: Spring
Crops: Winter cereals
Assessment timing: 10-14 days after application
Harmful organism: VERAG/VERAR/VERHE/VERHT/VERPE

		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL**	**Chwastox Extra 300 SL**	**Chwastox Turbo 340 SL**	**U46 M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA + Dicamba	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l	3 l	2,5 l	1500 ml	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g	900 g	750 + 100 g	750 g	1650 g	15 g 549,75 g	11,325-12 g 440,25 g
NORTH-EASTERN EPPO ZONE												
Data grouping (PL)	VERAG	Number of values	1	1	1	1	-	-	-	-	-	-
		Mean	**32,5**	**41,3**	**42,5**	**56,3**	-	-	-	-	-	-
	VERAR	Number of values	2	2	2	-	-	2	-	-	-	-
		Mean	**36,9**	**36,3**	**45,7**	-	-	**41,3**	-	-	-	-
	VERHE	Number of values	-	5	5	1	-	4	-	-	-	-
		Mean	-	**36,5**	**39,5**		**45,8**		-	-	-	-
		Number of values	2	2	2	-	-	2	-	-	-	-
		Mean	**30,7**	**36,3**	**37,6**	-	-	**53,2**	-	-	-	-
	VERHT	Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**0,0**	**30,0**	**31,3**	-	-	**37,5**	-	-	-	-
	VERPE	Number of values	-	7	7	-	1	6	-	-	-	-
		Mean	-	**32,5**	**38,2**	-	**42,3**		-	-	-	-
		Number of values	5	5	5	-	1	4	-	-	-	-
		Mean	**26,8**	**27,0**	**31,0**	-	**34,8**		-	-	-	-
	VERAG VERAR VERHE VERHT VERPE	Number of values	-	16	16	2	1	13	-	-	-	-
		Minimum value	-	15,0	22,5		10,0		-	-	-	-
		Maximum value	-	52,5	67,5		75,0		-	-	-	-
		Mean	-	**34,6**	**39,4**		**43,8**		-	-	-	-
		Standard deviation	-	11,1	13,5		16,2		-	-	-	-
		Number of values	11	11	11	1	1	9	-	-	-	-
		Minimum value	0,0	15,0	22,5		10,0		-	-	-	-

		Maximum value	47,5	52,5	67,5	57,4			-	-	-	-
		Mean	**27,4**	**31,9**	**35,9**	**41,5**			-	-	-	-
		Standard deviation	11,3	11,3	12,8	15,9			-	-	-	-
		Nb of **dose effects** compared to 1000 g	6/11	3/16	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 9 trials = 6 trials <	-	-	-	-	-	-	-
MARITIME EPPO ZONE												
Data grouping (UK, DE)	VER AR	Number of values	-	3	3	-	-	-	3	-	-	-
		Mean	-	**35,9**	**35,9**	-	-	-	**7,5**	-	-	-
		Number of values	2	2	2	-	-	-	2	-	-	-
		Mean	**63,8**	**75,0**	**80,7**	-	-	-	**74,4**	-	-	-
	VER HE	Number of values	1	1	1	-	-	-	1	-	-	-
		Mean	**50,0**	**52,5**	**65,0**	-	-	-	**62,5**	-	-	-
	VER PE	Number of values	-	9	9	-	-	-	7	2	-	-
		Mean	-	**38,0**	**41,5**	-	-	-	**31,5**		-	-
		Number of values	5	5	5	-	-	-	3	2	-	-
		Mean	**39,1**	**45,4**	**46,2**	-	-	-	**38,0**		-	-
	VER AR VER HE VER PE	Number of values	-	13	13	-	-	-	11	2	-	-
		Minimum value	-	7,5	10,0	-	-	-	5,0		-	-
		Maximum value	-	86,3	83,8	-	-	-	80,0		-	-
		Mean	-	**47,6**	**52,4**	-	-	-	**44,1**		-	-
		Standard deviation	-	28,3	29,5	-	-	-	29,0		-	-
		Number of values	8	8	8	-	-	-	6	2	-	-
		Minimum value	15,0	11,3	13,8	-	-	-	5,0		-	-
		Maximum value	75,0	86,3	83,8	-	-	-	80,0		-	-
		Mean	**46,6**	**53,7**	**57,2**	-	-	-	**50,2**		-	-
		Standard deviation	23,7	26,0	26,8	-	-	-	29,1		-	-
		Nb of **dose effects** compared to 1000 g	5/8	3/13	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 10 trials = 0 trial <	-	-	-	-	-	-	-
SOUTH-EASTERN EPPO ZONE												
Data grouping (RO, HU)	VER AR	Number of values	1	1	1	-	-	-	-	-	-	1
		Mean	**23,8**	**30,0**	**28,8**	-	-	-	-	-	-	**30,0**
	VER PE	Number of values	2	2	2	-	-	-	-	-	2	-
		Mean	**57,5**	**61,9**	**67,5**	-	-	-	-	-	**62,5**	-
	VER TR	Number of values	1	1	1	-	-	-	-	-	1	-
		Mean	**75,0**	**77,5**	**75,0**	-	-	-	-	-	**76,3**	-
	VER AR VER PE	Number of values	4	4	4	-	-	-	-	-	3	1
		Minimum value	23,8	30,0	28,8	-	-	-	-	-	30,0	

	VER TR	Maximum value	75,0	77,5	75,0	-	-	-	-	-	76,3	
		Mean	**53,4**	**57,8**	**59,7**	-	-	-	-	-	**57,8**	
		Standard deviation	22,3	20,3	21,3	-	-	-	-	-	20,6	
		Nb of **dose effects** compared to 1000 g	1/4	0/4	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 0 trial <	-	-	-	-	-	-	-
POLAND + GERMANY												
Data grouping (PL, DE)	VER AG	Number of values	1	1	1	1	-	-	-	-	-	-
		Mean	**32,5**	**41,3**	**42,5**	**56,3**	-	-	-	-	-	-
	VER AR	Number of values	-	5	5	-	-	2	3	-	-	-
		Mean	-	**59,3**	**66,8**	-	-	**61,8**		-	-	-
		Number of values	4	4	4	-	-	2	2	-	-	-
		Mean	**50,3**	**55,6**	**63,2**	-	-	**57,8**		-	-	-
	VER HE	Number of values	-	6	6	1	0	4	1	-	-	-
		Mean	-	**39,2**	**43,8**	**48,6**				-	-	-
		Number of values	3	3	3	-	-	2	1	-	-	-
		Mean	**37,1**	**41,7**	**46,7**	-	-	**56,3**		-	-	-
	VER HT	Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**0,0**	**30,0**	**31,3**	-	-	**37,5**	-	-	-	-
	VER PE	Number of values	-	14	14	-	1	6	7	-	-	-
		Mean	-	**30,0**	**35,1**	-	**31,6**			-	-	-
		Number of values	8	8	8	-	1	4	3	-	-	-
		Mean	**24,1**	**26,6**	**29,5**	-	**28,3**			-	-	-
	VER AG VER AR VER HE VER HT VER PE	Number of values	-	27	27	2	1	13	11	-	-	-
		Minimum value	-	7,5	10,0	5,0				-	-	-
		Maximum value	-	77,5	82,5	80,0				-	-	-
		Mean	-	**37,9**	**43,0**	**42,1**				-	-	-
		Standard deviation	-	19,5	21,8	22,1				-	-	-
		Number of values	17	17	17	1	1	9	6	-	-	-
		Minimum value	0,0	11,3	13,8	5,0				-	-	-
		Maximum value	70,0	77,5	82,5	80,0				-	-	-
		Mean	**31,6**	**37,1**	**41,3**	**42,4**				-	-	-
		Standard deviation	16,6	18,4	20,3	21,7				-	-	-
		Nb of **dose effects** compared to 1000 g	11/17	6/27	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 17 trials = 6 trials <	-	-	-	-	-	-	-

Long-term effect (about 21-30 days after application)

At the second spring assessment timing, sufficient density of *Veronica* species was observed in 39 trials

out of 42 which are considered valid for this assessment timing.
In addition, 5 trials performed in Poland and 6 trials performed in Germany or UK were excluded due to the low performance of the reference product against *Veronica* species.

Table 3.2-113: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – VERAG / VERAR / VERHE / VERHT / VERPE

Trial timing: Spring
Crops: Winter cereals
Assessment timing: 21-30 days after application
Harmful organism: VERAG/VERAR/VERHE/VERHT/VERPE

		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL**	**Chwastox Extra 300 SL**	**Chwastox Turbo 340 SL**	**U46 M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA + Dicamba	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l	3 l	2,5 l	1500 ml	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 587 ml
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g	900 g	750 + 100 g	750 g	1650 g	15 g 549,75 g	11,325-12 g 440,25 g
NORTH-EASTERN EPPO ZONE												
Data grouping (PL)	VERAG	Number of values	1	1	1	1	-	-	-	-	-	-
		Mean	**77,5**	**80,0**	**82,5**	**82,5**	-	-	-	-	-	-
	VERAR	Number of values	2	2	2	-	-	2	-	-	-	-
		Mean	**85,0**	**87,5**	**91,9**	-	-	**91,9**	-	-	-	-
	VERHE	Number of values	-	3	3	-	-	3	-	-	-	-
		Mean	-	**72,5**	**88,1**	-	-	**86,7**	-	-	-	-
		Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**75,0**	**87,5**	**88,8**	-	-	**82,5**	-	-	-	-
	VERHT	Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**35,0**	**37,5**	**38,8**	-	-	**75,0**	-	-	-	-
	VERPE	Number of values	-	7	7	1	-	6	-	-	-	-
		Mean	-	**79,5**	**85,6**	**86,0**			-	-	-	-
		Number of values	4	4	4	-	-	4	-	-	-	-
		Mean	**80,0**	**83,8**	**88,5**	-	-	**87,2**	-	-	-	-
	VERAG VERAR VERHE VERHT VERPE	Number of values	-	14	14	2	0	12	-	-	-	-
		Minimum value	-	37,5	38,8	75,0			-	-	-	-
		Maximum value	-	94,3	95,0	93,8			-	-	-	-
		Mean	-	**76,2**	**83,5**	**85,9**			-	-	-	-
		Standard deviation	-	16,0	14,8	5,7			-	-	-	-
		Number of values	9	9	9	1	0	8	-	-	-	-
		Minimum value	35,0	37,5	38,8	75,0			-	-	-	-
		Maximum value	90,0	90,0	95,0	93,8			-	-	-	-
		Mean	**75,3**	**79,4**	**83,1**	**85,8**			-	-	-	-
		Standard deviation	16,0	16,2	17,1	5,8			-	-	-	-

		Nb of **dose effects** compared to 1000 g	8/9	6/14	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 12 trials = 2 trials <	-	-	-	-	-	-	-
		MARITIME EPPO ZONE										
Data grouping (UK, DE)	VER AR	Number of values	-	3	3	-	-	-	3	-	-	-
		Mean	-	**84,2**	**92,5**	-	-	-	**92,1**	-	-	-
		Number of values	2	2	2	-	-	-	2	-	-	-
		Mean	**66,9**	**86,3**	**90,0**	-	-	-	**91,9**	-	-	-
	VER PE	Number of values	-	6	6	-	-	-	4	2	-	-
		Mean	-	**56,3**	**62,5**	-	-	-	**56,7**		-	-
		Number of values	4	4	4	-	-	-	2	2	-	-
		Mean	**61,6**	**65,6**	**69,1**	-	-	-	**73,2**		-	-
	VER AR VER PE	Number of values	-	9	9	-	-	-	7	2	-	-
		Minimum value	-	20,0	27,5	-	-	-	5,0		-	-
		Maximum value	-	100,0	100,0	-	-	-	100,0		-	-
		Mean	-	**65,6**	**72,5**	-	-	-	**68,5**		-	-
		Standard deviation	-	30,9	29,9	-	-	-	38,3		-	-
		Number of values	6	6	6	0	0	0	4	2	-	-
		Minimum value	12,5	20,0	27,5	-	-	-	10,0		-	-
		Maximum value	100,0	100,0	100,0	-	-	-	100,0		-	-
		Mean	**63,4**	**72,5**	**76,1**	-	-	-	**73,4**		-	-
		Standard deviation	36,3	33,3	30,5	-	-	-	37,0		-	-
		Nb of **dose effects** compared to 1000 g	4/6	5/9	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 5 trials = 1 trial <	-	-	-	-	-	-	-
		SOUTH-EASTERN EPPO ZONE										
Data grouping (RO, HU)	VER AR	Number of values	1	1	1	-	-	-	-	-	-	1
		Mean	**78,8**	**83,8**	**83,8**	-	-	-	-	-	-	**80,5**
	VER PE	Number of values	2	2	2	-	-	-	-	-	2	-
		Mean	**61,9**	**62,5**	**75,0**	-	-	-	-	-	**63,8**	-
	VER TR	Number of values	1	1	1	-	-	-	-	-	1	-
		Mean	**78,8**	**87,5**	**83,8**	-	-	-	-	-	**78,8**	-
	VER AR VER PE VER TR	Number of values	4	4	4	-	-	-	-	-	3	1
		Minimum value	60,0	62,5	72,5	-	-	-	-	-	62,5	
		Maximum value	78,8	87,5	83,8	-	-	-	-	-	80,5	
		Mean	**70,3**	**74,1**	**79,4**	-	-	-	-	-	**71,7**	
		Standard deviation	9,9	13,4	5,5	-	-	-	-	-	9,3	
		Nb of **dose effects** compared to 1000 g	3/4	2/4	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 1 trial = 0 trial <	-	-	-	-	-	-	-
		POLAND + GERMANY										
Data grouping (PL,	VER AG	Number of values	1	1	1	1	-	-	-	-	-	-
		Mean	**77,5**	**80,0**	**82,5**	**82,5**	-	-	-	-	-	-
	VER	Number of	-	5	5	-	-	2	3	-	-	-

DE)	AR	values Mean	- **-**	 **85,5**	 **92,3**	 **-**	 **-**	 **92,0**		 **-**	 **-**	 **-**
		Number of values	4	4	4	-	-	2	2	-	-	-
		Mean	**72,9**	**85,9**	**90,0**	**-**	**-**	**91,9**		**-**	**-**	**-**
	VER HE	Number of values	-	3	3	-	-	3	-	-	-	-
		Mean	**-**	**72,5**	**88,1**	**-**	**-**	**86,7**	**-**	**-**	**-**	**-**
		Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**75,0**	**87,5**	**88,8**	**-**	**-**	**82,5**	**-**	**-**	**-**	**-**
	VER HT	Number of values	1	1	1	-	-	1	-	-	-	-
		Mean	**35,0**	**37,5**	**38,8**	**-**	**-**	**75,0**	**-**	**-**	**-**	**-**
	VER PE	Number of values	-	11	11	1	0	6	4	-	-	-
		Mean	**-**	**63,1**	**70,4**	**67,5**				**-**	**-**	**-**
		Number of values	8	8	8	0	0	4	2	2	0	0
		Mean	**70,8**	**74,7**	**78,8**	**-**	**-**	**67,5**			**-**	**-**
	VER AG VER AR VER HE VER HT VER PE	Number of values	-	21	21	2	0	12	7	-	-	-
		Minimum value	-	20,0	27,5	5,0				-	-	-
		Maximum value	-	94,3	97,5	93,8				-	-	-
		Mean	**-**	**69,4**	**77,2**	**77,1**				**-**	**-**	**-**
		Standard deviation	-	22,2	22,1	25,3				-	-	-
		Number of values	13	13	13	1	0	8	4	-	-	-
		Minimum value	12,5	20,0	27,5	10,0				-	-	-
		Maximum value	90,0	90,0	95,0	93,8				-	-	-
		Mean	**66,0**	**73,1**	**77,2**	**77,9**				**-**	**-**	**-**
		Standard deviation	24,4	23,4	22,9	23,9				-	-	-
		Nb of **dose effects** compared to 1000 g	12/13	10/21	-	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 15 trials = 3 trials <	-	-	-	-	-	-	-

Viola arvensis (VIOAR)

Viola arvensis were observed in 39 trials implemented in Poland (24), Germany (12), UK (3) investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley, winter rye and winter triticale.

Short-term effect (about 10-14 days after application)

At the first spring assessment timing, sufficient density of *Viola arvensis* was observed in 38 trials out of 39 which are considered valid for this assessment timing.
In addition, 12 trials performed in Poland and 11 trials performed in Germany or UK were excluded due to the low performance of the reference product against *Viola arvensis*.

Table 3.2-114: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – VIOAR

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 10-14 days after application **Harmful organism:** VIOAR						
Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Premier D 750 SL /**	**U46M-Fluid**	**Agritox**

		SarBio 90 EC	SarBio 90 EC	SarBio 90 EC	Chwastox Turbo 340 SL		
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	12	12	12	-	-
	Minimum value	-	18,8	20,0	18,8	-	-
	Maximum value	-	66,3	77,5	71,3	-	-
	Mean	-	**36,8**	**41,0**	**42,4**	-	-
	Standard deviation	-	16,6	20,7	20,2	-	-
	Number of values	8	8	8	8	-	-
	Minimum value	15,0	18,8	20,0	18,8	-	-
	Maximum value	53,8	66,3	67,5	71,3	-	-
	Mean	**31,3**	**39,4**	**42,2**	**45,7**	-	-
	Standard deviation	13,9	18,4	19,3	21,6	-	-
	Nb of **dose effects** compared to 1000 g	4/8	1/12	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 9 trials = 1 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE, UK)	Number of values	4	4	4	-	2	2
	Minimum value	30,0	31,3	40,0	-	35,0	
	Maximum value	75,0	86,3	83,8	-	77,5	
	Mean	**51,3**	**58,1**	**59,4**	-	**55,3**	
	Standard deviation	21,1	26,6	22,2	-	23,5	
	Nb of **dose effects** compared to 1000 g	0/4	0/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	Number of values	-	14	14	12	2	-
	Minimum value	-	18,8	20,0	18,8		-
	Maximum value	-	75,0	77,5	77,5		-
	Mean	-	**39,8**	**43,1**	44,4		-
	Standard deviation	-	18,4	20,9	21,0		-
	Number of values	10	10	10	8	2	-
	Minimum value	15,0	18,8	20,0	18,8		-
	Maximum value	62,5	75,0	72,5	77,5		-
	Mean	**35,0**	**43,0**	**45,0**	44,4		-
	Standard deviation	15,7	19,7	19,6	21,0		-
	Nb of **dose effects** compared to 1000 g	4/10	1/14	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 11 trials = 1 trial <	-	-	-

Long-term effect (about 27-35 days after application)

At the second spring assessment timing, sufficient density of *Viola arvensis* was observed in 38 trials out of 39 which are considered valid for this assessment timing.
In addition, 12 trials performed in Poland and 11 trials performed in Germany or UK were excluded due to the low performance of the reference product against *Viola arvensis*.

Table 3.2-115: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – VIOAR

Trial timing: Spring
Crops: Winter cereals
Assessment timing: 27-35 days after application
Harmful organism: VIOAR

	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Premier D 750 SL / Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA+ Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,25 l / 2,5 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	825 + 112,5 g 750 + 100 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values	-	12	12	12	-	-
	Minimum value	-	40,0	58,8	67,5	-	-
	Maximum value	-	86,3	88,8	92,0	-	-
	Mean	-	**65,0**	**72,9**	**78,7**	-	-
	Standard deviation	-	14,7	9,5	7,9	-	-
	Number of values	8	8	8	8	-	-
	Minimum value	28,8	40,0	58,8	72,0	-	-
	Maximum value	76,3	86,3	88,8	92,0	-	-
	Mean	**54,6**	**66,0**	**72,1**	**80,7**	-	-
	Standard deviation	14,6	15,5	11,4	8,3	-	-
	Nb of **dose effects** compared to 1000 g	7/8	3/12	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 5 trials = 6 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE, UK)	Number of values	3	3	3	0	1	2
	Minimum value	43,8	55,0	67,5	-	62,5	
	Maximum value	96,8	94,5	97,5	-	97,8	
	Mean	**73,1**	**76,5**	**84,6**	-	**80,2**	
	Standard deviation	27,0	20,0	15,4	-	25,0	
	Nb of **dose effects** compared to 1000 g	1/3	1/3	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values	-	13	13	12	1	-
	Minimum value	-	40,0	58,8	67,5		-
	Maximum value	-	94,5	97,5	97,8		-
	Mean	-	**67,3**	**74,8**	80,1		-
	Standard deviation	-	16,3	11,4	9,2		-
	Number of values	9	9	9	8	1	-
	Minimum value	28,8	40,0	58,8	67,5		-
	Maximum value	96,8	94,5	97,5	97,8		-
	Mean	**59,3**	**69,1**	**74,9**	80,1		-
	Standard deviation	19,6	17,4	13,6	9,2		-
	Nb of **dose effects** compared to 1000 g	7/9	3/13	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trials > 6 trials = 6 trials <	-	-	-

Minor weeds

Eighteen weeds were observed in 1 or 2 trials in one or several EPPO zone, were qualified as minor weeds and therefore data were grouped together. These weeds were: AGOGI (*Agrostemma githago*), APHAR (*Aphanes arvensis*), ARBTH (*Aradibopsis thaliana*), CENSS (*Centaurea sp.*), CHEAL (*Chenopodium album*), CNSRE (*Consolida regalis*), CONAR (*Convolvulus arvensis*), DESSO (*Descurainia sophia*), LITAR (*Buglossoides arvensis*), MATIN (*Tripleurospermum inodorum*), POLAV (*Polygonum aviculare*), POLCO (*Fallopia convolvulus*), POLPE (*Persicaria maculosa*), RAPSO (*Raphanus sativus subsp. oleiferus*), RUMAA (*Rumex acetosella*), SENVU (*Senecio vulgaris*), SINAR (*Sinapsis arvensis*), VICFM (*Vicia faba subsp. minor*).

Those weeds were observed over 22 trials implemented in the North-eastern (10), in Maritime (11) and South-eastern (1) EPPO zones.

During spring, a total of 1 trial performed in Poland and 2 trials performed in Germany were excluded due to the low and unexpected performance of the standard reference.

Short-term effect (about 10-16 days after application)

Table 3.2-116: Grouped data – Efficacy trials – Spring application / Winter cereals – Short-term effect – Minor weeds

<table>
<tr><td colspan="11">**Trial timing:** Spring
Crops: Winter cereals
Assessment timing: 10-16 days after application
Harmful organism: minor weeds</td></tr>
<tr><td></td><td>**Treatment**</td><td>**MT-565SG-OR2-C SarBio 90 EC**</td><td>**MT-565SG-OR2-C SarBio 90 EC**</td><td>**MT-565SG-OR2-C SarBio 90 EC**</td><td>**Granstar 50 SX Mecomorn 750 SL Trend 90**</td><td>**Chwastox Extra 300 SL**</td><td>**Chwastox Turbo 340 SL**</td><td>**U46M-Fluid**</td><td>**Agritox**</td><td>**Premier D 750 SL**</td></tr>
<tr><td></td><td>**Active ingredient**</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>Tribenuron-methyl MCPA</td><td>MCPA</td><td>MCPA+ Dicamba</td><td>MCPA</td><td>MCPA</td><td>MCPA + Dicamba</td></tr>
<tr><td></td><td>**Dose FP kg or l/ha**</td><td>600 g 50 ml/100 l</td><td>800 g 50 ml/100 l</td><td>1000 g 50 ml/100 l</td><td>30 g 733 ml 100 ml/100 l</td><td>3 l/ha</td><td>2,5 l</td><td>1500 ml</td><td>3,3 l</td><td>1,25 l</td></tr>
<tr><td></td><td>**Dose g a.i./ha**</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>15 g 549,75 g</td><td>900 g</td><td>750 + 100 g</td><td>750 g</td><td>1650 g</td><td>825 + 112,5 g</td></tr>
<tr><td colspan="11">**NORTH EASTERN EPPO ZONE**</td></tr>
<tr><td rowspan="4">**Data grouping** (PL)</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>-
-
-
-
-</td><td>9
20,0
72,5
45,0
18,9</td><td>9
21,3
82,5
49,9
19,0</td><td>-
-
-
-
-</td><td colspan="5">2 / 5 / - / - / 2
5,3
82,5
45,7
25,1</td></tr>
<tr><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>6
18,8
72,5
44,8
22,7</td><td>6
20,0
72,5
48,1
21,4</td><td>6
21,3
82,5
53,4
22,2</td><td>-
-
-
-
-</td><td colspan="5">2 / 3 / - / - / 1
5,3
82,5
49,2
30,9</td></tr>
<tr><td>Nb of **dose effects** compared to 1000 g</td><td>2/6</td><td>3/9</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
4 trials =
3 trials <</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="11">**MARITIME EPPO ZONE**</td></tr>
<tr><td>**Data group-**</td><td>Number of values</td><td>8</td><td>8</td><td>8</td><td>-</td><td>-</td><td>-</td><td>3</td><td>5</td><td>-</td></tr>
</table>

ing (DE, UK)	Minimum value Maximum value Mean Standard deviation	0,0 75,0 **56,6** 29,5	0,0 86,3 **62,7** 32,1	25,0 83,8 **70,0** 21,7	- - - -	- - - -	- - - -	22,5 73,8 **62,7** 18,2		- - - -
	Nb of **dose effects** compared to 1000 g	3/8	1/8	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 6 trials = 0 trial <	-	-	-	-	-	-
SOUTH EASTERN EPPO ZONE										
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	1 75,0 75,0 **75,0** -	1 73,8 73,8 **73,8** -	1 71,3 71,3 **71,3** -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	-	0/1	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-	-	-	-
POLAND + GERMANY										
Data grouping (PL, DE)	Number of values	-	12	12	-	2	5	3	-	2
	Minimum value Maximum value Mean Standard deviation	- - - -	0,0 77,5 **42,3** 23,9	21,3 82,5 **50,3** 20,0	- - - -	5,3 82,5 **46,0** 23,5				
	Number of values	9	9	9	-	2	3	3	-	1
	Minimum value Maximum value Mean Standard deviation	0,0 72,5 **39,6** 26,2	0,0 77,5 **43,5** 27,0	21,3 82,5 **52,8** 22,3	- - - -	5,3 82,5 **48,4** 27,0				
	Nb of **dose effects** compared to 1000 g	4/9	4/12	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 6 trials = 3 trials <	-	-	-	-	-	-

<u>Long-term effect (about 21-30 days after application)</u>

Table 3.2-117: Grouped data – Efficacy trials – Spring application / Winter cereals – Long-term effect – Minor weeds

Trial timing: Spring **Crops:** Winter cereals **Assessment timing:** 21-30 days after application **Harmful organism:** minor weeds									
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Granstar 50 SX Mecomeron 750 SL Trend 90**	**Chwas-tox Extra 300 SL**	**Chwas-tox Turbo 340 SL**	**U46M-Fluid**	**Agritox**	**Premier D 750 SL**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA	MCPA	MCPA+ Dicamba	MCPA	MCPA	MCPA + Dicamba

	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	30 g 733 ml 100 ml/100 l	3 l/ha	2,5 l	1500 ml	3,3 l	1,25 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	15 g 549,75 g	900 g	750 + 100 g	750 g	1650 g	825 + 112,5 g
NORTH EASTERN EPPO ZONE										
Data grouping (PL)	Number of values	-	9	9	-	2	5	-	-	2
	Minimum value	-	57,5	57,5	-			26,3		
	Maximum value	-	93,8	98,8	-			98,8		
	Mean	-	**80,3**	**84,2**	-			**78,9**		
	Standard deviation	-	13,9	13,3	-			24,1		
	Number of values	6	6	6	-	2	3	-	-	1
	Minimum value	46,3	57,5	68,8	-			26,3		
	Maximum value	93,8	91,3	93,8	-			97,5		
	Mean	**78,4**	**82,5**	**86,9**	-			**79,6**		
	Standard deviation	16,7	12,7	9,4	-			26,6		
	Nb of **dose effects** compared to 1000 g	3/6	1/9	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 8 trials = 0 trial <	-	-	-	-	-	-
MARITIME EPPO ZONE										
Data grouping (DE, UK)	Number of values	8	8	8	-	-	-	3	5	-
	Minimum value	20,0	25,0	25	-	-	-	22,5		-
	Maximum value	100,0	100,0	100,0	-	-	-	100,0		-
	Mean	**85,5**	**89,1**	**88.3**	-	-	-	**85,6**		-
	Standard deviation	27,7	26,1	38,3	-	-	-	26,2		-
	Nb of **dose effects** compared to 1000 g	2/8	0/8	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 7 trials = 0 trial <	-	-	-	-	-	-
SOUTH EASTERN EPPO ZONE										
Data grouping (HU)	Number of values	-	1	1	1	-	-	-	-	-
	Minimum value	-	78,8	87,5	90,0	-	-	-	-	-
	Maximum value	-	78,8	87,5	90,0	-	-	-	-	-
	Mean	-	**78,8**	**87,5**	**90,0**	-	-	-	-	-
	Standard deviation	-	-	-	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	-	1/1	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-	-	-	-
POLAND + GERMANY										
Data grouping (PL, DE)	Number of values	-	12	12	-	2	5	3	-	2
	Minimum value	-	25,0	8,8	-			22,5		
	Maximum value	-	100,0	100,0	-			98,8		
	Mean	-	**79,0**	**74,3**	-			**76,3**		
	Standard deviation	-	22,1	29,7	-			27,2		
	Number of values	9	9	9	-	2	3	3	-	1
	Minimum value	20,0	25,0	8,8	-			22,5		
	Maximum value	100,0	100,0	100,0	-			98,8		

	Mean Standard deviation	**76,5** 26,6	**80,0** 24,2	**72,8** 33,1	- -	**75,8** 29,7				
	Nb of **dose effects** compared to 1000 g	3/9	1/12	-	-	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 10 trials = 0 trial <	-	-	-	-	-	-

Conclusion – Spring application – winter cereals

The efficacy of MT-565SG-OR2-C applied after the emergence of winter cereals in spring was investigated over 42 different weeds in North-eastern, Maritime and South-eastern EPPO zones.

It has been previously demonstrated that the minimum effective dose of MT-565SG-OR2-C applied post-emergence of winter cereals in spring for the control of dicotyledonous weeds is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl).

In the **North-eastern EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 30 different weeds for which valid trials are available.
In this pool of 30 different weeds, 17 are considered as major because they were observed in 2 trials and more. Conversely, 13 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in winter cereals, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in spring reached several levels of efficacy:

- Good efficacy (85-94.9% efficacy) against 13 weeds (ANTAR, BRSNA / BRSNW, CAPBP, CENCY, LAMPU, MATCH, MYOAR, PAPRH, STEME, THLAR, VERAR, VERHE, VERPE)
- Acceptable efficacy (70-84.9% efficacy) against 4 weeds (FUMOF, GALAP, MATIN, VIOAR)

In the **Maritime EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 25 different weeds for which valid trials are available.
In this pool of 25 different weeds, 13 are considered as major because they were observed in 2 trials and more. Conversely, 12 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in winter cereals, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in spring reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 2 major weeds (THLAR, LAMPU)
- Good efficacy (85-94.9% efficacy) against 5 major weeds (CENCY, MATIN, PAPRH, STEME, VERAR)
- Acceptable efficacy (70-84.9% efficacy) against 3 major weeds (GALAP, MYOAR, VIOAR)
- Limited efficacy (50-69.6% efficacy) against 3 major weeds (GERDI, MATCH, VERPE)

In the **South-eastern EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 13 different weeds for which valid trials are available.
In this pool of 13 different weeds, 10 are considered as major because they were observed in 2 trials and more. Conversely, 3 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in winter cereals, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 4 major weeds (ANTAR, DESSO, PAPRH, STEME)
- Good efficacy (85-94.9% efficacy) against 2 major weeds (CIRAR, POLCO)
- Acceptable efficacy (70-84.9% efficacy) against 3 major weeds (CNSRE, CONAR, VERPE)++
- Limited efficacy (50-69.6% efficacy) against 1 major weed (GALAP)

Whatever the EPPO zone considered, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) offered a very high control (> 95% efficacy) or a high control (85-94.9% efficacy) of the majority of weeds.

In **Poland and Germany**, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) during spring on winter cereals provided a very good control of LAMPU, a good control of BRSNA / BRSNW, CAPBP, CENCY, MATIN, PAPRH, SPRAR, STEME, THLAR, VERAR, an acceptable control of GALAP, MATCH, MYOAR, VERPE, VIOAR.

Consequently, it is justified to claim the registration of one application of MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in spring on winter cereals for the control of dicotyledonous weeds.

Table 3.2-118: Efficacy evaluation – Summary – Spring application / Winter cereals

Spring application Winter cereals	***North-eastern EPPO zone*** Second spring assessment			***Maritime EPPO zone*** Second spring assessment			***South-eastern EPPO zone*** Second spring assessment			***Special grouping - Poland + Germany*** Second spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
AGOGI	1	1 kg/ha	93,5	-	-	-	-	-	-	-	-
ANTAR	5	1 kg/ha	88,9	-	-	-	3	0,8 kg/ha	100	-	-
APHAR	-	-	-	1	1 kg/ha	25	-	-	-	-	-
ARBTH	1	1 kg/ha	57,5	-	-	-	-	-	-	-	-
BRSNA / BRSNW	6	1 kg/ha	92,2	1	0,6 kg/ha	100	-	-	-	7	93,3
CAPBP	6	1 kg/ha	85,2	1	0,8 kg/ha	95	-	-	-	7	86,6
CENCY	14	1 kg/ha	86	8	1 kg/ha	94,5	-	-	-	22	89,1
CENSS	1	1 kg/ha	93,75	-	-	-	-	-	-	-	-
CHEAL	-	-	-	1	1 kg/ha	100	-	-	-	-	-
CIRAR	-	-	-	-	-	-	3	1 kg/ha	90	-	-
CNSRE	1	1 kg/ha	68,75	-	-	-	2	1 kg/ha	81,3	-	-
CONAR	-	-	-	-	-	-	2	1 kg/ha	75	-	-
DESSO	1	1 kg/ha	80	-	-	-	3	0,8 kg/ha	96,3	-	-
FUMOF	2	1 kg/ha	75,7	-	-	-	-	-	-	-	-
GALAP	9	1 kg/ha	78,8	4	1 kg/ha	77,9	2	1 kg/ha	52,5	13	78,5
GERDI	-	-	-	3	1 kg/ha	63,4	-	-	-	-	-
GERMO	-	-	-	1	1 kg/ha	100	-	-	-	-	-
GERPU	1	0,8 kg/ha	98	-	-	-	-	-	-	-	-
GERDI / GERMO / GERPU	-	-	-	*4*	*1 kg/ha*	*72,6*	-	-	-	*5*	*77,7*
LAMPU	5	1 kg/ha	94,3	2	1 kg/ha	100	-	-	-	6	95.3
LITAR	1	1 kg/ha	87,5	-	-	-	-	-	-	-	-
MATCH	6	1 kg/ha	90,5	6	1 kg/ha	59,4	-	-	-	12	73,2
MATIN	5	1 kg/ha	87,5	4	1 kg/ha	89,7	1	1 kg/ha	87,5	8	87,1
MYOAR	3	1 kg/ha	87,6	3	1 kg/ha	70	-	-	-	6	78,8
PAPRH	2	1 kg/ha	92,8	6	0,6 kg/ha	87,4	5	1 kg/ha	97,1	7	87,1
POLAV	1	1 kg/ha	86,3	1	1 kg/ha	97	-	-	-	-	-
POLCO	-	-	-	1	1 kg/ha	97	4	0,8 kg/ha	89,5	-	-
POLPE	-	-	-	1	1 kg/ha	100	-	-	-	-	-
RAPSO	-	-	-	1	1 kg/ha	87,5	-	-	-	-	-
RUMAA	1	1 kg/ha	98,8	-	-	-	-	-	-	-	-
SENVU	-	-	-	1	1 kg/ha	100	-	-	-	-	-
SINAR	1	1 kg/ha	91,3	-	-	-	-	-	-	-	-
SPRAR	1	0,8 kg/ha	87,5	1	0,8 kg/ha	98,8	-	-	-	2	93,2
STEME	8	1 kg/ha	93,1	12	1 kg/ha	88,1	4	1 kg/ha	98,9	18	90,5
THLAR	6	1 kg/ha	90,8	2	1 kg/ha	98	-	-	-	7	91,5
VERAG	1	1 kg/ha	82,5	-	-	-	-	-	-	-	-
VERAR	2	1 kg/ha	91,9	3	1 kg/ha	92,5	1	1 kg/ha	83,8	5	92,3
VERHE	3	1 kg/ha	88.1	-	-	-	-	-	-	-	-
VERHT	1	1 kg/ha	38,8	-	-	-	-	-	-	-	-

Spring application **Winter cereals**	***North-eastern EPPO zone*** Second spring assessment			***Maritime EPPO zone*** Second spring assessment			***South-eastern EPPO zone*** Second spring assessment			***Special grouping - Poland + Germany*** Second spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
VERPE	7	1 kg/ha	85,6	6	1 kg/ha	62,5	2	1 kg/ha	75	11	70,4
VERTR	-	-	-	-	-	-	1	1 kg/ha	83,8	-	-
VERAG / VERAR / VERHE / VERHT / VERPE	*14*	*1 kg/ha*	*83.5*	*9*	*1 kg/ha*	*72,5*	*4*	*1 kg/ha*	*79,4*	*21*	*77.2*
VICFM	-	-	-	1	1 kg/ha	100	-	-	-	-	-
VIOAR	12	1 kg/ha	72,9	3	1 kg/ha	84,6	-	-	-	13	74,8

	Highly Susceptible (HS)	95-100%
	Susceptible (S)	85-94,9%
	Moderately Susceptible (MS)	70-84,9%
	Moderately Tolerant (MT)	50-69,9%
	Tolerant (T)	0-49,9%

3.2.3.3 Spring application / Spring cereals

Introduction

The effectiveness of MT-565SG-OR2-C applied in spring on spring cereals was studied in 39 trials. Those trials were performed from 2016 to 2018 in Poland (19), Germany (7), United kingdoms (6), Hungary (4) and Romania (3).
The herbicidal performance of MT-565SG-OR2-C was investigated in 3 different spring cereals including spring wheat (6), spring barley (27) and oat (6).

Anthemis arvensis (ANTAR)

Anthemis arvensis was observed in 2 trials implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat and spring barley.

Short-term effect (about 14 days after application)

Sufficient density of *Anthemis arvensis* (9 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-119: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – ANTAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14 days after application **Harmful organism:** ANTAR				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 90,0 90,0 **90,0** 0,0	2 90,0 90,0 **90,0** 0,0	2 90,0 90,0 **90,0** 0,0	2 76,3 90,0 **83,2** 9,7
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Long-term effect (about 28 days after application)

Sufficient density of *Anthemis arvensis* (9 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-120: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – ANTAR

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28 days after application **Harmful organism:** ANTAR				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
Dose FP	600 g	800 g	1000 g	2 l

	kg or l/ha **Dose g a.i./ha**	50 ml/100 l 330 + 9 g	50 ml/100 l 440 + 12 g	50 ml/100 l 550 + 15 g	600 + 80 g
NORTH EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 95,0 99,0 **97,0** 2,8	2 97,0 99,0 **98,0** 1,4	2 97,0 99,0 **98,0** 1,4	2 83,3 98,0 **90,7** 10,4
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Brassica napus rapifera / Brassica napus (BRSNA / BRSNS / BRSNW)

Brassica napus rapifera / Brassica napus was observed in 17 trials implemented in Poland (12), Germany (2), UK (1) and Romania (2), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

<u>Short-term effect (about 14-28 days after application)</u>

Sufficient density of *Brassica napus rapifera / Brassica napus* (4.5-72 plants/m²) was observed in 14 trials out of 17 which are considered valid for this assessment timing.
At this timing, 3 trials were excluded from the analysis due to the low weed density observed at application and/or assessment (2 trials in Poland, 1 trial in UK).

Table 3.2-121: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – BRSNA/BRSNS/BRSNW

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14-28 days after application **Harmful organism:** BRSNA-BRSNW-BRSNS							
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Chwastox Turbo 340 SL**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA + Dicamba	Tribenuron-methyl MCPA
		Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	1,5 l	2 l	30 g 733 ml 100 ml/100 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	600 + 80 g	15 g 549,75 g
NORTH EASTERN EPPO ZONE									
Data grouping (PL)	BRSNA	Number of values Mean	3 **76,7**	3 **80,7**	3 **82,0**	3 **82,7**	- -	- -	- -
	BRSNW	Number of values Mean	- -	7 **75,4**	7 **77,3**	- -	- -	7 **72,3**	- -
		Number of values Mean	4 **67,9**	4 **70,3**	4 **71,9**	- -	- -	4 **65,3**	- -
	BRSNA-BRSNW	Number of values	-	10	10	3	-	7	-
		Minimum value Maximum value Mean Standard deviation	- - - -	46,3 90,0 **77,0** 14,5	51,3 90,0 **78,7** 13,9	47,5 90,0 **75,4** 13,7			- - - -

		Number of values	8	8	8	3	-	5	-
		Minimum value	41,3	46,3	51,3		47,5		-
		Maximum value	90,0	90,0	90,0		90,0		-
		Mean	**73,9**	**76,7**	**78,0**		**74,9**		**-**
		Standard deviation	18,3	16,2	15,1		15,4		-
		Nb of **dose effects** compared to 1000 g	1/8	1/10	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 8 trials = (3 num) 0 trial <	-	-	-	-
MARITIME EPPO ZONE									
Data grouping (DE)	BRSNW	Number of values	2	2	2	-	2	-	-
		Minimum value	75,0	77,5	87,5	-	70,0	-	-
		Maximum value	97,5	100,0	100,0	-	95,0	-	-
		Mean	**86,3**	**88,8**	**93,8**	**-**	**82,5**	**-**	**-**
		Standard deviation	15,9	15,9	8,8	-	17,7	-	-
		Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-	-
SOUTH-EASTERN EPPO ZONE									
Data grouping (HU)	BRSNW	Number of values	2	2	2	-	-	-	2
		Minimum value	72,6	76,3	77,5	-	-	-	75,0
		Maximum value	73,8	77,5	80,0	-	-	-	76,3
		Mean	**73,2**	**76,9**	**78,8**	**-**	**-**	**-**	**75,6**
		Standard deviation	0,8	0,9	1,8	-	-	-	0,9
		Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
POLAND + GERMANY									
Data grouping (PL, DE)	BRSNA	Number of values	3	3	3	3	-	-	-
		Mean	**82,0**	**86,0**	**88,0**	**88,0**	**-**	**-**	**-**
	BRSNW	Number of values	-	9	9	-	2	7	-
		Mean	**-**	**78,3**	**81,0**	-	**74,6**		**-**
		Number of values	6	6	6	-	2	4	-
		Mean	**74,0**	**76,5**	**79,2**	**71,1**			**-**
	BRSNA-BRSNW	Number of values	-	12	12	3	2	7	-
		Minimum value	-	46,3	51,3		47,5		-
		Maximum value	-	100,0	100,0		95,0		-
		Mean	-	**78,9**	**81,2**		**76,6**		-
		Standard deviation	-	14,7	14,2		13,8		-
		Number of values	10	10	10	3	2	5	-
		Minimum value	41,3	46,3	51,3		47,5		-
		Maximum value	97,5	100,0	100,0		95,0		-
		Mean	**76,4**	**79,1**	**81,1**		**76,4**		**-**
		Standard deviation	17,7	16,1	15,2		15,1		-
		Nb of **dose effects** compared	2/10	2/12	-	-	-	-	-

		to 1000 g							
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 10 trials = (3 num) 0 trial <	-	-	-	-

Long-term effect (about 22-42 days after application)

Sufficient density of *Brassica napus rapifera / Brassica napus* (4.5-72 plants/m²) was observed in 15 trials out of 17 which are considered valid for this assessment timing.
At this timing, 2 trials were excluded from the analysis due to the low weed density observed at application and/or assessment (1 trial in Poland, 1 trial in UK).

Table 3.2-122: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – BRSNA/BRSNS/BRSNW

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 22-42 days after application **Harmful organism:** BRSNA-BRSNW-BRSNS							
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M -Fluid**	**Chwastox Turbo 340 SL**	**Granstar 50 SX Mecomorn 750 SL Trend 90**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA + Dicamba	Tribenuron-methyl MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	1,5 l	2 l	30 g 733 ml 100 ml/100 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	600 + 80 g	15 g 549,75 g
NORTH EASTERN EPPO ZONE									
Data grouping (PL)	BRSNA	Number of values	4	4	4	4	-	-	-
		Mean	**91,3**	**93,8**	**95,0**	**95,0**	**-**	**-**	**-**
	BRSNW	Number of values	-	7	7	-	-	7	-
		Mean	**-**	**97,0**	**97,1**	**-**	**-**	**95,9**	**-**
	BRSNW	Number of values	4	4	4	-	-	4	-
		Mean	**96,1**	**99,0**	**99,5**	**-**	**-**	**98,4**	**-**
		Number of values	-	11	11	4	-	7	-
		Minimum value	-	83,8	82,5	82,5			-
		Maximum value	-	100,0	100,0	100,0			-
		Mean	**-**	**95,8**	**96,3**	**95,6**			**-**
		Standard deviation	-	5,0	5,1	4,8			-
	BRSNA-BRSNW	Number of values	9	9	9	4	-	5	-
		Minimum value	85,0	90,0	95,0	95,0			-
		Maximum value	99,0	100,0	100,0	100,0			-
		Mean	**94,3**	**96,7**	**97,4**	**96,9**			**-**
		Standard deviation	4,7	3,2	2,4	2,4			-
		Nb of **dose effects** compared to 1000 g	2/9	0/11	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trials > 10 trials = (4 num) 0 trial <	-	-	-	-
MARITIME EPPO ZONE									

Data grouping (DE)	BRSNW	Number of values	2	2	2	-	2	-	-
		Minimum value	75,0	82,5	90,0	-	75,0	-	-
		Maximum value	100,0	100,0	100,0	-	100,0	-	-
		Mean	**87,5**	**91,3**	**95,0**	**-**	**87,5**	**-**	**-**
		Standard deviation	17,7	12,4	7,1	-	17,7	-	-
		Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-	-
SOUTH-EASTERN EPPO ZONE									
Data grouping (HU)	BRSNW	Number of values	2	2	2	-	-	-	2
		Minimum value	62,5	75,0	82,5	-	-	-	75,0
		Maximum value	77,5	81,3	84,5	-	-	-	86,3
		Mean	**70,0**	**78,1**	**83,5**	**-**	**-**	**-**	**80,6**
		Standard deviation	10,6	4,4	1,4	-	-	-	8,0
		Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
POLAND + GERMANY									
Data grouping (PL, DE)	BRSNA	Number of values	4	4	4	4	-	-	-
		Mean	**90,0**	**93,3**	**95,0**	**95,0**	**-**	**-**	**-**
	BRSNW	Number of values	-	9	9	-	2	7	-
		Mean	**-**	**95,7**	**96,6**	-	**94,0**		**-**
		Number of values	6	6	6	-	2	4	-
		Mean	**93,2**	**96,4**	**98,0**	**94,8**			**-**
	BRSNA-BRSNW	Number of values	-	13	13	4	2	7	-
		Minimum value	-	82,5	82,5		75,0		-
		Maximum value	-	100,0	100,0		100,0		-
		Mean	**-**	**95,1**	**96,1**		**94,3**		**-**
		Standard deviation	-	6,0	5,1		7,4		-
		Number of values	11	11	11	4	2	5	-
		Minimum value	75,0	82,5	90,0		75,0		-
		Maximum value	100,0	100,0	100,0		100,0		-
		Mean	**93,0**	**95,7**	**97,0**		**95,2**		**-**
		Standard deviation	7,5	5,3	3,2		7,1		-
		Nb of **dose effects** compared to 1000 g	1/11	1/13	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 11 trials = (4 num) 0 trial <	-	-	-	-

Capsella bursa-pastoris (CAPBP)

Capsella bursa-pastoris was observed in 11 trials implemented in Poland (9), Germany (1) and Hungary (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
Since *Capsella bursa-pastoris* was observed in only 1 trial of the South-eastern EPPO zone, results ob-

tained in Romania were reported in the Minor weed section.

Short-term effect (about 14-28 days after application)

Sufficient density of *Capsella bursa-pastoris* (6-10 plants/m²) was observed in all 10 trials which are considered valid for this assessment timing.

Table 3.2-123: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – CAPBP

<table>
<tr><td></td><td colspan="7">Trial timing: Spring
Crops: Spring cereals
Assessment timing: 14-28 days after application
Harmful organism: CAPBP</td></tr>
<tr><td></td><td>Treatment</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>Chwastox 750 SL</td><td>Chwastox Turbo 340 SL</td><td>U46M-Fluid</td></tr>
<tr><td></td><td>Active ingredient</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA</td><td>MCPA + Dicamba</td><td>MCPA</td></tr>
<tr><td></td><td>Dose FP
kg or l/ha</td><td>600 g
50 ml/100 l</td><td>800 g
50 ml/100 l</td><td>1000 g
50 ml/100 l</td><td>0,75 l</td><td>2 l</td><td>1,5 l</td></tr>
<tr><td></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>562,5 g</td><td>600 + 80 g</td><td>750 g</td></tr>
<tr><td colspan="8">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="3">Data grouping
(PL)</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>9
62,5
84,0
78,1
7,6</td><td>9
66,3
86,0
82,9
6,3</td><td>9
71,3
88,0
85,6
5,5</td><td colspan="2">8 | 1
72,5
88,0
86,3
5,2</td><td>-
-
-
-
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>3/9 (2 num)</td><td>1/9</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
9 trials = (8 num)
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="3">Data grouping
(DE)</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>1
83,8
83,8
83,8
-</td><td>1
80,0
80,0
80,0
-</td><td>1
80,0
80,0
80,0
-</td><td>-
-
-
-
-</td><td>-
-
-
-
-</td><td>1
82,5
82,5
82,5
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/1</td><td>0/1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
1 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">POLAND + GERMANY</td></tr>
<tr><td rowspan="3">Data grouping
(PL, DE)</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>10
62,5
84,0
78,6
7,4</td><td>10
66,3
86,0
82,6
6,0</td><td>10
71,3
88,0
85,0
5,5</td><td colspan="3">8 | 1 | 1
72,5
88,0
85,9
5,0</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>3/10 (2 num)</td><td>1/10</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
10 trials = (8 num)
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
</table>

Long-term effect (about 28-42 days after application)

Sufficient density of *Capsella bursa-pastoris* (6-10.5 plants/m²) was observed in all 10 trials which are considered valid for this assessment timing.

Table 3.2-124: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – CAPBP

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14-28 days after application **Harmful organism:** CAPBP						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	2 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	600 + 80 g	750 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values Minimum value Maximum value Mean Standard deviation	9 82,0 100,0 **91,3** 5,6	9 85,0 100,0 **93,9** 4,2	9 88,0 100,0 **94,8** 3,0	8 88,0 100,0 **94,8** 3,0	1	- - - - -
	Nb of **dose effects** compared to 1000 g	0/9	0/9	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 9 trials = (8 num) 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE)	Number of values Minimum value Maximum value Mean Standard deviation	1 99,5 99,5 **99,5** -	1 100,0 100,0 **100,0** -	1 100,0 100,0 **100,0** -	- - - - -	- - - - -	1 100,0 100,0 **100,0** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	10 82,0 100,0 **92,2** 5,9	10 85,0 100,0 **94,5** 4,4	10 88,0 100,0 **95,3** 3,3	8	1 88,0 100,0 **95,3** 3,3	1
	Nb of **dose effects** compared to 1000 g	0/10	0/10	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 10 trials = (8 num) 0 trial <	-	-	-

Chenopodium album / Chenopodiastrum hybridum (CHEAL / CHEHY)

Chenopodium album / *Chenopodiastrum hybridum* was observed in 25 trials implemented in Poland (14), Germany (4), UK (2), Romania (2) and Hungary (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

Short-term effect (about 12-28 days after application)

At the second spring assessment, two trials implemented in Germany were excluded from the analysis due to the low infestation observed at application or assessment

In addition, one trial performed in Germany was excluded because the standard reference showed unexpected low efficacy level.
Therefore, the analysis for short-term effect is based on 22 valid trials.

Table 3.2-125: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – CHEAL/CHEHY

Trial timing: Spring
Crops: Spring cereals
Assessment timing: 12-28 days after application
Harmful organism: CHEAL-CHEHY

		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Chwastox 750 SL**	**U46 M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	0,75 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 580-587 ml
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	562,5 g	750 g	1650 g	15 g 549,75 g	11,3-12 g 435-440 g
NORTH EASTERN EPPO ZONE											
Data grouping (PL)	CHEAL	Number of values	-	14	14	6	8	-	-	-	-
		Minimum value	-	30,0	35,0	37,5		-	-	-	-
		Maximum value	-	90,0	93,8	90,0		-	-	-	-
		Mean	-	**76,3**	**79,7**	**77,7**		-	-	-	-
		Standard deviation	-	18,5	17,5	17,8		-	-	-	-
		Number of values	13	13	13	5	8	-	-	-	-
		Minimum value	20,0	30,0	35,0	37,5		-	-	-	-
		Maximum value	90,0	90,0	90,0	90,0		-	-	-	-
		Mean	**70,4**	**75,6**	**78,6**	**77,5**		**-**	**-**	**-**	**-**
		Standard deviation	20,2	19,0	17,7	18,5		-	-	-	-
		Nb of **dose effects** compared to 1000 g	5/13 (2 num)	2/14	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 12 trials = (8 num) 0 trial <	-	-	-	-	-	-
MARITIME EPPO ZONE											
Data grouping (DE, UK)	CHEAL	Number of values	-	3	3	-	-	1	2	-	-
		Minimum value	-	26,3	31,3	-	-	8,8		-	-
		Maximum value	-	85,0	80,0	-	-	80,0		-	-
		Mean	-	**57,1**	**62,1**	**-**	**-**	**49,6**		**-**	**-**
		Standard deviation	-	29,5	26,8	-	-	36,7		-	-
		Number of	1	1	1	-	-	-	1	-	-

		values									
		Minimum value	81,3	85,0	80,0	-	-	-	80,0	-	-
		Maximum value	81,3	85,0	80,0	-	-	-	80,0	-	-
		Mean	**81,3**	**85,0**	**80,0**	**-**	**-**	**-**	**80,0**	**-**	**-**
		Standard deviation	-	-	-	-	-	-	-	-	-
		Nb of **dose effects** compared to 1000 g	0/1	0/3	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-	-	-	-	-	-
SOUTH-EASTERN EPPO ZONE											
Data grouping (HU, RO)	CHEAL	Number of values	-	3	3	-	-	-	-	1	1
		Mean	-	**72,5**	**74,6**	-	-	-	-	**70,0**	
		Number of values	2	2	2	-	1	-	-	-	1
		Mean	**61,3**	**70,0**	**69,4**	-	**64,4**				
	CHEHY	Number of values	2	2	2	-	-	-	-	2	-
		Mean	**75,0**	**81,3**	**84,4**	-	-	-	-	**80,0**	-
		Number of values	-	5	5	-	1	-	-	3	1
		Minimum value	-	68,8	68,8	-	58,8				
		Maximum value	-	83,8	86,3	-	82,5				
		Mean	**-**	**76,0**	**78,5**	**-**	**74,0**				
		Standard deviation	-	6,0	8,5	-	9,8				
	CHEAL-CHEHY	Number of values	4	4	4	-	1	-	-	2	1
		Minimum value	56,3	68,8	68,8	-	58,8				
		Maximum value	76,3	83,8	86,3	-	82,5				
		Mean	**68,1**	**75,6**	**76,9**	**-**	**72,2**				
		Standard deviation	9,0	6,9	8,8	-	10,3				
		Nb of **dose effects** compared to 1000 g	2/4	1/5	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 0 trial <	-	-	-	-	-	-
POLAND + GERMANY											
Data grouping (PL, DE)	CHEAL	Number of values	-	15	15	6	8	1	-	-	-
		Minimum value	-	30,0	35,0	37,5			-	-	-
		Maximum value	-	90,0	93,8	90,0			-	-	-
		Mean	-	**75,3**	**79,4**	**76,6**			-	-	-
		Standard deviation	-	18,3	16,9	17,8			-	-	-
		Number of values	13	13	13	5	8	-	-	-	-
		Minimum value	20,0	30,0	35,0	37,5		-	-	-	-
		Maximum value	90,0	90,0	90,0	90,0		-	-	-	-
		Mean	**70,4**	**75,6**	**78,6**	**77,5**		**-**	**-**	**-**	**-**

		Standard deviation	20,2	19,0	17,7	18,5		-	-	-	-
		Nb of **dose effects** compared to 1000 g	5/13 (2 num)	2/15	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 13 trials = (8 num) 0 trial <	-	-	-	-	-	-

Long-term effect (about 22-42 days after application)

At the second spring assessment, two trials implemented in Germany were excluded from the analysis due to the low infestation observed at application or assessment

In addition, one trial performed in Germany was excluded because the standard reference showed unexpected low efficacy level.

Therefore, the analysis for short-term effect is based on 22 valid trials.

Table 3.2-126: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – CHEAL/CHEHY

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 22-42 days after application **Harmful organism:** CHEAL-CHEHY									
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Chwastox 750 SL**	**U46 M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA	MCPA	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA
		Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	0,75 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	15,1-16 g 580-587 ml
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	562,5 g	750 g	1650 g	15 g 549,75 g	11,3-12 g 435-440 g
NORTH EASTERN EPPO ZONE											
Data grouping (PL)	CHEAL	Number of values	-	14	14	6	8	-	-	-	-
		Minimum value	-	86,3	89,8	82,5		-	-	-	-
		Maximum value	-	100,0	100,0	100,0		-	-	-	-
		Mean	-	**94,9**	**95,7**	**94,6**		-	-	-	-
		Standard deviation	-	3,9	2,7	4,3		-	-	-	-
		Number of values	13	13	13	5	8	-	-	-	-
		Minimum value	80,0	87,5	89,8	91,0		-	-	-	-
		Maximum value	100,0	100,0	100,0	100,0		-	-	-	-
		Mean	**89,6**	**95,6**	**95,8**	**95,6**		-	-	-	-
		Standard deviation	6,1	3,1	2,7	2,6		-	-	-	-
		Nb of **dose effects** compared to 1000 g	6/13 (4 num)	0/14	-	-	-	-	-	-	-

		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 12 trials = (8 num) 0 trial <	-	-	-	-	-	-
MARITIME EPPO ZONE											
Data group-ing (DE, UK)	CHEAL	Number of values	-	3	3	-	-	1	2	-	-
		Minimum value	-	93,5	93,8	-	-	95,0		-	-
		Maximum value	-	98,0	97,3	-	-	97,3		-	-
		Mean	-	**95,5**	**95,4**	-	-	**95,8**		-	-
		Standard deviation	-	2,3	1,8	-	-	1,3		-	-
		Number of values	1	1	1	-	-	-	1	-	-
		Minimum value	95,0	95,0	95,0	-	-	-	95,0	-	-
		Maximum value	95,0	95,0	95,0	-	-	-	95,0	-	-
		Mean	**95,0**	**95,0**	**95,0**	-	-	-	**95,0**	-	-
		Standard deviation	-	-	-	-	-	-	-	-	-
		Nb of **dose effects** com-pared to 1000 g	0/1	0/3	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-	-	-	-	-
SOUTH-EASTERN EPPO ZONE											
Data group-ing (HU, RO)	CHEAL	Number of values	-	3	3	-	1	-	-	1	1
		Mean	-	**96,7**	**98,2**	-	**96,1**				
		Number of values	2	2	2	-	1	-	-	-	1
		Mean	**88,1**	**95,0**	**97,5**	-	**94,4**				
	CHEHY	Number of values	2	2	2	-	-	-	-	2	-
		Mean	**97,5**	**98,2**	**98,8**	-	-	-	-	**98,2**	-
	CHEAL-CHEHY	Number of values	-	5	5	-	1	-	-	3	1
		Minimum value	-	95,0	97,5	-	88,8				
		Maximum value	-	100,0	100,0	-	100,0				
		Mean	-	**97,3**	**98,4**	-	**96,9**				
		Standard deviation	-	2,6	1,2	-	4,8				
		Number of values	4	4	4	-	1	-	-	2	1
		Minimum value	87,5	95,0	97,5	-	88,8				
		Maximum value	100,0	100,0	100,0	-	100,0				
		Mean	**92,8**	**96,6**	**98,1**	-	**96,3**				
		Standard deviation	5,8	2,4	1,3	-	5,3				
		Nb of **dose effects** com-pared to 1000 g	1/4	0/5	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 4 trials = 0 trial <	-	-	-	-	-	-

POLAND + GERMANY											
Data grouping (PL, DE)	CHEAL	Number of values	-	15	15	6	8	1	-	-	-
		Minimum value	-	86,3	89,8	82,5			-	-	-
		Maximum value	-	100,0	100,0	100,0			-	-	-
		Mean	-	**94,8**	**95,6**	**94,7**			-	-	-
		Standard deviation	-	3,8	2,6	4,2			-	-	-
		Number of values	13	13	13	5	8	-	-	-	-
		Minimum value	80,0	87,5	89,8	91,0		-	-	-	-
		Maximum value	100,0	100,0	100,0	100,0		-	-	-	-
		Mean	**89,6**	**95,6**	**95,8**	**95,6**		-	-	-	-
		Standard deviation	6,1	3,1	2,7	2,6		-	-	-	-
		Nb of **dose effects** compared to 1000 g	6/13 (4 num)	0/15	-	-	-	-	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 13 trials = (8 num) 0 trial <	-	-	-	-	-	-

Cyanus segetum (CENCY)

Cyanus segetum was observed in 9 trials implemented in Poland (6) and Germany (3) investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

Short-term effect (about 13-20 days after application)

At the first spring assessment, sufficient density of *Cyanus segetum* (5-20 plants/m²) was observed in 8 trials out of 9 which are considered valid for this assessment timing.
Additionally, one trial performed in Germany was excluded due to the low performance of the standard reference.

Table 3.2-127: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – CENCY

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 13-20 days after application **Harmful organism:** CENCY					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	750 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	-	6	6	6	-
	Minimum value	-	57,5	76,3	72,5	-
	Maximum value	-	87,5	92,3	94,5	-
	Mean	-	**76,9**	**83,5**	**83,7**	-
	Standard deviation	-	11,5	7,0	8,6	-
	Number of values	4	4	4	4	-
	Minimum value	50,0	57,5	75,0	77,5	-
	Maximum value	83,8	87,5	90,0	90,0	-
	Mean	**71,9**	**75,3**	**81,6**	**83,8**	-
	Standard deviation	15,0	13,2	7,2	6,5	-

	Nb of **dose effects** compared to 1000 g	2/4	2/6	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 5 trials = 0 trial <	-	-
MARITIME EPPO ZONE						
Data grouping (DE)	Number of values Minimum value Maximum value Mean Standard deviation	1 72,5 72,5 **72,5** -	1 77,5 77,5 **77,5** -	1 72,5 72,5 **72,5** -	- - - - -	1 75,0 75,0 **75,0** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	7 57,5 87,5 **77,0** 10,5	7 72,5 92,3 **81,9** 7,6	6 72,5 94,5 **82,4** 8,5	1
	Number of values Minimum value Maximum value Mean Standard deviation	5 50,0 83,8 **72,0** 13,0	5 57,5 87,5 **75,8** 11,4	5 72,5 90,0 **79,8** 7,4	4 75,0 90,0 **82,0** 6,9	1
	Nb of **dose effects** compared to 1000 g	2/5	2/7	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 6 trials = 0 trial <	-	-

Long-term effect (about 22-34 days after application)

At the second spring assessment, sufficient density of *Cyanus segetum* (5-20 plants/m²) was observed in 8 trials out of 9 which are considered valid for this assessment timing.
Additionally, one trial performed in Germany was excluded due to the low performance of the standard reference.

Table 3.2-128: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – CENCY

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 22-34 days after application **Harmful organism:** CENCY					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	1,5 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	750 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 67,5 99,0 **83,7** 14,0	6 72,5 99,0 **86,9** 11,9	6 72,5 99,0 **89,4** 10,0	- - - - -

	Number of values Minimum value Maximum value Mean Standard deviation	4 62,5 93,8 **76,6** 14,3	4 67,5 97,0 **82,7** 14,3	4 72,5 99,0 **85,1** 13,3	4 82,5 96,0 **91,2** 6,1	- - - **-** -
	Nb of **dose effects** compared to 1000 g	3/4	1/6	-	-	
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 3 trials = 1 trial <	-	
MARITIME EPPO ZONE						
	Number of values Minimum value Maximum value Mean Standard deviation	1 100,0 100,0 **100,0** -	1 100,0 100,0 **100,0** -	1 100,0 100,0 **100,0** -	- - - **-** -	1 100,0 100,0 **100,0** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-
POLAND + GERMANY						
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - **-** -	7 67,5 100,0 **86,0** 14,2	7 72,5 100,0 **88,8** 11,9	6 72,5 100,0 **90,9** 10,0	1
	Number of values Minimum value Maximum value Mean Standard deviation	5 62,5 100,0 **81,3** 16,2	5 67,5 100,0 **86,2** 14,6	5 72,5 100,0 **88,1** 13,3	4 82,5 100,0 **93,0** 6,6	1
	Nb of **dose effects** compared to 1000 g	3/5	1/7	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 4 trials = 1 trial <	-	-

Convolvulus arvensis (CONAR)

Convolvulus arvensis was observed in 3 trials implemented in Romania, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley.

<u>Short-term effect (about 12-13 days after application)</u>

Sufficient density of *Convolvulus arvensis* (16-17.25 plants/m² - 9% ground cover) was observed in these 3 trials which are considered valid for this assessment timing.

Table 3.2-129: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – CONAR

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-13 days after application **Harmful organism:** CONAR				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Rival Star 75 GD Dicopur M**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA

	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	15,1-16 g 580-587 ml 11,3-12 g 435-440 g
SOUTH EASTERN EPPO ZONE					
Data grouping (RO)	Number of values Minimum value Maximum value Mean Standard deviation	3 30,0 63,8 **48,3** 17,1	3 46,3 73,8 **57,5** 14,4	3 47,5 81,3 **62,5** 17,2	3 30,0 73,8 **53,3** 22,0
	Nb of **dose effects** compared to 1000 g	2/3	1/3	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 1 trial = 0 trial <	-

Long-term effect (about 23-25 days after application)

Sufficient density of *Convolvulus arvensis* (16-17.25 plants/m² - 9% ground cover) was observed in these 3 trials which are considered valid for this assessment timing.

Table 3.2-130: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – CONAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 23-25 days after application **Harmful organism:** CONAR				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Rival Star 75 GD Dicopur M**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	Tribenuron-methyl MCPA
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	15,1-16 g 580-587 ml 11,3-12 g 435-440 g
SOUTH EASTERN EPPO ZONE					
Data grouping (RO)	Number of values Minimum value Maximum value Mean Standard deviation	3 66,3 97,5 **81,3** 15,7	3 82,5 100,0 **88,3** 10,1	3 81,3 100,0 **88,8** 9,9	3 66,3 100,0 **85,0** 17,2
	Nb of **dose effects** compared to 1000 g	1/3	0/3	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-

***Fumaria officinalis* (FUMOF)**

Fumaria officinalis was observed in 4 trials implemented in Poland (1), Germany (1), UK (1) and Romania (1) investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
Since *Fumaria officinalis* was observed in only 1 trial of the South-eastern EPPO zone, results obtained in Romania were reported in the Minor weed section.

Short-term effect (about 14 days after application)

At the first spring assessment, sufficient density of *Fumaria officinalis* (6.5-18 plants/m² was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-131: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – FUMOF

<table>
<tr><td></td><td colspan="7">Trial timing: Spring
Crops: Spring cereals
Assessment timing: 14 days after application
Harmful organism: FUMOF</td></tr>
<tr><td></td><td>Treatment</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>Chwastox Turbo 340 SL</td><td>U46M-Fluid</td><td>Agritox</td></tr>
<tr><td></td><td>Active ingredient</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Dicamba</td><td>MCPA</td><td>MCPA</td></tr>
<tr><td></td><td>Dose FP
kg or l/ha</td><td>600 g
50 ml/100 l</td><td>800 g
50 ml/100 l</td><td>1000 g
50 ml/100 l</td><td>2 l</td><td>1,5 l</td><td>3,3 l</td></tr>
<tr><td></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>600 + 80 g</td><td>750 g</td><td>1650 g</td></tr>
<tr><td colspan="8">NORTH-EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="3">Data grouping
(PL)</td><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>1
7,5
7,5
7,5
-</td><td>1
15,0
15,0
15,0
-</td><td>1
17,5
17,5
17,5
-</td><td>1
17,5
17,5
17,5
-</td><td>-
-
-
-
-</td><td>-
-
-
-
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>1/1</td><td>0/1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>0 trial >
1 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="4">Data grouping
(DE, UK)</td><td rowspan="2">Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td rowspan="2">-
-
-
-
-</td><td rowspan="2">2
40,0
58,8
49,4
13,3</td><td rowspan="2">2
45,0
58,8
51,9
9,8</td><td rowspan="2">-
-
-
-
-</td><td>1</td><td>1</td></tr>
<tr><td colspan="2">7,5
51,3
29,4
31,0</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/2</td><td>0/2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials>
0 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">POLAND + GERMANY</td></tr>
<tr><td rowspan="5">Data grouping
(PL, DE)</td><td rowspan="2">Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td rowspan="2">-
-
-
-
-</td><td rowspan="2">2
15,0
40,0
27,5
17,7</td><td rowspan="2">2
17,5
45,0
31,3
19,4</td><td>1</td><td>1</td><td rowspan="2">-
-
-
-
-</td></tr>
<tr><td colspan="2">7,5
17,5
12,5
7,1</td></tr>
<tr><td>Number of values
Minimum value
Maximum value
Mean
Standard deviation</td><td>1
7,5
7,5
7,5
-</td><td>1
15,0
15,0
15,0
-</td><td>1
17,5
17,5
17,5
-</td><td>1
17,5
17,5
17,5
-</td><td>-
-
-
-
-</td><td>-
-
-
-
-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>1/1</td><td>0/2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>1 trial >
1 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
</table>

<u>Long-term effect (about 28 days after application)</u>

At the second spring assessment, sufficient density of *Fumaria officinalis* (6.5-20 plants/m² was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-132: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – FUMOF

Trial timing: Spring
Crops: Spring cereals
Assessment timing: 28 days after application
Harmful organism: FUMOF

	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	750 g	1650 g
NORTH-EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values	1	1	1	1	-	-
	Minimum value	62,6	72,6	77,6	77,6	-	-
	Maximum value	62,6	72,6	77,6	77,6	-	-
	Mean	**62,6**	**72,6**	**77,6**	**77,6**	**-**	**-**
	Standard deviation	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	1/1	0/1	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE, UK)	Number of values	-	2	2	-	1	1
	Minimum value	-	92,5	95,5	-	0,0	
	Maximum value	-	93,8	97,8	-	85,0	
	Mean	**-**	**93,2**	**96,7**	**-**	**42,5**	
	Standard deviation	-	0,9	1,6	-	60,1	
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials> 0 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values	-	2	2	1	1	-
	Minimum value	-	72,6	77,6	0,0		-
	Maximum value	-	92,5	97,8	77,6		-
	Mean	**-**	**82,6**	**87,7**	**38,8**		**-**
	Standard deviation	-	14,1	14,3	54,9		-
	Number of values	1	1	1	1	-	-
	Minimum value	62,6	72,6	77,6	77,6	-	-
	Maximum value	62,6	72,6	77,6	77,6	-	-
	Mean	**62,6**	**72,6**	**77,6**	**77,6**	**-**	**-**
	Standard deviation	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	1/1	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-

Galeopsis tetrahit (GAETE)

Galeopsis tetrahit was observed in 2 trials implemented in United Kingdoms, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley.

Short-term effect (about 12-13 days after application)

Sufficient density of *Galeopsis tetrahit* (24.5-38.8 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-133: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – GAETE

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-13 days after application **Harmful organism:** GAETE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	1650 g
MARITIME EPPO ZONE					
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	2 36,3 77,5 **56,9** 29,1	2 28,8 87,5 **58,2** 41,5	2 51,3 82,5 **66,9** 22,1	2 3,8 80,0 **41,9** 53,9
	Nb of **dose effects** compared to 1000 g	0/2	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Long-term effect (about 26-27 days after application)

Sufficient density of *Galeopsis tetrahit* (24.5-39.2 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-134: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – GAETE

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 26-27 days after application **Harmful organism:** GAETE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	1650 g
MARITIME EPPO ZONE					
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	2 23,8 77,5 **50,7** 38,0	2 13,8 91,3 **52,6** 54,8	2 60,0 92,5 **76,3** 23,0	2 63,0 88,0 **75,5** 17,7
	Nb of **dose effects** compared to 1000 g	2/2	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Galium aparine (GALAP)

Galium aparine was observed in 10 trials implemented in Poland (9) and in Germany (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
In the trial performed in Germany, the efficacy of the reference product was limited (<50%), therefore, this trial was excluded from the analysis.

<u>Short-term effect (about 14-28 days after application)</u>

Sufficient density of *Galium aparine* (6-7.8 plants/m²) was observed in 6 trials out of 9 which are considered valid for this assessment timing.

Table 3.2-135: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – GALAP

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14-28 days after application **Harmful organism:** GALAP					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 0,0 86,0 **50,8** 30,3	6 0,0 88,0 **53,0** 30,3	3 20,0 88,0 **59,1** 24,2	3
	Number of values Minimum value Maximum value Mean Standard deviation	5 35,0 82,0 **56,2** 19,0	5 40,0 86,0 **60,9** 19,4	5 42,5 88,0 **63,6** 17,5	3 43,8 88,0 **66,9** 16,6	2
	Nb of **dose effects** compared to 1000 g	1/5	1/6	-	-	
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 6 trials = (3 num) 0 trial <	-	

<u>Long-term effect (about 28-42 days after application)</u>

Sufficient density of *Galium aparine* (6-7.8 plants/m²) was observed in 7 trials out of 9 which are considered valid for this assessment timing.

Table 3.2-136: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – GALAP

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28-42 days after application **Harmful organism:** GALAP					
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba

	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	7 50,0 86,3 **73,2** 12,6	7 50,0 91,3 **80,2** 14,0	4 72,5 96,3 **81,8** 8,3	3
	Number of values Minimum value Maximum value Mean Standard deviation	6 60,0 82,5 **72,1** 8,1	6 65,0 86,3 **77,1** 8,1	6 80,0 91,3 **85,2** 4,8	4 75,0 96,3 **83,3** 7,9	2
	Nb of **dose effects** compared to 1000 g	5/6 (4 num)	3/7 (2 num)	-	-	
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = (4 num) 2 trials <	-	

Lamium amplexicaule / Lamium purpureum (LAMAM / LAMPU)

Lamium amplexicaule / Lamium purpureum was observed in 9 trials implemented in Poland (5), Germany (2), UK (1) and Hungary (1) investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
Since *Lamium amplexicaule / Lamium purpureum* was observed in only 1 trial of the South-eastern EPPO zone, results obtained in Hungary were reported in the Minor weed section.
In the Maritime EPPO zone, both trials performed in Germany will be excluded from the analysis due to the low infection level at application and low performance of the reference. Therefore, only one valid trial is available in the Maritime EPPO zone and will therefore be analysed in the Minor weed section.

<u>Short-term effect (about 15-23 days after application)</u>

At the first spring assessment, sufficient density of *Lamium amplexicaule / Lamium purpureum* (6 plants/m²) was observed in all 5 trials which are considered valid for this assessment timing.

Table 3.2-137: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – LAMAM/LAMPU

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 15-23 days after application **Harmful organism:** LAMPU						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	1,5 l 750 g	3,3 l 1650
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values Minimum value Maximum value Mean Standard deviation	5 84,0 84,0 **84,0** 0,0	5 84,0 86,0 **84,4** 0,9	5 88,0 88,0 **88,0** 0,0	5 88,0 88,0 **88,0** 0,0	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	2/5 (2 num)	0/5	-	-	-	-
	Nb of trials where	-	-	0 trial >	-	-	-

	MT-565SG-OR2-C is >, = or < compared to standard			5 trials = (5 num) 0 trial <			

Long-term effect (about 28-37 days after application)

At the second spring assessment, sufficient density of *Lamium amplexicaule / Lamium purpureum* (6-26.5 plants/m²) was observed in all 5 trials which are considered valid for this assessment timing.

Table 3.2-138: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – LAMAM/LAMPU

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28-35 days after application **Harmful organism:** LAMPU						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	1650
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	5 85,0 95,0 **89,0** 4,2	5 95,0 95,0 **95,0** 0,0	5 95,0 95,0 **95,0** 0,0	5 95,0 95,0 **95,0** 0,0	- - - **-** -	- - - **-** -
	Nb of **dose effects** compared to 1000 g	2/5 (2 num)	0/5	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = (5 num) 0 trial <	-	-	-

Anchusa arvensis (LYCAR)

Anchusa arvensis was observed in 2 trials both implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on oat.

Short-term effect (about 14 days after application)

Sufficient density of *Anchusa arvensis* (7 plants/m² & 4.5% ground cover and 2.8 plants/m² & 5.5% ground cover) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-139: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – LYCAR

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-13 days after application **Harmful organism:** GAETE				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l

	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 37,5 42,5 **40,0** 3,5	2 40,0 46,3 **43,2** 4,5	2 41,3 47,5 **44,4** 4,4	2 33,8 48,8 **41,3** 10,6
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 28 days after application)

Sufficient density of *Anchusa arvensis* (7 plants/m² & 5.5% ground cover and 2.8 plants/m² & 5.5% ground cover) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-140: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – LYCAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28 days after application **Harmful organism:** GAETE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 68,8 80,0 **74,4** 7,9	2 75,0 87,5 **81,3** 8,8	2 85,0 93,8 **89,4** 6,2	2 82,5 86,3 **84,4** 2,7
	Nb of **dose effects** compared to 1000 g	2/2	2/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Matricaria chamomilla (MATCH)

Matricaria chamomilla was observed in 7 trials implemented in Poland (4), Germany (2) and UK (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley, spring wheat and on oat.

Short-term effect (about 11-14 days after application)

At the first spring assessment, sufficient density of *Matricaria chamomilla* (5-25 plants/m²) was observed in 6 trials out of 7 which are considered valid for this assessment timing.

Table 3.2-141: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – MATCH

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 11-14 days after application

	Harmful organism: MATCH						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	4	4	4	-	-
	Minimum value	-	71,3	77,5	35,0	-	-
	Maximum value	-	91,3	91,3	85,0	-	-
	Mean	-	**80,4**	**84,7**	**56,6**	-	-
	Standard deviation	-	9,0	7,0	22,9	-	-
	Number of values	2	2	2	2	-	-
	Minimum value	87,5	83,8	90,0	35,0	-	-
	Maximum value	92,5	91,3	91,3	41,3	-	-
	Mean	**90,0**	**87,6**	**90,7**	**38,2**	-	-
	Standard deviation	3,5	5,3	0,9	4,5	-	-
	Nb of **dose effects** compared to 1000 g	0/2	1/4	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 0 trial = 1 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE, UK)	Number of values	-	2	2	-	1	1
	Minimum value	-	28,8	57,5	-	10,3	
	Maximum value	-	91,3	92,5	-	75,0	
	Mean	-	**60,1**	**75,0**	-	**42,7**	
	Standard deviation	-	44,2	24,7	-	45,7	
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 0 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	Number of values	-	5	5	4	-	1
	Minimum value	-	28,8	57,5	10,3		
	Maximum value	-	91,3	91,3	85,0		
	Mean	-	**70,0**	**79,3**	**47,3**		
	Standard deviation	-	24,3	13,6	28,7		
	Number of values	3	3	3	2	1	-
	Minimum value	82,5	83,8	90,0	35,0		-
	Maximum value	92,5	91,3	92,5	75,0		-
	Mean	**87,5**	**88,8**	**91,3**	**50,4**		-
	Standard deviation	5,0	4,3	1,3	21,5		-
	Nb of **dose effects** compared to 1000 g	0/3	1/5	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	4 trials > 0 trial = 1 trial <	-	-	-

Long-term effect (about 22-34 days after application)

At the second spring assessment, sufficient density of *Matricaria chamomilla* (5-25 plants/m²) was observed in 6 trials out of 7 which are considered valid for this assessment timing.

Table 3.2-142: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – MATCH

<table>
<tr><td></td><td colspan="7">Trial timing: Spring
Crops: Spring cereals
Assessment timing: 22-34 days after application
Harmful organism: MATCH</td></tr>
<tr><td></td><td>Treatment</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>MT-565SG-OR2-C SarBio 90 EC</td><td>Chwastox Turbo 340 SL</td><td>U46M-Fluid</td><td>Agritox</td></tr>
<tr><td></td><td>Active ingredient</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Tribenuron methyl</td><td>MCPA + Dicamba</td><td>MCPA</td><td>MCPA</td></tr>
<tr><td></td><td>Dose FP
kg or l/ha</td><td>600 g
50 ml/100 l</td><td>800 g
50 ml/100 l</td><td>1000 g
50 ml/100 l</td><td>2 l</td><td>1,5 l</td><td>3,3 l</td></tr>
<tr><td></td><td>Dose g a.i./ha</td><td>330 + 9 g</td><td>440 + 12 g</td><td>550 + 15 g</td><td>600 + 80 g</td><td>750 g</td><td>1650 g</td></tr>
<tr><td colspan="8">NORTH EASTERN EPPO ZONE</td></tr>
<tr><td rowspan="12">Data grouping (PL)</td><td>Number of values</td><td>-</td><td>4</td><td>4</td><td>4</td><td>-</td><td>-</td></tr>
<tr><td>Minimum value</td><td>-</td><td>72,5</td><td>80,0</td><td>55,0</td><td>-</td><td>-</td></tr>
<tr><td>Maximum value</td><td>-</td><td>99,3</td><td>98,5</td><td>98,5</td><td>-</td><td>-</td></tr>
<tr><td>Mean</td><td>-</td><td>92,4</td><td>93,4</td><td>70,3</td><td>-</td><td>-</td></tr>
<tr><td>Standard deviation</td><td>-</td><td>13,2</td><td>9,0</td><td>20,6</td><td>-</td><td>-</td></tr>
<tr><td>Number of values</td><td>2</td><td>2</td><td>2</td><td>2</td><td>-</td><td>-</td></tr>
<tr><td>Minimum value</td><td>95,5</td><td>99,3</td><td>96,8</td><td>55,0</td><td>-</td><td>-</td></tr>
<tr><td>Maximum value</td><td>99,0</td><td>99,3</td><td>98,5</td><td>55,0</td><td>-</td><td>-</td></tr>
<tr><td>Mean</td><td>97,3</td><td>99,3</td><td>97,7</td><td>55,0</td><td>-</td><td>-</td></tr>
<tr><td>Standard deviation</td><td>2,5</td><td>0,0</td><td>1,2</td><td>0,0</td><td>-</td><td>-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>0/2</td><td>1/4</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>3 trials >
1 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">MARITIME EPPO ZONE</td></tr>
<tr><td rowspan="7">Data grouping (DE, UK)</td><td>Number of values</td><td>-</td><td>2</td><td>2</td><td>-</td><td>1</td><td>1</td></tr>
<tr><td>Minimum value</td><td>-</td><td>21,3</td><td>66,3</td><td>-</td><td colspan="2">2,5</td></tr>
<tr><td>Maximum value</td><td>-</td><td>88,8</td><td>96,5</td><td>-</td><td colspan="2">77,5</td></tr>
<tr><td>Mean</td><td>-</td><td>55,1</td><td>81,4</td><td>-</td><td colspan="2">40,0</td></tr>
<tr><td>Standard deviation</td><td>-</td><td>47,7</td><td>21,4</td><td>-</td><td colspan="2">53,0</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>2/2</td><td>1/2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>2 trials >
0 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td colspan="8">POLAND + GERMANY</td></tr>
<tr><td rowspan="12">Data grouping (PL, DE)</td><td>Number of values</td><td>-</td><td>5</td><td>5</td><td>4</td><td>-</td><td>1</td></tr>
<tr><td>Minimum value</td><td>-</td><td>21,3</td><td>66,3</td><td colspan="3">2,5</td></tr>
<tr><td>Maximum value</td><td>-</td><td>99,3</td><td>98,5</td><td colspan="3">98,5</td></tr>
<tr><td>Mean</td><td>-</td><td>78,1</td><td>94,0</td><td colspan="3">56,7</td></tr>
<tr><td>Standard deviation</td><td>-</td><td>33,8</td><td>14,4</td><td colspan="3">35,1</td></tr>
<tr><td>Number of values</td><td>3</td><td>3</td><td>3</td><td>2</td><td>1</td><td>-</td></tr>
<tr><td>Minimum value</td><td>85,0</td><td>88,8</td><td>96,5</td><td colspan="2">55,0</td><td>-</td></tr>
<tr><td>Maximum value</td><td>99,0</td><td>99,3</td><td>98,5</td><td colspan="2">77,5</td><td>-</td></tr>
<tr><td>Mean</td><td>93,2</td><td>95,8</td><td>97,3</td><td colspan="2">62,5</td><td>-</td></tr>
<tr><td>Standard deviation</td><td>7,3</td><td>6,1</td><td>1,1</td><td colspan="2">13,0</td><td>-</td></tr>
<tr><td>Nb of dose effects compared to 1000 g</td><td>1/3</td><td>1/5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr>
<tr><td>Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard</td><td>-</td><td>-</td><td>4 trials >
1 trial =
0 trial <</td><td>-</td><td>-</td><td>-</td></tr>
</table>

Tripleurospermum inodorum (MATIN)

Tripleurospermum inodorum was observed in 8 trials implemented in Poland (6), UK (1) and Hungary (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
Since *Tripleurospermum inodorum* was observed in only 1 trial of the Maritime and South-eastern EPPO zones, results obtained in UK and Hungary were reported in the Minor weed section.

Short-term effect (about 14-28 days after application)

Sufficient density of *Tripleurospermum inodorum* (6-14 plants/m²) was observed in 4 trials out of 6 which are considered valid for this assessment timing.

Table 3.2-143: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – MATIN

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14-28 days after application **Harmful organism:** MATIN					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values	-	4	4	3	1
	Minimum value	-	45,0	50,0	52,5	
	Maximum value	-	84,0	86,0	88,0	
	Mean	-	**74,3**	**77,0**	**77,6**	
	Standard deviation	-	19,5	18,0	16,8	
	Number of values	3	3	3	3	-
	Minimum value	70,0	84,0	86,0	85,0	-
	Maximum value	80,0	84,0	86,0	88,0	-
	Mean	**76,7**	**84,0**	**86,0**	**86,0**	-
	Standard deviation	5,8	0,0	0,0	1,7	-
	Nb of **dose effects** compared to 1000 g	1/3	0/4	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = (3 num) 0 trial <	-	-

Long-term effect (about 28-42 days after application)

Sufficient density of *Tripleurospermum inodorum* (6-17 plants/m²) was observed in 4 trials out of 6 which are considered valid for this assessment timing.

Table 3.2-144: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – MATIN

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28-42 days after application **Harmful organism:** MATIN					
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba

	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	4 90,0 100,0 **92,5** 5,0	4 95,0 100,0 **96,3** 2,5	3 95,0 100,0 **96,3** 2,5	1
	Number of values Minimum value Maximum value Mean Standard deviation	3 85,0 90,0 **88,3** 2,9	3 90,0 90,0 **90,0** 0,0	3 95,0 95,0 **95,0** 0,0	3 95,0 95,0 **95,0** 0,0	- - - - -
	Nb of **dose effects** compared to 1000 g	0/3	0/4	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 4 trials = (3 num) 0 trial <	-	-

Papaver rhoeas (PAPRH)

Papaver rhoeas was observed in 11 trials implemented in Poland (10) and Hungary (1), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.
Since *Papaver rhoeas* was observed in only 1 trial of the South-eastern EPPO zone, results obtained in Hungary were reported in the Minor weed section.

<u>Short-term effect (about 11-28 days after application)</u>

Sufficient density of *Papaver rhoeas* (5-18 plants/m²) was observed in 9 trials out of 10 which are considered valid for this assessment timing.

Table 3.2-145: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – PAPRH

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 11-28 days after application **Harmful organism:** PAPRH					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	9 20,0 94,5 **72,8** 27,8	9 27,5 96,5 **74,7** 26,6	2 22,5 90,8 **72,3** 27,8	7
	Number of values Minimum value Maximum value Mean Standard deviation	7 11,3 91,3 **74,5** 28,4	7 20,0 90,0 **75,8** 25,2	7 27,5 90,0 **78,0** 22,8	2 22,5 90,8 **72,3** 27,8	5
	Nb of **dose effects** compared to 1000 g	1/7	0/9	-	-	-
	Nb of trials where	-	-	2 trials >	-	-

	MT-565SG-OR2-C is >, = or < compared to standard			7 trials = (2 num) 0 trial <		

Long-term effect (about 25-42 days after application)

Sufficient density of *Papaver rhoeas* (5-18 plants/m²) was observed in all 10 trials which are considered valid for this assessment timing.

Table 3.2-146: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – PAPRH

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 25-42 days after application **Harmful organism:** PAPRH					
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	600 + 80 g
NORTH EASTERN EPPO ZONE						
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	10 27,5 100,0 **88,4** 22,2	10 25,0 100,0 **89,3** 23,0	3 83,8 100,0 **93,3** 6,7	7
	Number of values Minimum value Maximum value Mean Standard deviation	8 73,8 100,0 **93,4** 8,9	8 81,3 100,0 **94,7** 6,3	8 86,3 100,0 **96,2** 4,6	3 83,8 100,0 **95,1** 5,1	5
	Nb of **dose effects** compared to 1000 g	1/8	0/10	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 8 trials = (3 num) 1 trial <	-	-

Polygonum aviculare (POLAV)

Polygonum aviculare was observed in 2 trials all implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on oat.

Short-term effect (about 14 days after application)

Sufficient density of *Polygonum aviculare* (6 plants/m²) was observed in all 2 trials which are considered valid for this assessment timing.

Table 3.2-147: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – POLAV

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14 days after application **Harmful organism:** POLAV				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**

	Active ingredient **Dose FP** **kg or l/ha** **Dose g a.i./ha**	MCPA + Tribenuron methyl 600 g 50 ml/100 l 330 + 9 g	MCPA + Tribenuron methyl 800 g 50 ml/100 l 440 + 12 g	MCPA + Tribenuron methyl 1000 g 50 ml/100 l 550 + 15 g	MCPA + Dicamba 2 l 600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 32,5 45,0 **38,8** 8,8	2 38,8 50,0 **44,4** 7,9	2 42,5 52,5 **47,5** 7,1	2 42,5 57,5 **50,0** 10,6
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 28 days after application)

Sufficient density of *Polygonum aviculare* (6 plants/m²) was observed in all 2 trials which are considered valid for this assessment timing.

Table 3.2-148: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – POLAV

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28 days after application **Harmful organism:** POLAV				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient **Dose FP** **kg or l/ha** **Dose g a.i./ha**	MCPA + Tribenuron methyl 600 g 50 ml/100 l 330 + 9 g	MCPA + Tribenuron methyl 800 g 50 ml/100 l 440 + 12 g	MCPA + Tribenuron methyl 1000 g 50 ml/100 l 550 + 15 g	MCPA + Dicamba 2 l 600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 85,0 87,5 **86,3** 1,8	2 88,8 95,0 **91,9** 4,4	2 93,8 97,5 **95,7** 2,6	2 92,5 100,0 **96,3** 5,3
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Fallopia convolvulus (POLCO)

Fallopia convolvulus was observed in 10 trials all implemented in Poland (2), Germany (3), UK (2) and Hungary (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley, spring wheat and oat.

Short-term effect (about 12-20 days after application)

At the first spring assessment, sufficient density of *Fallopia convolvulus* (6-28.4 plants/m²) was observed in 9 trials out of 10 which are considered valid for this assessment timing.

Table 3.2-149: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – POLCO

Trial timing: Spring
Crops: Spring cereals
Assessment timing: 12-20 days after application
Harmful organism: POLCO

	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**U46M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	Tribenuron-methyl MCPA	MCPA + Dicamba
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 g	1650 g	15 g 549,75 g	600 + 80 g
NORTH-EASTERN EPPO ZONE								
Data grouping (PL)	Number of values	2	2	2	-	-	-	2
	Minimum value	83,8	81,3	83,8	-	-	-	82,5
	Maximum value	90,0	90,0	90,0	-	-	-	90,0
	Mean	**86,9**	**85,7**	**86,9**	**-**	**-**	**-**	**86,3**
	Standard deviation	4,4	6,2	4,4	-	-	-	5,3
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = (1 num) 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
Data grouping (DE, UK)	Number of values	-	4	4	2	2	-	-
	Minimum value	-	15,0	15,0	5,0		-	-
	Maximum value	-	85,0	80,0	70,0		-	-
	Mean	**-**	**49,4**	**55,0**	**46,3**		**-**	**-**
	Standard deviation	-	29,5	28,2	33,6		-	-
	Number of values	2	2	2	1	1	-	-
	Minimum value	60,0	57,5	67,5	70,0		-	-
	Maximum value	81,3	85,0	80,0	80,0		-	-
	Mean	**70,6**	**71,3**	**73,8**	**75,0**		**-**	**-**
	Standard deviation	15,0	19,4	8,8	7,1		-	-
	Nb of **dose effects** compared to 1000 g	0/2	1/4	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 3 trials = 0 trial <	-	-	-	-
SOUTH EASTERN EPPO ZONE								
Data grouping (HU)	Number of values	3	3	3	-	-	3	-
	Minimum value	47,5	55,0	55,0	-	-	50,0	-
	Maximum value	70,0	79,0	89,5	-	-	86,5	-
	Mean	**60,7**	**68,4**	**73,2**	**-**	**-**	**67,2**	**-**
	Standard deviation	11,7	12,3	17,3	-	-	18,3	-
	Nb of **dose effects** compared to 1000 g	1/3	0/3	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-	-	-	-
POLAND + GERMANY								
Data grouping (PL, DE)	Number of values	-	4	4	2	-	-	2
	Minimum value	-	40,0	57,5	22,5			
	Maximum value	-	90,0	90,0	90,0			

	Mean Standard deviation	- -	**67,2** 22,7	**74,7** 14,9	**66,3** 30,3			
	Number of values	3	3	3	1	-	-	2
	Minimum value Maximum value Mean Standard deviation	60,0 90,0 **77,9** 15,8	57,5 90,0 **76,3** 16,8	67,5 90,0 **80,4** 11,6	70,0 90,0 **80,8** 10,1			
	Nb of **dose effects** compared to 1000 g	0/3	1/4	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 3 trials = (1 num) 0 trial <	-	-	-	-

Long-term effect (about 24-34 days after application)

At the second spring assessment, sufficient density of *Fallopia convolvulus* (6-29.6 plants/m²) was observed in 9 trials out of 10 which are considered valid for this assessment timing.

Table 3.2-150: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – POLCO

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 24-34 days after application **Harmful organism:** POLCO							
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**U46M-Fluid**	**Agritox**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	Tribenuron-methyl MCPA	MCPA + Dicamba
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	1,5 l	3,3 l	30 g 733 ml 100 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	750 g	1650 g	15 g 549,75 g	600 + 80 g
NORTH-EASTERN EPPO ZONE								
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	2 88,8 92,5 **90,7** 2,6	2 90,0 92,5 **91,3** 1,8	2 90,0 96,0 **93,0** 4,2	- - - - -	- - - - -	- - - - -	2 91,3 96,0 **93,7** 3,3
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
	Number of values	-	3	3	1	2	-	-
	Minimum value Maximum value Mean Standard deviation	- - - -	86,3 96,5 **90,9** 5,2	87,5 98,5 **92,0** 5,8	22,5 98,8 **70,4** 41,7		- - - -	- - - -
Data grouping (DE, UK)	Number of values	2	2	2	1	1	-	-
	Minimum value Maximum value Mean Standard deviation	90,0 97,0 **93,5** 4,9	90,0 96,5 **93,3** 4,6	90,0 98,5 **94,3** 6,0	90,0 98,8 **94,4** 6,2		- - - -	- - - -
	Nb of **dose effects** compared to 1000 g	0/2	0/4	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 2 trials = 0 trial <	-	-	-	-

SOUTH EASTERN EPPO ZONE								
Data grouping (HU)	Number of values Minimum value Maximum value Mean Standard deviation	3 58,8 87,3 **70,8** 14,8	3 68,8 81,3 **74,2** 6,4	3 71,3 89,8 **77,9** 10,4	- - - - -	- - - - -	3 71,3 87,5 **78,8** 8,2	- - - - -
	Nb of **dose effects** compared to 1000 g	1/3	1/3	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-	-	-
POLAND + GERMANY								
Data grouping (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 90,0 96,5 **93,0** 3,3	3 90,0 98,5 **94,8** 4,4	1 91,3 98,8 **95,4** 3,8	-	-	2
	Number of values Minimum value Maximum value Mean Standard deviation	3 88,8 97,0 **92,8** 4,1	3 90,0 96,5 **93,0** 3,3	3 90,0 98,5 **94,8** 4,4	1 91,3 98,8 **95,4** 3,8	-	-	2
	Nb of **dose effects** compared to 1000 g	0/3	0/4	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-	-	-

Persicaria maculosa (POLPE)

Persicaria maculosa was observed in 2 trials implemented in United kingdoms, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley.

<u>Short-term effect (about 12-13 days after application)</u>

Sufficient density of *Persicaria maculosa* (29.2 – 49.6 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-151: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – POLPE

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-13 days after application **Harmful organism:** POLPE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	1650 g
MARITIME EPPO ZONE					
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	2 37,5 41,3 **39,4** 2,7	2 27,5 37,5 **32,5** 7,1	2 53,8 56,3 **55,1** 1,8	2 5,5 48,8 **27,2** 30,6
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

<u>Long-term effect (about 26-27 days after application)</u>

At the second spring assessment, sufficient density of *Persicaria maculosa* (32-49.6 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-152: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – POLPE

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 26-27 days after application **Harmful organism:** POLPE				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	1650 g
MARITIME EPPO ZONE					
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	2 33,8 57,5 **45,7** 16,8	2 23,8 71,3 **47,6** 33,6	2 66,3 88,8 **77,6** 15,9	2 8,8 77,5 **43,2** 48,6
	Nb of **dose effects** compared to 1000 g	2/2	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Sinapis arvensis (SINAR)

Sinapis arvensis was observed in 18 trials implemented in Poland (12), UK (1), Germany (1) and Romania (4), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on winter wheat, winter barley and oat.
In the South-eastern EPPO zone, 3 trials out of 4 did not present sufficient density at application / assessment and were therefore automatically excluded from the analysis.
Since *Sinapis arvensis* was observed in only 1 valid trial of the South-eastern EPPO zone, results obtained in Hungary were reported in the Minor weed section.

<u>Short-term effect (about 11-23 days after application)</u>

Sufficient density of *Sinapis arvensis* (5-67.7 plants/m²) was observed in 14 trials which are considered valid for this assessment timing.

Table 3.2-153: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – SINAR

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 11-23 days after application **Harmful organism:** SINAR							
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**
Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba	MCPA	MCPA
Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	2 l	1,5 l	3,3 l

	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	600 + 80 g	750 g	1650 g
NORTH EASTERN EPPO ZONE								
Data grouping (PL)	Number of values	-	12	12	3	9	-	-
	Minimum value	-	35,0	37,5	37,5		-	-
	Maximum value	-	90,0	93,8	90,0		-	-
	Mean	-	**75,4**	**78,1**	**71,5**		-	-
	Standard deviation	-	18,6	17,4	19,8		-	-
	Number of values	9	9	9	3	6	-	-
	Minimum value	25,0	35,0	37,5	37,5		-	-
	Maximum value	90,0	90,0	90,0	90,0		-	-
	Mean	**73,3**	**76,3**	**78,0**	**73,6**		-	-
	Standard deviation	23,2	20,6	19,2	21,2		-	-
	Nb of **dose effects** compared to 1000 g	2/9	1/12	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > 7 trials = (3 num) 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
Data grouping (DE, UK)	Number of values	2	2	2	-	-	1	1
	Minimum value	52,5	52,5	52,5	-	-	38,8	
	Maximum value	75,0	77,5	85,0	-	-	82,5	
	Mean	**63,8**	**65,0**	**68,8**	-	-	**60,6**	
	Standard deviation	15,9	17,7	23,0	-	-	30,9	
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
POLAND + GERMANY								
Data grouping (PL, DE)	Number of values	-	13	13	3	9	1	0
	Minimum value	-	35,0	37,5	37,5			
	Maximum value	-	90,0	93,8	90,0			
	Mean	-	**75,6**	**78,6**	**72,3**			
	Standard deviation	-	17,8	16,8	19,2			
	Number of values	10	10	10	3	6	1	0
	Minimum value	25,0	35,0	37,5	37,5			
	Maximum value	90,0	90,0	90,0	90,0			
	Mean	**73,5**	**76,4**	**78,7**	**75,6**			
	Standard deviation	21,9	19,4	18,2	19,2			
	Nb of **dose effects** compared to 1000 g	2/10	1/13	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	5 trials > 8 trials = (3 num) 0 trial <	-	-	-	-

Long-term effect (about 24-37 days after application)

Sufficient density of *Sinapis arvensis* (5-75 plants/m²) was observed in 14 trials which are considered valid for this assessment timing.

Table 3.2-154: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – SINAR

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 24-37 days after application **Harmful organism:** SINAR							
Treatment	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**MT-565SG-OR2-C**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**	**U46M-Fluid**	**Agritox**

		SarBio 90 EC	**SarBio 90 EC**	**SarBio 90 EC**				
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba	MCPA	MCPA
	Dose FP	600 g	800 g	1000 g				
	kg or l/ha	50 ml/100 l	50 ml/100 l	50 ml/100 l	0,75 l	2 l	1,5 l	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	600 + 80 g	750 g	1650 g
NORTH EASTERN EPPO ZONE								
Data grouping (PL)	Number of values	-	12	12	3	9	-	-
	Minimum value	-	83,8	87,5	82,5		-	-
	Maximum value	-	100,0	100,0	100,0		-	-
	Mean	-	**95,9**	**96,7**	**95,5**		-	-
	Standard deviation	-	5,0	3,6	5,6		-	-
	Number of values	9	9	9	3	6	-	-
	Minimum value	73,8	83,8	87,5	86,3		-	-
	Maximum value	99,0	100,0	100,0	100,0		-	-
	Mean	**93,5**	**96,0**	**96,4**	**96,5**		-	-
	Standard deviation	8,1	5,0	3,9	4,5		-	-
	Nb of **dose effects** compared to 1000 g	2/9	0/12	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 11 trials = (3 num) 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
Data grouping (DE, UK)	Number of values	2	2	2	-	-	1	1
	Minimum value	90,0	90,0	90,0	-	-	90,0	
	Maximum value	100,0	100,0	100,0	-	-	100,0	
	Mean	**95,0**	**95,0**	**95,0**	-	-	**95,0**	
	Standard deviation	7,1	7,1	7,1	-	-	7,1	
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
POLAND + GERMANY								
Data grouping (PL, DE)	Number of values	-	13	13	3	9	1	0
	Minimum value	-	83,8	87,5	82,5			
	Maximum value	-	100,0	100,0	100,0			
	Mean	-	**96,2**	**96,9**	**95,9**			
	Standard deviation	-	4,9	3,6	5,5			
	Number of values	10	10	10	3	6	1	0
	Minimum value	73,8	83,8	87,5	86,3			
	Maximum value	100,0	100,0	100,0	100,0			
	Mean	**94,2**	**96,4**	**96,8**	**96,7**			
	Standard deviation	7,9	4,9	3,9	4,2			
	Nb of **dose effects** compared to 1000 g	2/10	0/13	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 12 trials = (3 num) 0 trial <	-	-	-	-

Stellaria media (STEME)

Stellaria media was observed in 13 trials implemented in Poland (5), UK (4) and Germany (4), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

<u>Short-term effect (about 12-23 days after application)</u>

At the first spring assessment, sufficient density of *Stellaria media* (6-70.4 plants/m²) was observed in 11 trials which are considered valid for this assessment timing.

Table 3.2-155: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – STEME

Trial timing: Spring
Crops: Spring cereals
Assessment timing: 12-23 days after application
Harmful organism: STEME

	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA
	Dose FP	600 g	800 g	1000 g			
	kg or l/ha	50 ml/100 l	50 ml/100 l	50 ml/100 l	0,75 l	1500 ml	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	1650 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	5	5	5	5	-	-
	Minimum value	62,0	68,0	68,0	72,0	-	-
	Maximum value	82,0	86,0	88,0	88,0	-	-
	Mean	**72,8**	**81,6**	**82,8**	**83,6**	-	-
	Standard deviation	8,2	7,7	8,4	6,7	-	-
	Nb of **dose effects** compared to 1000 g	2/5 (2 num)	0/5	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = (5 num) 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE, UK)	Number of values	-	6	6	-	2	4
	Minimum value	-	23,8	42,5	-	6,3	
	Maximum value	-	100,0	100,0	-	100,0	
	Mean	-	**59,0**	**64,2**	-	45,4	
	Standard deviation	-	25,4	22,1	-	34,6	
	Number of values	4	4	4	-	1	3
	Minimum value	37,5	23,8	52,5	-	6,3	
	Maximum value	100,0	100,0	100,0	-	100,0	
	Mean	**57,5**	**57,5**	**65,0**	-	**45,4**	
	Standard deviation	29,3	31,6	23,4	-	34,6	
	Nb of **dose effects** compared to 1000 g	1/4	1/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 2 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (DE, PL)	Number of values	-	7	7	5	2	-
	Minimum value	-	68,0	68,0	65,0		-
	Maximum value	-	100,0	100,0	100,0		-
	Mean	-	**82,9**	**85,2**	**83,3**		-
	Standard deviation	-	10,4	9,5	11,5		-
	Number of values	6	6	6	5	1	0
	Minimum value	62,0	68,0	68,0	72,0		-
	Maximum value	100,0	100,0	100,0	100,0		-
	Mean	**77,3**	**84,7**	**85,7**	**86,3**		-
	Standard deviation	13,3	10,2	10,3	9,0		-
	Nb of **dose effects** compared to 1000 g	2/6 (2 num)	0/7	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to	-	-	0 trial > 7 trials = (5 num) 0 trial <	-	-	-

	standard						

Long-term effect (about 24-37 days after application)

At the second spring assessment, sufficient density of *Stellaria media* (6-70.4 plants/m²) was observed in 11 trials which are considered valid for this assessment timing.

Table 3.2-156: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – STEME

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 24-37 days after application **Harmful organism:** STEME						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA
	Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	1500 ml 750 g	3,3 l 1650 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values Minimum value Maximum value Mean Standard deviation	5 85,0 95,0 **90,0** 5,0	5 90,0 95,0 **93,0** 2,7	5 95,0 95,0 **95,0** 0,0	5 95,0 95,0 **95,0** 0,0	- - - - -	- - - - -
	Nb of **dose effects** compared to 1000 g	0/5	0/5	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 5 trials = (5 num) 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE, UK)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	6 35,0 100,0 **77,1** 29,2	6 60,0 100,0 **85,9** 16,5	- - - - -	2 18,0 100,0 70,5 32,0	4
	Number of values Minimum value Maximum value Mean Standard deviation	4 23,8 100,0 **61,9** 38,7	4 35,0 100,0 **67,5** 32,3	4 60,0 100,0 **80,3** 18,0	- - - - -	1 18,0 100,0 **70,5** 32,0	3
	Nb of **dose effects** compared to 1000 g	2/4	2/6	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	3 trials > 3 trials = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (DE, PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	7 90,0 100,0 **95,0** 4,1	7 95,0 100,0 **96,4** 2,4	5 95,0 100,0 **96,4** 2,4	2	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	6 85,0 100,0 **91,7** 6,1	6 90,0 100,0 **94,2** 3,8	6 95,0 100,0 **95,8** 2,0	5 95,0 100,0 **95,8** 2,0	1	0 - - - -
	Nb of **dose effects** compared to 1000	0/6	0/7	-	-	-	-

	g							
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 7 trials = (5 num) 0 trial <	-	-	-	

Thlaspi arvense (THLAR)

Thlaspi arvense was observed in 2 trials implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley and oat.

Short-term effect (about 14 days after application)

Sufficient density of *Thlaspi arvense* (5-6 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-157: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – THLAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14 days after application **Harmful organism:** THLAR				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Tribe-nuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping (PL)	Number of values	2	2	2	2
	Minimum value	25,0	32,5	37,5	37,5
	Maximum value	91,3	91,3	90,0	90,0
	Mean	**58,2**	**61,9**	**63,8**	**63,8**
	Standard deviation	46,9	41,6	37,1	37,1
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-

Long-term effect (about 24-28 days after application)

Sufficient density of *Thlaspi arvense* (5-7 plants/m²) was observed in both trials which are considered valid for this assessment timing.

Table 3.2-158: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – THLAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 24-28 days after application **Harmful organism:** THLAR				
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
NORTH-EASTERN EPPO ZONE					
Data grouping	Number of values	2	2	2	2

(PL)	Minimum value Maximum value Mean Standard deviation	67,5 77,5 **72,5** 7,1	67,5 87,5 **77,5** 14,1	72,5 92,0 **82,3** 13,8	91,3 92,0 **91,7** 0,5
	Nb of **dose effects** compared to 1000 g	1/2	1/2	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Veronica sp. (VERAR / VERHE / VERPE)

Veronica species was observed in 8 trials all implemented in Poland, investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

<u>Short-term effect (about 13-28 days after application)</u>

At the first spring assessment, sufficient density of *Veronica* species (6-8 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.

Table 3.2-159: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – VERAR/VERHE/VERPE

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 13-28 days after application **Harmful organism:** VERAR-VERHE-VERPE					
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
		Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	VERAR	Number of values Mean	5 **63,8**	5 **69,2**	5 **69,2**	5 **71,6**	- -
	VERHE	Number of values Mean	1 **12,5**	1 **22,5**	1 **27,5**	- -	1 **25,0**
	VERPE	Number of values Mean	- -	2 **32,5**	2 **35,1**	- -	2 **36,3**
		Number of values Mean	1 **61,3**	1 **65,0**	1 **66,3**	- -	1 **70,0**
	VERAR-VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	8 0,0 70,0 **54,2** 27,2	8 3,8 70,0 **55,5** 25,4	5 2,5 72,0 **56,9** 27,3	3
		Number of values Minimum value Maximum value Mean Standard deviation	7 12,5 66,0 **56,1** 19,4	7 22,5 70,0 **61,9** 17,5	7 27,5 70,0 **62,8** 15,6	5 25,0 72,0 **64,7** 17,5	2
		Nb of **dose effects** compared to 1000 g	1/7	0/8	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 8 trials = 0 trial <	-	-

<u>Long-term effect (about 28-42 days after application)</u>

At the second spring assessment, sufficient density of *Veronica* species (6-8 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.

Table 3.2-160: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – VERAR/VERHE/VERPE

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 28-42 days after application **Harmful organism:** VERAR-VERHE-VERPE					
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**Chwastox Turbo 340 SL**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA + Dicamba
		Dose FP **kg or l/ha** **Dose g a.i./ha**	600 g 50 ml/100 l 330 + 9 g	800 g 50 ml/100 l 440 + 12 g	1000 g 50 ml/100 l 550 + 15 g	0,75 l 562,5 g	2 l 600 + 80 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	VERAR	Number of values Mean	5 **75,8**	5 **79,0**	5 **82,4**	5 **81,0**	- -
	VERHE	Number of values Mean	1 **70,5**	1 **75,2**	1 **82,6**	- -	1 **81,3**
	VERPE	Number of values Mean	- -	2 **55,0**	2 **54,4**	- -	2 **52,6**
		Number of values Mean	1 **87,5**	1 **90,0**	1 **88,8**	- -	1 **88,8**
	VERAR-VERHE-VERPE	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	8 20,0 90,0 **72,5** 21,9	8 20,0 90,0 **75,4** 22,9	5 (Chwastox) / 3 (Turbo) 16,3 88,8 **73,9** 23,6	
		Number of values Minimum value Maximum value Mean Standard deviation	7 70,0 87,5 **76,7** 6,9	7 75,0 90,0 **80,0** 5,7	7 75,0 90,0 **83,3** 5,2	5 (Chwastox) / 2 (Turbo) 78,0 88,8 **82,2** 4,0	
		Nb of **dose effects** compared to 1000 g	3/7 (2 num)	0/8	-	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 8 trials = 0 trial <	-	-

Viola arvensis (VIOAR)

Viola arvensis was observed in 13 trials implemented in Poland (10) and Germany (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring wheat, spring barley and oat.

<u>Short-term effect (about 14-21 days after application)</u>

At the first spring assessment, sufficient density of *Viola arvensis* (5-107.2 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.
One trial performed in Germany was excluded due to the low and unexpected performance of the reference product U46M-fluid.

Table 3.2-161: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – VIOAR

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 14-21 days after application **Harmful organism:** VIOAR						
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA + Dicamba
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	1,5 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	600 + 80 g
NORTH EASTERN EPPO ZONE							
Data group-ing (PL)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	10 2,5 80,0 **55,4** 26,2	10 3,8 82,5 **59,5** 25,9	2	- 7,5 82,5 **58,1** 24,3	8
	Number of values Minimum value Maximum value Mean Standard deviation	7 32,5 73,8 **55,9** 16,1	7 33,8 80,0 **64,1** 18,7	7 36,3 82,5 **66,3** 19,2	2	 33,8 82,5 **66,0** 19,0	5
	Nb of **dose effects** compared to 1000 g	4/7	1/10	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 9 trials = (2 num) 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data group-ing (DE)	Number of values Minimum value Maximum value Mean Standard deviation	2 65,0 82,5 **73,8** 12,4	2 67,5 92,5 **80,0** 17,7	2 75,0 93,8 **84,4** 13,3	- - - - -	2 52,5 75,0 **63,8** 15,9	- - - - -
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data group-ing (PL, DE)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	12 2,5 92,5 **59,5** 26,1	12 3,8 93,8 **63,7** 25,7	2	2 7,5 82,5 **59,0** 22,6	8
	Number of values Minimum value Maximum value Mean Standard deviation	9 32,5 82,5 **59,9** 16,6	9 33,8 92,5 **67,7** 18,7	9 36,3 93,8 **70,3** 19,0	2	2 33,8 82,5 **65,5** 17,4	5
	Nb of **dose effects** compared to 1000 g	5/9	1/12	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 10 trials = (2 num) 0 trial <	-	-	-

Long-term effect (about 22-35 days after application)

At the second spring assessment, sufficient density of *Viola arvensis* (5-90 plants/m²) was observed in all 8 trials which are considered valid for this assessment timing.
One trial performed in Germany was excluded due to the low and unexpected performance of the reference product U46M-fluid.

Table 3.2-162: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – VIOAR

Trial timing: Spring
Crops: Spring cereals
Assessment timing: 22-35 days after application
Harmful organism: VIOAR

	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox 750 SL**	**U46M-Fluid**	**Chwastox Turbo 340 SL**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA	MCPA	MCPA + Dicamba
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	0,75 l	1,5 l	2 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	562,5 g	750 g	600 + 80 g
NORTH EASTERN EPPO ZONE							
Data grouping (PL)	Number of values	-	10	10	2	-	8
	Minimum value	-	52,5	57,5		62,5	
	Maximum value	-	99,0	98,8		99,0	
	Mean	-	**79,3**	**82,7**		**82,1**	
	Standard deviation	-	14,9	12,6		12,4	
	Number of values	7	7	7	2		5
	Minimum value	56,3	67,5	75,0		72,5	
	Maximum value	99,3	98,5	97,8		99,0	
	Mean	**76,7**	**81,6**	**84,7**		**84,6**	
	Standard deviation	14,0	11,2	8,9		8,8	
	Nb of **dose effects** compared to 1000 g	3/7	1/10	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 9 trials = (2 num) 0 trial <	-	-	-
MARITIME EPPO ZONE							
Data grouping (DE)	Number of values	2	2	2	-	2	-
	Minimum value	85,0	90,0	94,5	-	65,0	-
	Maximum value	92,5	91,3	97,5	-	80,0	-
	Mean	**88,8**	**90,7**	**96,0**	-	**72,5**	-
	Standard deviation	5,3	0,9	2,1	-	10,6	-
	Nb of **dose effects** compared to 1000 g	0/2	0/2	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 0 trial = 0 trial <	-	-	-
POLAND + GERMANY							
Data grouping (PL, DE)	Number of values	-	12	12	2	2	8
	Minimum value	-	52,5	57,5		62,5	
	Maximum value	-	99,0	98,8		99,0	
	Mean	-	**81,2**	**84,9**		**80,5**	
	Standard deviation	-	14,2	12,5		12,2	
	Number of values	9	9	9	2	2	5
	Minimum value	56,3	67,5	75,0		65,0	
	Maximum value	99,3	98,5	97,8		99,0	
	Mean	**79,4**	**83,6**	**87,2**		**81,9**	
	Standard deviation	13,3	10,5	9,2		10,0	
	Nb of **dose effects** compared to 1000 g	3/9	1/12	-	-	-	-
	Nb of trials where MT-565SG-OR2-	-	-	3 trials > 9 trials = (2	-	-	-

	C is >, = or < compared to standard			num) 0 trial <			

Xanthium orientale / Xanthium strumarium (XANOR / XANST)

Xanthium orientale / Xanthium strumarium was observed in 3 trials implemented in Romania (3), investigating the minimum effective dose and effectiveness of MT-565SG-OR2-C applied in spring on spring barley.

Short-term effect (about 12-13 days after application)

Sufficient density of *Xanthium orientale / Xanthium strumarium* (18.5-22.25 plants/m² or 6% ground cover) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-163: Grouped data – Efficacy trials – Spring application / Spring cereals – Short-term effect – XANOR/XANST

		Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-13 days after application **Harmful organism:** XANOR-XANST				
		Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**
		Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba
		Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l
		Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g
SOUTH-EASTERN EPPO ZONE						
Data grouping (RO)	XANOR	Number of values Mean	2 **40,6**	2 **50,0**	2 **53,1**	2 **45,6**
	XANST	Number of values Mean	1 **80,0**	1 **76,3**	1 **80,0**	1 **80,0**
	XANOR-XANST	Number of values Minimum value Maximum value Mean Standard deviation	3 31,3 80,0 **53,8** 24,6	3 47,5 76,3 **58,8** 15,4	3 47,5 80,0 **62,1** 16,5	3 30,0 80,0 **57,1** 25,3
		Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Long-term effect (about 23-25 days after application)

Sufficient density of *Xanthium orientale / Xanthium strumarium* (18.5-22.25 plants/m² or 6% ground cover) was observed in all 3 trials which are considered valid for this assessment timing.

Table 3.2-164: Grouped data – Efficacy trials – Spring application / Spring cereals – Long-term effect – XANOR/XANST

Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 23-25 days after application **Harmful organism:** XANOR-XANST				
Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**

		Active ingredient **Dose FP** **kg or l/ha** **Dose g a.i./ha**	MCPA + Tribe-nuron methyl 600 g 50 ml/100 l 330 + 9 g	MCPA + Tribe-nuron methyl 800 g 50 ml/100 l 440 + 12 g	MCPA + Tribe-nuron methyl 1000 g 50 ml/100 l 550 + 15 g	MCPA + Dicam-ba 2 l 600 + 80 g
SOUTH-EASTERN EPPO ZONE						
Data grouping (RO)	XANOR	Number of values Mean	2 **73,1**	2 **85,0**	2 **86,9**	2 **78,1**
	XANST	Number of values Mean	1 **100,0**	1 **100,0**	1 **100,0**	1 **100,0**
	XANOR-XANST	Number of values Minimum value Maximum value Mean Standard deviation	3 67,5 100,0 **82,1** 16,5	3 83,8 100,0 **90,0** 8,8	3 86,3 100,0 **91,3** 7,6	3 63,8 100,0 **85,4** 19,1
		Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-
		Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 1 trial = 0 trial <	-

Minor weeds

Thirteen weeds were observed in 1 or 2 trials, were qualified as minor weeds and therefore data were grouped together. These weeds were: AMARE (*Amaranthus retroflexus*), AMBEL (*Ambrosia artemisiifolia*), ANGAR (*Anagallis arvensis*), CAPBP (*Capsella bursa-pastoris*), CIRAR (*Cirsium arvense*), CNISA (*Cannabis sativa*), FUMOF (*Fumaria officinalis*), LAMAM (*Lamium amplexicaule*), MATIN (*Tripleurospermum inodorum*), PAPRH (*Papaver rhoeas*), SINAR (*Sinapis arvensis*), SONOL (*Sonchus oleraceus*), VICIN (Vicia cracca subsp. Incana), VICVI (*Vicia villosa*).

Those weeds were observed over 17 trials implemented in the North-eastern (1), in Maritime (3) and South-eastern (13) EPPO zones.

A total of 2 trials out of 6 were excluded from the analysis due to the low weed pressure observed at application (2 trials implemented in Romania with SINAR).
In addition, one trial was excluded because of the low and unexpected efficacy of the reference product (1 trial implemented in Romania on VICVI).

<u>Short-term effect (about 12-15 days after application)</u>

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 12-15 days after application **Harmful organism:** Minor weeds							
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA	MCPA
	Dose FP **kg or l/ha**	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	30 g 733 ml 100 ml/100 l	15,1-16 g 580-587 ml	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	15 g 549,75 g	11,3-12 g 435-440 g	1650
NORTH EASTERN EPPO ZONE								
Data grouping (PL)	Number of values Minimum value Maximum value Mean	1 67,5 67,5 **67,5**	1 75,0 75,0 **75,0**	1 78,8 78,8 **78,8**	1 81,3 81,3 **81,3**	- - - -	- - - -	- - - -

	Standard deviation	-	-	-	-	-	-	-
	Nb of **dose effects** compared to 1000 g	1/1	0/1	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	2 38,8 81,3 **60,0** 30,0	2 57,5 85,0 **71,3** 19,4	2 60,0 80,0 **70,0** 14,1	- - - **-** -	- - - **-** -	- - - **-** -	2 53,8 80,0 **66,9** 18,5
	Nb of **dose effects** compared to 1000 g	1/2	0/2	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 2 trials = 0 trial <	-	-	-	-
SOUTH-EASTERN EPPO ZONE								
Data grouping (RO, HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	10 57,5 85,5 **71,5** 8,7	10 60,0 91,0 **76,5** 9,7	- - - **-** -	7 52,5 91,5 **72,9** 12,1	3	- - - **-** -
	Number of values Minimum value Maximum value Mean Standard deviation	8 50,0 87,5 **69,5** 12,3	8 57,5 85,5 **73,3** 8,9	8 60,0 91,0 **77,7** 10,6	- - - **-** -	5 52,5 91,5 **73,4** 13,6	3	- - - **-** -
	Nb of **dose effects** compared to 1000 g	4/8	2/10	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	2 trials > 8 trials = 0 trial <	-	-	-	-

Long-term effect (about 24-28 days after application)

	Trial timing: Spring **Crops:** Spring cereals **Assessment timing:** 24-28 days after application **Harmful organism:** Minor weeds							
	Treatment	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**MT-565SG-OR2-C SarBio 90 EC**	**Chwastox Turbo 340 SL**	**Granstar 50 SX Mecomorn 750 SL Trend 90**	**Rival Star 75 GD Dicopur M**	**Agritox**
	Active ingredient	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Tribenuron methyl	MCPA + Dicamba	Tribenuron-methyl MCPA	Tribenuron-methyl MCPA	MCPA
	Dose FP kg or l/ha	600 g 50 ml/100 l	800 g 50 ml/100 l	1000 g 50 ml/100 l	2 l	30 g 733 ml 100 ml/100 l	15,1-16 g 580-587 ml	3,3 l
	Dose g a.i./ha	330 + 9 g	440 + 12 g	550 + 15 g	600 + 80 g	15 g 549,75 g	11,3-12 g 435-440 g	1650
NORTH EASTERN EPPO ZONE								
Data grouping (PL)	Number of values Minimum value Maximum value Mean Standard deviation	1 90,0 90,0 **90,0** -	1 92,5 92,5 **92,5** -	1 92,5 92,5 **92,5** -	1 92,5 92,5 **92,5** -	- - - **-** -	- - - **-** -	- - - **-** -
	Nb of **dose effects** compared to 1000 g	0/1	0/1	-	-	-	-	-

	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 1 trial = 0 trial <	-	-	-	-
MARITIME EPPO ZONE								
Data grouping (UK)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	3 83,8 95,0 **90,5** 5,9	3 86,3 95,0 **90,1** 4,5	- - - - -	- - - - -	- - - - -	3 81,5 95,0 **86,3** 7,5
	Number of values Minimum value Maximum value Mean Standard deviation	2 62,5 95,0 **78,8** 23,0	2 83,8 95,0 **89,4** 7,9	2 86,3 95,0 **90,7** 6,2	- - - - -	- - - - -	- - - - -	2 82,5 95,0 **88,8** 8,8
	Nb of **dose effects** compared to 1000 g	1/2	0/3	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	0 trial > 3 trials = 0 trial <	-	-	-	-
SOUTH-EASTERN EPPO ZONE								
Data grouping (RO, HU)	Number of values Minimum value Maximum value Mean Standard deviation	- - - - -	10 70,0 100,0 **87,9** 11,2	10 73,8 100,0 **91,6** 10,3	- - - - -	7 72,5 100,0 **89,1** 9,7	3	- - - - -
	Number of values Minimum value Maximum value Mean Standard deviation	8 76,3 100,0 **88,0** 7,9	8 76,3 100,0 **92,0** 8,3	8 81,3 100,0 **95,7** 6,2	- - - - -	5 85,0 100,0 **93,0** 6,0	3	- - - - -
	Nb of **dose effects** compared to 1000 g	4/8	0/10	-	-	-	-	-
	Nb of trials where MT-565SG-OR2-C is >, = or < compared to standard	-	-	1 trial > 9 trials = 0 trial <	-	-	-	-

Conclusion – Spring application – spring cereals

The efficacy of MT-565SG-OR2-C applied after the emergence of spring cereals in spring was investigated over 35 different weeds in North-eastern, Maritime and South-eastern EPPO zones.

It has been previously demonstrated that the minimum effective dose of MT-565SG-OR2-C applied post-emergence of spring cereals in spring for the control of dicotyledonous weeds is 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl).

In the **North-eastern EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 21 different weeds for which valid trials are available.
In this pool of 21 different weeds, 18 are considered as major because they were observed in 2 trials and more. Conversely, 3 weeds / groups of weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in spring cereals, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 8 major weeds (ANTAR, BRSNA / BRSNS / BRSNW, CHEAL, LAMPU, MATIN, POLAV, SINAR, STEME)
- Good efficacy (85-94.9% efficacy) against 6 major weeds (CAPBP, CENCY, LYCAR, MATCH, PAPRH, POLCO)

- Acceptable efficacy (70-84.9% efficacy) against 3 major weeds (GALAP, VERAR, VIOAR)
- Limited efficacy (50-69.6% efficacy) against 1 major weed (VERPE)

In the **Maritime EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 17 different weeds for which valid trials are available.
In this pool of 17 different weeds, 11 are considered as major because they were observed in 2 trials and more. Conversely, 6 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in spring cereals, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 5 major weeds (BRSNA / BRSNS / BRSNW, CHEAL, FUMOF, SINAR, VIOAR)
- Good efficacy (85-94.9% efficacy) against 2 major weeds (POLCO, STEME)
- Acceptable efficacy (70-84.9% efficacy) against 4 major weeds (GAETE, MATCH, POLPE, THLAR)

In the **South-eastern EPPO zone**, the efficacy of MT-565SG-OR2-C was evaluated over 16 different weeds for which valid trials are available.
In this pool of 15 different weeds, 6 are considered as major because they were observed in 2 trials and more. Conversely, 9 weeds were considered as minor because they were observed in 1 trial only.
Against major weeds observed in spring cereals, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) reached several levels of efficacy:

- Very good efficacy (> 95% efficacy) against 2 major weeds (CHEAL, CHEHY)
- Good efficacy (85-94.9% efficacy) against 1 major weed (CONAR)
- Acceptable efficacy (70-84.9% efficacy) against 2 major weeds (BRSNA / BRSNS / BRSNW, POLCO)

Whatever the EPPO zone considered, MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) offered a very high control (> 95% efficacy) or a high control (85-94.9% efficacy) of the majority of weeds.

In **Poland and Germany**, MT-565SG-OR2-C applied at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) during spring on spring cereals provided a very good control of BRSNA / BRSNS / BRSNW, CAPBP, CHEAL, SINAR, STEME, a good control of CENCY, FUMOF, MATCHand POLCO, an acceptable control of VIOAR.

Consequently, it is justified to claim the registration of one application of MT-565SG-OR2-C at 1 kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) in spring on spring cereals for the control of dicotyledonous weeds.

Table 3.2-165: Efficacy evaluation – Summary – Spring application / spring cereals

Spring application **Spring cereals**	***North-eastern EPPO zone*** Second spring assessment			***Maritime EPPO zone*** Second spring assessment			***South-eastern EPPO zone*** Second spring assessment			***Special grouping - Poland + Germany*** Second spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
AMARE	-	-	-	-	-	-	1	1 kg/ha	100	-	-
AMBEL	-	-	-	-	-	-	1	1 kg/ha	76,3	-	-
ANGAR	-	-	-	-	-	-	1	1 kg/ha	100	-	-
ANTAR	2	0,6 kg/ha	98	-	-	-	-	-	-	-	-
BRSNA / BRSNS / BRSNW	11	0,6 kg/ha	96,3	2	0,8 kg/ha	95	2	1 kg/ha	83,5	13	96,1
CAPBP	9	0,6 kg/ha	94,8	1	0,6 kg/ha	100	1	1 kg/ha	95	10	95,3
CHEAL	14	0,8 kg/ha	95,7	3	0,6 kg/ha	95,4	3	0,6 kg/ha	98,2	15	95,6
CHEHY	-	-	-	-	-	-	2	0,6 kg/ha	98,8	-	-
CHEAL / CHEHY	-	-	-	-	-	-	*5*	*0,6 kg/ha*	*98,4*	*15*	*95,6*
CENCY	6	1 kg/ha	86,9	1	0,6 kg/ha	100	-	-	-	7	88,8
CIRAR	-	-	-	1	1 kg/ha	95	-	-	-	-	-
CNISA	-	-	-	-	-	-	1	1 kg/ha	73,8	-	-
CONAR	-	-	-	-	-	-	3	0,8 kg/ha	88,8	-	-
FUMOF	1	1 kg/ha	77,6	2	0,8 kg/ha	96,7	1	1 kg/ha	100	2	87,7
GAETE	-	-	-	2	1 kg/ha	76,3	-	-	-	-	-
GALAP	7	1 kg/ha	80,2	-	-	-	-	-	-	-	-
LAMAM	5	0,6 kg/ha	95	-	-	-	-	-	-	-	-
LAMPU	-	-	-	1	0,6 kg/ha	90	-	-	-	-	-
LAMAM / LAMPU	*5*	*0,6 kg/ha*	*95*	*1*	*0,6 kg/ha*	*90*	*1*	*1 kg/ha*	*81,25*	-	-
LYCAR	2	1 kg/ha	89,4	-	-	-	-	-	-	-	-
MATCH	4	0,6 kg/ha	93,4	2	1 kg/ha	81,4	-	-	-	5	88
MATIN	4	1 kg/ha	96,3	1	1 kg/ha	86,3	1	1 kg/ha	95	-	-
PAPRH	10	0,6 kg/ha	89,3	-	-	-	1	1 kg/ha	98	-	-
POLAV	2	0,8 kg/ha	95,7	-	-	-	-	-	-	-	-
POLCO	2	0,6 kg/ha	93	3	1 kg/ha	92	3	1 kg/ha	77,9	3	94.8
POLPE	-	-	-	2	1 kg/ha	77,6	-	-	-	-	-
SINAR	12	0,8 kg/ha	96,7	2	0,6 kg/ha	95	1	1 kg/ha	96,5	13	96,9
SONOL	-	-	-	1	1 kg/ha	89	-	-	-	-	-
STEME	5	0,6 kg/ha	95	6	1 kg/ha	85,9	-	-	-	7	96,4
THLAR	2	1 kg/ha	82,3				-	-	-	-	-
VERAR	5	0,6 kg/ha	82,4	-	-	-	-	-	-	-	-
VERHE	1	0,6 kg/ha	82,6	-	-	-	-	-	-	-	-

Spring application **Spring cereals**	***North-eastern EPPO zone*** Second spring assessment			***Maritime EPPO zone*** Second spring assessment			***South-eastern EPPO zone*** Second spring assessment			***Special grouping - Poland + Germany*** Second spring assessment	
Weeds / Group of weeds	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Min eff dose determined	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
VERPE	2	0,6 kg/ha	54,4	-	-	-	-	-	-	-	-
VERAR / VERHE / VERPE	*8*	*0,6 kg/ha*	*75,4*	-	-	-	-	-	-	-	-
VICIN	1	1 kg/ha	92,5	-	-	-	-	-	-	-	-
VIOAR	10	1 kg/ha	82,7	2	0,6 kg/ha	96	-	-	-	12	84,9
XANOR	-	-	-	-	-	-	2	0,8 kg/ha	86,9	-	-
XANST	-	-	-	-	-	-	1	0,8 kg/ha	100	-	-
XANOR / XANST	-	-	-	-	-	-	*3*	*0,8 kg/ha*	*91,3*	-	-

Dark green	Highly Susceptible (HS)	95-100%
Light green	Susceptible (S)	85-94,9%
Yellow	Moderately Susceptible (MS)	70-84,9%
Orange	Moderately Tolerant (MT)	50-69,9%
Red	Tolerant (T)	0-49,9%

3.2.3.4 Overall efficacy evaluation – Results and Conclusion

A total of 147 trials investigating the minimum effective dose and the effectiveness of MT-565SG-OR2-C (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl) against weeds were implemented in 2016, 2017 and 2018. Those trials were undertaken in winter wheat, winter barley, winter rye, win-ter triticale, spring wheat, spring barley and oat and located in the Maritime EPPO zone (Germany and United Kingdom), in the North-Eastern EPPO zone (Poland) and in the South-Eastern EPPO zone (Hungary and Romania). Data were split into 3 uses: autumn application on winter cereals (wheat, barley, rye and triticale), spring application on winter cereals (wheat, barley, rye and triticale) and spring application on spring cereals (wheat, barley and oat). An additional data grouping was made for Poland and Ger-many as a neighbouring countries with similar agronomic and climatic conditions within the Central Zone. Consequently, it is reasonable to regard data package as mutually admissible and supportive.

All efficacy trials conducted in spring were performed with the use of adjuvant, however MT-565SG-OR2-C is intended to be applied without an adjuvant. That recommendation is based on presented bridging trials, confirming that application of MT-565SG-OR2-C in combination with an adjuvant do not improve its effectiveness against weeds in spring, therefore it is justified to use available data set to support registration of MT-565SG-OR2 in Central Zone in winter and spring cereals at target dose 1,0 kg/ha without use of an adjuvant.

It has been demonstrated that the minimum effective dose of MT-565SG-OR2-C applied post-emergence of winter and spring cereals in spring and autumn for the control of dicotyledonous weeds is 1,0 kg/ha, when compared with lower tested rates (0,8 kg/ha or 0,6 kg/ha) for which effi-cacy obtained was lower and less consistent. Therefore the dose of 1,0 kg/ha provided the optimum overall control and should be considered as effective against targeted weed species, for which ac-tivity of MT-565SG-OR2-C is claimed.

The efficacy of MT-565SG-OR2-C was investigated over 50 different weed species in all EPPO zones. Whatever the EPPO zone considered, application timing or crops, MT-565SG-OR2-C at 1,0 kg/ha achieved a very high control (> 95% efficacy) or a high control (85-94.9% efficacy) against the majority of weeds. The summarized results are presented in the following Tables 6.2 268-269.

As the amount of shading of the weeds caused by the crop plants is closely similar in all cereal crops and EPPO Zones, the applicant proposes that results should be grouped by target species and application rate, rather than by whether the crop was planted in spring or autumn or whether in North-Eastern, Maritime or South-Eastern Zone. The control achieved by the product is related to the size and infestation of the weeds at application, which is a constant regardless of the date or place of planting. The applicant therefore believes that there is no reason to compare the efficacy achieved in different crops within the categories of autumn or spring-sown cereals and in different EPPO Zones as well.

The use of data from all EPPO Zones to support an application for approval is relevant for the fol-lowing reasons:

- The climate in North-Eastern, Maritime and South-Eastern Zone, where the trials took place, is nowadays comparable.
- The agronomic factors influencing the cereal crops and weeds are similar in all EPPO Zones. This is indicated by the common planting seen in this series of trials.
- The biology and epidemiology of the weed species is the same in all regions of the EU.
- The weed incidence and the relative severity of infestation are similar in trials conducted in North-Eastern, Maritime or South-Eastern Zone

Consequently, it is reasonable to regard the performance of products in all the trials as being indica-tive of their performance in each EPPO Zone.

The control achieved by the product is related to the size and infestation of the weeds at applica-tion, which is a constant regardless of the date of planting or the EPPO Zone and was confirmed in trial series submitted by the applicant. The applicant therefore believes that there is no reason to compare the efficacy achieved in spring or winter cereals whether the trial series was conducted in North-Eastern, Maritime or South-Eastern Zone.

As a confirmation of above statement, and based on data presented in below Table 6.2-269, there are practically no significant differences comparing the efficacy results of MT-565S-OR2-C against broad spectrum of weed species in winter in spring cereals and EPPO Zone as well. Therefore, in Table 6.2-270 the Applicant presents overall efficacy summary across all EPPO Zones and cereals.

Consequently, it is justified to claim the registration of one application of MT-565SG-OR2-C at 1,0 kg/ha in autumn or spring on winter and spring cereals for the control of broad spectrum of annual dicotyledonous weeds.

Table 3.2-268: Efficacy evaluation – Summary – Autumn application / Winter cereals

Autumn application	*North-eastern EPPO zone*		*Maritime EPPO zone*		*Special grouping - Poland + Germany*	
Winter cereals	First spring assessment		First spring assessment		First spring assessment	
Weeds / Group of weeds	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha
AETCY	-	-	1	94,3	-	-
ALOMY	-	-	1	99,5	-	-
ANTAR	5	100	-	-	-	-
APHAR	-	-	3	99,5	-	-
BRSNN / BRSNW	17	93,8	5	96,6	22	94,5
CAPBP	16	96,2	4	100	21	96,4
CENCY	10	87,3	3	90,7	13	88,1
GALAP	6	79,2	5	69,5	11	74,8
GERPU	-	-	1	100	-	-
LAMAM	6	96,9	-	-	6	96,9
LAMPU	9	86,8	1	96,5	10	87,8
LAMAM / LAMPU	*15*	*90,9*	-	-	*16*	*91,2*
MATCH	-	-	8	90,8	-	-
MATIN	11	92,8	2	100	13	93,9
MYOAR	-	-	2	100	-	-
PAPRH	7	89,3	-	-	-	-
SSYOF	-	-	2	100	-	-
STEME	14	95	8	97,4	22	95,9
TAROF	1	100	-	-	-	-
THLAR	12	91,9	-	-	-	-
VERHE	4	79,4	6	62,7	10	69,4
VERPE	1	82,8	5	71,6	6	70,1
VERHE / VERPE	*5*	*80,1*	*11*	*66,7*	*16*	*70,9*
VICTE	1	31,3	-	-	-	-
VIOAR	15	89,7	13	68,4	28	79,8

(dark green)	Highly Susceptible (HS)	95-100%
(light green)	Susceptible (S)	85-94,9%
(yellow)	Moderately Susceptible (MS)	70-84,9%
(orange)	Moderately Tolerant (MT)	50-69,9%
(red)	Tolerant (T)	0-49,9%

Table 3.2-269: Efficacy evaluation – Summary – Spring application / Winter cereals / Spring cereals

Spring application	***North-eastern EPPO zone***						***Maritime EPPO zone***						***South-eastern EPPO zone***						***Special grouping PL+DE***					
	Second spring assessment						Second spring assessment						Second spring assessment						Second spring assessment					
	winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**	
Weeds / Group of weeds	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**
AGOGI	1	93,5	-	-	1	93,5	-	-	-	-	-	-	-	-	-	-	-	-	1	93,5	-	-	1	93,5
AMARE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	100,0	1	100,0	-	-	-	-	-	-
AMBEL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	76,3	1	76,3	-	-	-	-	-	-
ANGAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	100,0	1	100,0	-	-	-	-	-	-
ANTAR	5	88,9	2	98,0	7	91,5	-	-	-	-	-	-	3	100,0	-	-	3	100,0	5	88,9	2	98,0	7	91,5
APHAR	-	-	-	-	-	-	1	25,0	-	-	1	25,0	-	-	-	-	-	-	1	25,0	-	-	1	25,0
ARBTH	1	57,5	-	-	1	57,5	-	-	-	-	-	-	-	-	-	-	-	-	1	57,5	-	-	1	57,5
Brassica sp.	6	92,2	11	96,3	17	94,9	1	100,0	2	95,0	3	96,7	-	-	2	83,5	2	83,5	7	93,3	13	96,1	20	95,1
CAPBP	6	85,2	9	94,8	15	91,0	1	95,0	1	100,0	2	97,5	-	-	1	95,0	1	95,0	7	86,6	10	95,3	17	91,7
CENCY	14	86,0	6	86,9	20	86,3	8	94,5	1	100,0	9	95,1	-	-	-	-	-	-	22	89,1	7	88,8	29	89,0
CENSS	1	93,8	-	-	1	93,8	-	-	-	-	-	-	-	-	-	-	-	-	1	93,8	-	-	1	93,8
CHEAL	-	-	14	95,7	14	95,7	1	100,0	3	95,4	4	96,5	-	-	3	98,2	3	98,2	-	-	15	95,6	15	95,6
CHEHY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	98,8	2	98,8	-	-	-	-	-	-
Chenopodium sp.	-	-	14	95,7	14	95,7	1	100,0	3	95,4	4	96,5	-	-	5	98,4	5	98,4	-	-	15	95,6	15	95,6
CIRAR	-	-	-	-	-	-	-	-	1	95,0	1	95,0	3	90,0	-	-	3	90,0	-	-	-	-	-	-
CNISA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	73,8	1	73,8	-	-	-	-	-	-
CNSRE	1	68,8	-	-	1	68,8	-	-	-	-	-	-	2	81,3	-	-	2	81,3	1	68,8	-	-	1	68,8
CONAR	-	-	-	-	-	-	-	-	-	-	-	-	2	75,0	3	88,8	5	83,3	-	-	-	-	-	-
DESSO	1	80,0	-	-	1	80,0	-	-	-	-	-	-	3	96,3	-	-	3	96,3	1	80,0	-	-	1	80,0
FUMOF	2	75,7	1	77,6	3	76,3	-	-	2	96,7	2	96,7	-	-	1	100,0	1	100,0	2	75,7	2	87,7	4	81,7

Spring application	***North-eastern EPPO zone***						***Maritime EPPO zone***						***South-eastern EPPO zone***						***Special grouping PL+DE***					
	Second spring assessment						Second spring assessment						Second spring assessment						Second spring assessment					
	winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**	
Weeds / Group of weeds	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**
GAETE	-	-	-	-	-	-	-	-	2	**76,3**	2	**76,3**	-	-	-	-	-	-	-	-	-	-	-	-
GALAP	9	**78,8**	7	**80,2**	16	**79,4**	4	**77,9**	-	-	4	**77,9**	2	**52,5**	-	-	2	**52,5**	13	**78,5**	7	**80,2**	20	**79,1**
GERDI	-	-	-	-	-	-	3	**63,4**	-	-	3	**63,4**	-	-	-	-	-	-	3	**63,4**	-	-	3	**63,4**
GERMO	-	-	-	-	-	-	1	**100,0**	-	-	1	**100,0**	-	-	-	-	-	-	1	**100,0**	-	-	1	**100,0**
GERPU	1	**98,0**	-	-	1	**98,0**	-	-	-	-	-	-	-	-	-	-	-	-	1	**98,0**	-	-	1	**98,0**
Geranium sp.	1	**98,0**	-	-	1	**98,0**	4	**72,6**	-	-	4	**72,6**	-	-	-	-	-	-	5	**77,7**	-	-	5	**77,7**
LAMAM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	**81,3**	1	**81,3**	-	-	-	-	-	-
LAMPU	5	**94,3**	5	**95,0**	10	**94,7**	2	**100,0**	1	**90,0**	3	**96,7**	-	-	-	-	-	-	6	**95,3**	5	**95,0**	11	**95,1**
Lamium sp.	5	**94,3**	5	**95,0**	10	**94,7**	2	**100,0**	1	**90,0**	3	**96,7**	-	-	1	**81,3**	1	**81,3**	6	**95,3**	5	**95,0**	11	**95,1**
LITAR	1	**87,5**	-	-	1	**87,5**	-	-	-	-	-	-	-	-	-	-	-	-	1	**87,5**	-	-	1	**87,5**
LYCAR	-	-	2	**89,4**	2	**89,4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	**89,4**	2	**89,4**
MATCH	6	**90,5**	4	**93,4**	10	**91,7**	6	**59,4**	2	**81,4**	8	**64,9**	-	-	-	-	-	-	12	**75,0**	5	**94,0**	17	**80,6**
MATIN	5	**87,5**	4	**96,3**	9	**91,4**	4	**89,7**	1	**86,3**	5	**89,0**	1	**87,5**	1	**95,0**	2	**91,3**	8	**87,1**	4	**96,3**	12	**90,1**
MYOAR	3	**87,6**	-	-	3	**87,6**	3	**70,0**	-	-	3	**70,0**	-	-	-	-	-	-	6	**78,8**	-	-	6	**78,8**
PAPRH	2	**92,8**	10	**89,3**	12	**89,9**	6	**87,4**	-	-	6	**87,4**	5	**97,1**	1	**98,0**	6	**97,2**	7	**87,1**	10	**89,3**	17	**88,4**
POLAV	1	**86,3**	2	**95,7**	3	**92,5**	1	**97,0**	-	-	1	**97,0**	-	-	-	-	-	-	1	**86,3**	2	**95,7**	3	**92,5**
POLCO	-	-	2	**93,0**	2	**93,0**	1	**97,0**	3	**92,0**	4	**93,3**	4	**89,5**	3	**77,9**	7	**84,5**	-	-	3	**94,8**	3	**94,8**
POLPE	-	-	-	-	-	-	1	**100,0**	2	**77,6**	3	**85,0**	-	-	-	-	-	-	-	-	-	-	-	-
RAPSO	-	-	-	-	-	-	1	**87,5**	-	-	1	**87,5**	-	-	-	-	-	-	1	**87,5**	-	-	1	**87,5**
RUMAA	1	**98,8**	-	-	1	**98,8**	-	-	-	-	-	-	-	-	-	-	-	-	1	**98,8**	-	-	1	**98,8**
SENVU	-	-	-	-	-	-	1	**100,0**	-	-	1	**100,0**	-	-	-	-	-	-	1	**100,0**	-	-	1	**100,0**
SINAR	1	**91,3**	12	**96,7**	13	**96,3**	-	-	2	**95,0**	2	**95,0**	-	-	1	**96,5**	1	**96,5**	1	**91,3**	13	**96,9**	14	**96,5**

Spring application	***North-eastern EPPO zone***						***Maritime EPPO zone***						***South-eastern EPPO zone***						***Special grouping PL+DE***					
	Second spring assessment						Second spring assessment						Second spring assessment						Second spring assessment					
	winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**		winter cereals		spring cereals		**all cereals**	
Weeds / Group of weeds	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**	Nb of valid trials	Efficacy % 1 kg/ha	Nb of valid trials	Efficacy % 1 kg/ha	**Nb of valid trials**	**Efficacy % 1 kg/ha**
SONOL	-	-	-	-	-	-	-	-	1	**89,0**	1	**89,0**	-	-	-	-	-	-	-	-	-	-	-	-
SPRAR	1	**87,5**	-	-	1	**87,5**	1	**98,8**	-	-	1	**98,8**	-	-	-	-	-	-	2	**93,2**	-	-	2	**93,2**
STEME	8	**93,1**	5	**95,0**	13	**93,8**	12	**88,1**	6	**85,9**	18	**87,4**	4	**98,9**	-	-	4	**98,9**	18	**90,5**	7	**96,4**	25	**92,1**
THLAR	6	**90,8**	2	**82,3**	8	**88,6**	2	**98,0**	-	-	2	**98,0**	-	-	-	-	-	-	7	**91,5**	2	**82,3**	9	**89,5**
VERAG	1	**82,5**	-	-	1	**82,5**	-	-	-	-	-	-	-	-	-	-	-	-	1	**82,5**	-	-	1	**82,5**
VERAR	2	**91,9**	5	**82,4**	7	**85,1**	3	**92,5**	-	-	3	**92,5**	1	**83,8**	-	-	1	**83,8**	5	**92,3**	5	**82,4**	10	**87,3**
VERHE	3	**88,1**	1	**82,6**	4	**86,8**	-	-	-	-	-	-	-	-	-	-	-	-	3	**88,1**	1	**82,6**	4	**86,8**
VERHT	1	**38,8**	-	-	1	**38,8**	-	-	-	-	-	-	-	-	-	-	-	-	1	**38,8**	-	-	1	**38,8**
VERTR	-	-	-	-	-	-	-	-	-	-	-	-	1	**83,8**	-	-	1	**83,8**	-	-	-	-	-	-
VERPE	7	**85,6**	2	**54,4**	9	**78,7**	6	**62,5**	-	-	6	**62,5**	2	**75,0**	-	-	2	**75,0**	11	**70,4**	2	**54,4**	13	**67,9**
Veronica sp.	14	**83,5**	8	**75,4**	22	**80,6**	9	**72,5**	-	-	9	**72,5**	4	**79,4**	-	-	4	**79,4**	21	**77,2**	8	**75,4**	29	**76,7**
VICFM	-	-	-	-	-	-	1	**100,0**	-	-	1	**100,0**	-	-	-	-	-	-	-	-	-	-	-	-
VICIN	-	-	1	**92,5**	1	**92,5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	**92,5**	1	**92,5**
VIOAR	12	**72,9**	10	**82,7**	22	**77,4**	3	**84,6**	2	**96,0**	5	**89,2**	-	-	-	-	-	-	13	**74,8**	12	**84,9**	25	**79,7**
XANOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	**86,9**	2	**86,9**	-	-	-	-	-	-
XANST	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	**100,0**	1	**100,0**	-	-	-	-	-	-
Xanthium sp.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	**91,3**	3	**91,3**	-	-	-	-	-	-

	Highly Susceptible (HS)	95-100%
	Susceptible (S)	85-94,9%
	Moderately Susceptible (MS)	70-84,9%
	Moderately Tolerant (MT)	50-69,9%
	Tolerant (T)	0-49,9%

Table 3.2-270: Total efficacy evaluation – Summary – Spring application / All cereals / All zones

Spring application Weeds / Group of weeds	ALL ZONES all cereals Nb of valid trials	ALL ZONES all cereals Efficacy % 1 kg/ha
AGOGI	1	**93,5**
AMARE	1	**100,0**
AMBEL	1	**76,3**
ANGAR	1	**100,0**
ANTAR	10	**94,0**
APHAR	1	**25,0**
ARBTH	1	**57,5**
Brassica sp.	22	**94,1**
CAPBP	18	**91,9**
CENCY	29	**89,0**
CENSS	1	**93,8**
CHEAL	21	**96,2**
CHEHY	2	**98,8**
Chenopodium sp.	23	**96,4**
CIRAR	4	**91,3**
CNISA	1	**73,8**
CNSRE	3	**77,1**
CONAR	5	**83,3**
DESSO	4	**92,2**
FUMOF	6	**87,0**
GAETE	2	**76,3**
GALAP	22	**76,7**
GERDI	3	**63,4**
GERMO	1	**100,0**
GERPU	1	**98,0**
Geranium sp.	5	**77,7**
LAMAM	1	**81,3**
LAMPU	13	**95,1**
Lamium sp.	14	**94,1**
LITAR	1	**87,5**

Spring application Weeds / Group of weeds	ALL ZONES all cereals Nb of valid trials	ALL ZONES all cereals Efficacy % 1 kg/ha
LYCAR	2	**89,4**
MATCH	18	**79,8**
MATIN	16	**90,6**
MYOAR	6	**78,8**
PAPRH	24	**91,1**
POLAV	4	**93,7**
POLCO	13	**88,5**
POLPE	3	**85,0**
RAPSO	1	**87,5**
RUMAA	1	**98,8**
SENVU	1	**100,0**
SINAR	16	**96,1**
SONOL	1	**89,0**
SPRAR	2	**93,2**
STEME	35	**91,1**
THLAR	10	**90,5**
VERAG	1	**82,5**
VERAR	11	**87,0**
VERHE	4	**86,8**
VERHT	1	**38,8**
VERTR	1	**83,8**
VERPE	17	**72,5**
Veronica sp.	35	**78,4**
VICFM	1	**100,0**
VICIN	1	**92,5**
VIOAR	27	**79,5**
XANOR	2	**86,9**
XANST	1	**100,0**
Xanthium sp.	3	**91,3**

Highly Susceptible (HS)	95-100%
Susceptible (S)	85-94,9%
Moderately Susceptible (MS)	70-84,9%
Moderately Tolerant (MT)	50-69,9%
Tolerant (T)	0-49,9%

Comments of zRMS:	**<u>Efficacy effects</u>** The research presents the results of 140 efficacy experiments. The effectiveness of MT-565SG-OR2-C, HAKSAR TOP 565 SG against annual dicotyledonous weeds were conducted in 2016,2017 and 2018 vegetation season. Those trials were undertaken in winter wheat, winter barley, winter rye, winter triticale, spring wheat, spring barley, oat and located in the Maritime EPPO zone (Germany and United Kingdom), in the North-Eastern EPPO zone (Poland) and in the South-Eastern EPPO zone (Hungary and Romania). A special group was created to summarize the results Poland + Germany. The efficacy of MT-565SG-OR2-C, HAKSAR TOP 565 SG was investigated on about 40 different weed species in 3 EPPO zones. The number of trials for important species was consistent to required for herbicide registrations in Poland. (see Comment on label). This dRR presents results from trials using adjuvants together with the researched herbicide and comparative herbicides. The results of these experiments can be considered representative due to the lack of significant differences in effectiveness between sites. In the study the results of effectiveness tests for spring triticale were not presented, therefore this crop is not included in the Haksar Top 565 SG product label. For **weeds officially recognized as important in cereal crops in Poland**, a more detailed data is presented below. **<u>The assessment concerns the officially indicated most important species of weeds in Poland</u>** Among the weeds studied in the experiments, the species of greatest importance in the cultivation of cereals in Poland were assessed. According to the Regulation of the Minister of Agriculture and Rural Development of 4 August 2004, these are in winter cereals, cleavers (*Galium aparine*)GALAP, mayweed (*Tripleurospermum inodorum*)MATIN and in spring cereals, goosefoot (*Chenopodium album*)CHEAL. The practical and expert knowledge and studies, e.g.: "Integrated methods for protection of winter and spring wheat", Plant Protection Institute, Poznan, 2017, emphasize the great importance nowadays of cornflower (*Cyanus segetum*, *Centaurea* sp.) CENCY, mayweed(*Tripleurospermum inodorum*)MATIN and cleavers (*Galium aparine*) GALAP in cultivation of winter and spring cereals. In spring cereals, goosefoot (*Chenopodium album*)CHEAL is important. In relation to these weeds, satisfactory efficacy of the tested herbicide was obtained, *Tripleurosermum inodorum* is sensitive species to MT-565SG-OR2-C, HAKSAR TOP 565 SG in dose 1kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl), but only moderately sensitive to tribenuron methyl. *Galium aparine* (cleavers), (przytulia czepna) GALAP – The efficacy of HAKSAR TOP 565 SG achieved was for <u>winter cereals</u>: <u>autumn application</u> : <u>North-Eastern</u> (6 exp.) 79,2 %, Maritime (5 exp.) 69,5%, special group Poland + Germany (11 exp), 74,8%

	<u>spring application</u>: North-Eastern (9 exp.)78,8%, Maritime (4 exp.) 77,9% South-eastern EPPO zone (2 exp.) 52,5%, special group Poland + Germany (13 exp) 78,5 %. <u>spring application</u> in <u>spring cereals</u>: <u>North-Eastern (7exp.) 80,2 %</u>, Maritime -, South-eastern EPPO zone (0 exp.) , special group –(0 exp.) It is a species included in the label of the tested product in the group of moderately susceptible weeds, both for autumn and spring application in winter cereals and in spring cereals. ***Galium aparine* GALAP is a moderately sensitive species to HAKSAR TOP 565 SG herbicide in the dose of 1kg/ha(550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl), which is consistent with what is stated in the label.** ***Tripleurospermum inodorum* (mayweed) (maruna bezwonna)MATIN**: The efficacy of HAKSAR TOP 565 SG achieved was for <u>winter cereals</u>: <u>autumn application</u>: North-Eastern (11 experiments PL) 92,8 %, Maritime (2 exp.)100%, special group Poland + Germany (13 exp.)93,9% <u>in spring application</u>: North-Eastern (5 exp. PL) 87,5%,Maritime (4 exp.) 89,7%, South-eastern, (1exp.) 87,5 %, special group Poland + Germany (8 exp.) 87,1% <u>spring cereals, spring application:</u> North-Eastern (4 exp. PL) 96,3 %, Maritime (1exp.) 86,3%, South-eastern, (1exp.) 95 %, It is a species included in the label of the tested product in the group of susceptible weeds for spring application in winter cereals and susceptible both for autumn application in winter cereals and for spring application in spring cereals. ***Tripleurospermum inodorum* (MATIN) it is a susceptible species to the HAKSAR TOP 565 SG herbicide, in the dose of 1kg/ha (550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl), which is consistent with what is stated in the label.** ***Chenopodium album* (goosefoot)(komosa biała) CHEAL**. The efficacy of HAKSAR TOP 565 SG(550 g/ha of MCPA + 15 g/ha of Tribenuron-methyl)achieved was for <u>winter cereals</u>: <u>autumn application</u>: North-Eastern (0 exp.), Maritime (0 exp.) -South-eastern(0 exp,), -special group Poland + Germany -. <u>spring appli</u>cation,: North-Eastern (0 exp.) , Maritime (1 exp.) 100%, South-eastern (0) -, special group Poland + Germany (0) -, <u>spring cereals, spring application:</u> North-Eastern (14 exp.) 95,7%, Maritime (3 exp.) 95,4%, South-eastern (3 exp.) 98,2 %, special group Poland + Germany (15 exp.) 95,6 % It is a species included in the label of the tested product in the group of susceptible weeds, for spring application in spring cereals**. *Chenopodium***

	***album* it is a susceptible species to the HAKSAR TOP 565 SG herbicide in the dose of 1kg/ha(550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl)herbicide which is consistent with what is stated in the label.** ***Centaurea sp., Cyanus segetum* (cornflower) (chaber bławatek) CENCY:** The efficacy of Haksar Top 565 SG achieved was for winter cereals: autumn application: North-Eastern (10 exp.) 87,3 %, Maritime (3 exp.) 90,7 %, South- eastern (0 exp.), special grup Poland + Germany (13 exp.) 88,1% spring application in winter cereals : North-Eastern (14 exp.) 86 %, Maritime (8 exp.) 94,5 %, South- eastern (0 exp.), special group Poland + Germany (22 exp.) 89,1 % spring application in spring cereals: North-Eastern (6 exp.) 86,9 %, Maritime (1 exp.) 100%, South-eastern, -special group Poland + Germany (7 exp.) 88,8 % It is a species included in the label of the tested product in the group of susceptible weeds, both for autumn and spring application in winter cereals and in spring cereals. ***Centaurea sp.,Cyanus segetum* it is a susceptible species to the Haksar Top 565 SG herbicide in the dose of 1kg/ha(550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) which is consistent with what is stated in the label.** **(*Matricaria chamomilla*) (rumianek pospolity)MATCH**, in all the experiments presented in the dRR, good efficacy of the herbicide Haksar Top 565 SG on this species were obtained, however in spring application in winter cereals was moderately sensitive. autumn application, winter cereals: North-Eastern (0 exp.), Maritime (8 exp.) 90,8 %, South- eastern (0 exp.), special grup Poland + Germany - spring application in winter cereals : North-Eastern (6 exp.) 90,5 %, Maritime (6 exp.) 59,4 %, South- eastern (0 exp.) , special group Poland + Germany (12exp.)73,2 % spring application in spring cereals: North-Eastern (4 exp.) 93.4 %, Maritime (2 exp.) 81,4%, South-eastern0, -special group Poland + Germany (5 exp.) 88 %. *Matricaria chamomilla*)(rumianek pospolity)MATCH it is a species included in the label of the tested product in the group of susceptible weeds, both for autumn application in winter cereals and spring application in spring cereals. In spring application in winter cereals this species is moderately sensitive. ***Matricaria chamomilla*(rumianek pospolity) MATCH is moderately susceptible species to the Haksar Top 565 SG herbicide in the dose of 1kg/ha(550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) in spring application in winter cereals. This weed is sensitive to the tested herbicide in autumn application in winter cereals and spring application in spring cereals,which is consistent with what is stated in the label.**

	Other nuisance species are classified as sensitive or moderately sensitive in the **Haksar Top 565 SG** label due to obtained efficacy of this herbicide. The weed species listed in the label were also effectively controlled in both the autumn and spring terms in winter cereals or spring application in spring cereals. These species were classified as sensitive or moderately sensitive. The research presents the summary of results in the 3 tables: Table 3.2- 73:Efficacy evaluation – Summary – Autumn application / Winter cereals, Table 3.2-118 :Efficacy evaluation – Summary – Spring application / Winter cereals Table 3.2- 165:Efficacy evaluation – Summary – Spring application / Spring cereals. The tabels list the species of weeds tested, the effectiveness of the Haksar Top 565 SG herbicide and the number of trials performed for each zone. Registration of the herbicide - new mix of active substances in Poland requires minimum 3 tests for each weed species, and 6 tests for highly harmful weeds in two vegetation seasons. Some weed species do not have the correct number of tests and should not be in the label. The efficiency of control for some weed species was too low. Gray color means that a given species has had too few tests and does not meet the requirements for registration in Poland. The evaluator carried out comparisons on the number of trials for each weed species, each crop, and the fulfillment of the weed density requirements on a plot. Comparison of the content and the number of experiences included in the reports and the experiences presented by the applicant. On this basis, the summary tables 3.2-73"Efficacy evaluation- Summary –Autumn application/Winter cereals”, 3.2-118 “Efficacy evaluation- Summary –Spring application/Winter cereals”, 3.2-165 “Efficacy evaluation-Summary –Spring application/Spring cereals”were found correct. Based on the data contained in the final summary, the weed species listed on the label were corrected. Weeds which are listed in the Polish official regulations as significant for winter and spring cereals cultivation were well controlled by MT-565SG-OR2-C, HAKSAR TOP 565 SG in one application at 1kg/ha**(**550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) in autumn and spring term. Number of species fully sensitive to HAKSAR TOP 565 SG it is much larger than the moderately sensitive. HAKSAR TOP 565 SG **(**550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) has a very wide range of action, it controls a very large number of various weeds. Experiments on the efficacies of HAKSAR TOP 565 SG for weed control in cereals are representative in terms of spectrum and intensity of species

	and meet the planting requirements per plot. The methods used in the trials were appropriate and trials submitted for evaluation are satisfactorily representative for weeds control in cereals for registration MT-565SG-OR2-C, HAKSAR TOP 565 SG (550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) in Poland. **The presented results of MT-565SG-OR2-C, HAKSAR TOP 565 SG performance applied in autumn or spring on winter cereals, also on spring cereals for the control of dicotyledonous weeds indicate compliance with the GAP table and with label of the measures tested and Uniform principles.** **It is justified to claim the registration of one application of MT-565SG-OR2-C, HAKSAR TOP 565 SG (550 g/ ha of MCPA + 15 g/ha of Tribenuron-methyl) on winter cereals at 1kg/ha in autumn and in spring and also on spring in spring cereals at 1kg/ha for the control of broad spectrum of annual dicotyledonous weeds.**

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

According to the EPPO standard PP 1/213 'Resistance risk analysis'

The possibility of development of resistance or cross-resistance to the active substances contained in the proposed formulation MT-565SG-OR2-C (550 g/kg MCPA + 15 g/kg Tribenuron-methyl)) is discussed thereafter based on the requirements detailed in EPPO standard PP1/213(3) "*Resistance risk analysis*".

MT-565SG-OR2-C is intended to be applied to control broadleaved weeds in winter wheat, barley, rye and triticale, spring wheat and barley and oat.

3.3.1 Justification of the co-formulation

MT-565SG-OR2-C is a co-formulation of two active substances: MCPA and Tribenuron-methyl.
MCPA belongs to the Phenoxy-carboxylic-acid (HRAC group: O) chemical family of herbicides and Tribenuron-methyl belongs to the Sulfonylurea (HRAC group: B) chemical family of herbicides (HRAC, 2018).

MCPA

MCPA is an herbicide widely used for the selective control of annual and perennial broad-leaved weeds in cereals crops such as wheat, oats, triticale and rye and other crops. It has been developed during World War II and first approved for use in 1950 (Pesticide Properties DataBase, 2018). MCPA is one of the first selective organic herbicides and has been the more widely used phenoxy herbicide in Europe (Pohanish, 2015).

MCPA is a selective and systemic auxin growth regulator herbicide. It is absorbed by roots or leaves with a translocation and accumulation in vegetative shoots and roots (PPDB, 2018). This herbicide disrupts plant cell division, growth and differentiation of meristematic tissues in the newly forming stems and leaves, it affects protein synthesis and damages the vascular system (Grossmann and Mediation, 2003).

Bending and twisting of leaves and stems is observed almost immediately after application. Delayed symptom development includes malformed growth and tumours: misshapen leaves, stems and flowers and abnormal roots (Alberta Agriculture and Forestry, 2018). The effects associated with auxins help set them apart from other downwardly mobile herbicides (Prudue University, 2018).

Tribenuron-methyl

Tribenuron-methyl has been first approved for utilisation in 1987 and became a rapidly a major herbicide due to it selectivity, low application rate and broad-spectrum effectiveness (Pesticide Properties Data-Base, 2018; Uusitalo et al., 2013). It is a potent, selective, foliar acting and post-emergence herbicide used to control broadleaved weeds on winter and spring cereals, fallows and other crops (EFSA, 2018).
Tribenuron-methyl inhibits the plant amino acid synthesis by blocking the normal function of the aceto-hydroxyacid synthase (AHAS) also known as acetolactate synthase (ALS) (weedscience.org). ALS is a key enzyme of the branched-chain amino acids isoleucine, leucine and valine (LaRossa and Schloss, 1984) and without proteins, plants starve to death (Pue and Guddat, 2014). However, the actual sequence of phytotoxic processes in unclear (weedscience.org).

3.3.2 Evidence of resistance

Cases of resistance occurring in the field worldwide are reported to a specialist herbicide resistance action group and the details are recorded on an internet database.

MCPA

According to the latter, some evidence of resistance has been shown and linked to the use of MCPA for the first time in 1979 (Sweden in cropland). Resistance have been then observed in several countries worldwide: Australia, Canada, China, France, Hungary, Iran, New Zealand, Sweden and United States (Weed science, 2018).
Twelve known broad-leaved weeds have developed a resistance against MCPA so far.

Tribenuron-methyl

According to the latter, some evidence of resistance has been shown and linked to the use of Tribenuron-methyl for the first time in 1987 in United States (Idaho) in particular in cereals and wheat. Resistance have been observed later in several countries: Canada, China, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Iran, Israel, Italy, Norway, Poland, Russia, South Africa, Spain, Sweden, Turkey, United States (Weed science, 2018).
Forty-three known broad-leaved weeds have developed a resistance against Tribenuron-methyl so far.

3.3.3 Mechanism of resistance

MCPA

In the early 1980s, resistant populations of *Ranunculus acris* have developed in the North Island of New Zealand. Chromosome analysis did not reveal any translocations, deletions or additions in the nuclear chromosomes of resistant plants, nor were there any changes in ploidy (109).
McNaughton (1991) has studied some aspect of metabolism in *Ranunculus acris* and has noted that: leaf morphology did not differ between susceptible and resistant plants and did not appear to be a factor in conferring resistance but that decarboxylation of MCPA was significantly greater in resistant plants compared with susceptible ones. Later, Jugulam et al., (2013) have determined the inheritance and mechanism of MCPA resistance in *Raphanus raphanistrum*:

- Following classical breeding procedures, F1, F2, and backcross progeny were generated. The F1 progeny showed an intermediate response to MCPA, compared to parents, suggesting that MCPA resistance in *R. raphanistrum* is inherited as an incompletely dominant trait.
- Segregation ratios observed in F2 (3:1; resistant: susceptible) and backcross progeny (1:1; resistant to susceptible) indicated that the MCPA resistance is controlled by a single gene in *R. raphanistrum*.
- Radiolabeled MCPA studies suggested no difference in MCPA uptake or metabolism between resistant and susceptible *R. raphanistrum*; however, resistant plants rapidly translocated more ^{14}C-MCPA to roots than susceptible plants, which may have been exuded from the plant.

Weinberg et al. (2006) observed a higher degree of metabolism of MCPA in the roots of resistant in *Galeopsis tetrahit*. which increases root exudation and may contribute to MCPA-resistance in *G. tetrahit*. Physiologically perhaps the cells of the phloem in susceptible plants are being damaged by MCPA and are unable to transport MCPA to the roots as efficiently as in resistant plants (Di Meo, 2012). Resistant plants seem to exude MCPA from the roots faster, as soon as 48 hours after treatment (HAT), which may protect the plant from further MCPA damage (Di Meo, 2012). Thereby, resistant plants are injured by MCPA but recover (HRAC, 2016). At least two genes with additive effects are responsible for MCPA-resistant *G. tetrahit* (Weinberg et al., 2006).

A single gene would control the inheritance of herbicide resistance to auxinic herbicides (Preston and Mallory-Smith, 2001).

Tribenuron-methyl

Both target-site resistance (TSR) and non-target-site resistance (NTSR) mechanisms are present in Tribenuron-methyl resistance in *Capsella bursa-pastoris* (Zhang et al., 2017). Analysis suggest that there are two different mechanisms of resistance: enhanced metabolism and punctual Acetolactate synthase (ALS) mutations (Hatami et al., 2016).
Chromatography-mass spectrometry (LC-MS) analysis indicated that the metabolic rates of Tribenuron-methyl in resistant *Descurainia sophia* plants was significantly faster than in susceptible plants. A higher expression level of P450 genes, leading to higher activity of cytochrome P450 monooxygenase increases Tribenuron-methyl metabolism and appears to be responsible for metabolic resistance to Tribenuron-methyl in resistant *D. sophia* and *C. bursa-pastoris* plants (Zhang et al., 2017; Yang et al., 2018). This is the most important NTSR (Yang et al., 2018). Furthermore, two genes, CYP96A13 and ABCC1 transporter, could play an important role in metabolic resistance to Tribenuron-methyl in the resistant *D. sophia* population (Yang et al., 2016).
Greenhouse and laboratory studies were conducted to characterize the mechanism of suspected Tribenuron-methyl resistance in a white mustard biotype (hereafter AR_{16}) from Malaga (southern Spain). Assays on the binding affinity to Tribenuron-methyl on Acetolactate synthase (ALS) revealed that Tribenuron-methyl resistance is due to a target-site mutation in the ALS enzyme which stabilizes an ALS tertiary conformation that results in a lack of affinity to Tribenuron-methyl (Hipolito et al., 2013).
ALS gene sequencing revealed single nucleotide mutations of Pro 197 codon (CCT) in Arginine, Threonine, Serine, Leucine or Histidine caused Tribenuron-methyl resistance in weeds. The Proline (Pro) to Arginine (Arg) substitution at amino acid position 197 (Pro-197-Arg) has been observed in resistant individuals of *C. bursa-pastoris* population in wheat field in China (Zhang et al., 2017). Similar results have been observed in resistant populations of *Lamium amplexicaule* (Varanasi et al., 2016). Resistant *C. bursa-pastoris* result from the Pro-197-Thr, Pro-197-Ser, Pro-197-Leu and Pro-197-His substitutions (Wang et al., 2011; Cui et al., 2012). The Pro-197-Tyr substitution caused by the mutation of two successive nucleotides was identified for the first time in resistant weed species (Deng et al., 2015). *D. sophia* accessions with a Pro-197-Leu and Pro-197-Ser ALS-mutation have evolved very high levels resistance to Tribenuron-methyl (Deng et al., 2014). *D. sophia* accession with an Asp-376-Glu mutation in ALS developed 758.1-fold resistance to Tribenuron-Methyl (Deng et al., 2016).

3.3.4 Cross-resistance

MCPA

In the 1970s, the development of resistance to MCPA in *Carduus nutant* was found to correlate directly with a previous history of 2.4-D application (Coupland, 2018).
In Europe, in cereals crops, *Papaver rhoeas* have developed cross-resistance to MCPA and to ALS-inhibitors (see Table 1).
A biotype of *Sinapis arvensis* is cross-resistant to a wide range of auxinic herbicides including Dicamba, MCPA, menoprop, 2,4-D and picloram (Peniuk et al., 1993).
MCPA-resistance mechanism in *Ranunculus acris* confers resistance to 2,4-D and MCPB (Synthetic Auxin herbicides) and a lower, temporary resistance to the sulfonylureas Chlorsulfuron and Thifensulfuron (Bourdôt et al., 1994).
MCPA-resistant populations of *Kochia* can demonstrate cross-resistance to other auxin herbicides such as Fluroxypyr (HRAC, 2016).

According to the International survey of herbicide resistant weeds, resistance to MCPA in about eleven weeds was correlated to resistances to other herbicides with the same or other sites of action. Cases of cross-resistance have been noticed in 11 broadleaved weed species on a total of 12 broad-leaved weed species presenting resistance to MCPA.

Tribenuron-methyl

In some cases, the mutation in ALS can lead to cross-resistance against other ALS-inhibitor herbicides (Kudsk et al., 1995).
D. sophia with an Asp-376-Glu mutation in ALS exhibited obvious cross-resistance to four ALS-inhibiting herbicides (Deng et al., 2016). ALS mutation (Pro-197-Ser) is likely to be the cause of the cross resistance to four of the five families of the ALS inhibitors group observed in populations of *Rapistrum rugosum* sampled in wheat fields in Iran (Hatami et al., 2016). Cross-resistance patterns of *C. bursa-pastoris* showed that resistant populations to Tribenuron-methyl were high resistant to Flucarbazone-Na; moderately resistant to Florasulam; low resistant to Pyrithiobac sodium and Ppyroxsulam, and sensitive to Imazethapyr (Zhang et al., 2017).

Some weeds, such as *Lolium rigidum* and *Alopecurus myosuroides*, have also developed non-target-site cross-resistance across several herbicide modes of action, including ALS inhibitors (Powles and Yu, 2010).

According to the International survey of herbicide resistant weeds, resistance to Tribenuron-methyl in about forty-three weeds was correlated to resistances to other herbicides with the same or other sites of action.
Cases of cross-resistance have been noticed in 38 broad-leaved weed species on a total of 43 broad-leaved weed species presenting resistance to Tribenuron-methyl.

3.3.5 Risk of resistance development

MCPA

Resistant weeds to MCPA have been officially noticed worldwide 5 times in cereals, 3 times in wheat, 2 times in spring barley and 1 time in winter wheat. However, in Europe, MCPA resistance in cereals crops has been declared only in France and only one weed specie is concerned (*Papaver rhoeas*). However, this weed species *P. rhoeas* is a major and difficult broadleaved weed to control in winter cereals and displays cross-resistance to herbicides with the same or another mode of action (11 weed species concerned worldwide).

MCPA resistance is inherited as an incompletely dominant trait (Jugulam and Veldhuis, 2013) thereby the resistance to MCPA should spread less quickly in populations than in the case of a dominant trait (as both homozygous dominant and heterozygous individuals carry the resistance trait). Indeed, despite MCPA has been is use in agriculture for over 60 years (Sterling and Jochem, 1995) the development of resistance has not been as important as it could have been.

According to the literature and the International survey of herbicide resistant weeds, the risk that broad-leaved weeds develop resistant populations, even cross-resistance, to MCPA in cereals crops is relatively low but exists.

Tribenuron-methyl

Resistant weeds to Tribenuron-methyl have been officially noticed worldwide 8 times in cereals, 29 times in wheat, 16 times in winter wheat, 11 times in spring barley, 4 times in spring wheat and 2 times in winter barley. The resistant populations have been observed in cereals crops, in the following European countries Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Norway, Poland, Spain and Sweden.
The weeds presenting the highest number of declared cases of resistance, in cereals crops, in European countries are:

- *Stellaria media* with 12 cases in spring barley, spring wheat, winter wheat, wheat and cereals
- *Kochia scoparia* with 11 cases in spring wheat, spring barley, wheat and winter barley
- *Papaver rhoeas* with 6 cases in cereals, wheat and winter wheat
- *Sinapsis arvensis* with 5 cases in wheat, winter wheat and cereals
- *Tripleurospermum perforatum* with 5 cases in winter wheat, wheat and spring barley
- *Capsella bursa-pastoris* with 4 cases in wheat, winter wheat and spring barley

S. media is known for infesting cereals and in particular, wheat, its seed production is prolific (CABI, 2018). *K. scoparia* is a common and economically important weed infesting cereals crops (CABI, 2018). *P. rhoeas* is the most important broad-leaved weed in winter cereals in southern Europe (Riba et al., 1990) and is difficult to manage due to an extended period of germination, high seed production and a highly persistent seed-bank (Torra et al. 2010). This weed is particularly competitive in wheat (Torra et al., 2008). *S. arvensis* is a prevalent weed species in wheat. *C. bursa-pastoris* is a common weed of spring and winter barley, rye and wheat (CABI, 2018).

Tribenuron-methyl resistance derives mainly from a single-point mutation in the ALS gene, which leads to substitutions in branched-chin amino acids (Powles and Yu, 2010). Several amino acid substitutions have been identified as causes for resistance to Tribenuron-methyl: Pro-197-Thr, Pro-197-Ser, Pro-197-Leu, Pro-197-His and Asp-376-Glu. These mutations confer a high level of resistance to Tribenuron-methyl.
Furthermore, multiple Pro-197 substitutions in the ALS of *Lolium rigidum* confers resistance Chlorsulfuron, an ALS-inhibitor, to the plant without any fitness cost (Kaloumenos et al., 2012). Therefore, resistant *L. rigidum* remain competitive for resources. Similar results can be expected with the use of Tribenuron-methyl as it is also an ALS-inhibitor.
In *Arabidopsis thaliana* (a model plant for genome analysis) Pro-197-Ser mutations occurrence is $3.2x10^{-5}$ (Jander et al., 2003).

According to the literature and the International survey of herbicide resistant weeds, the risk that broad-leaved weeds develop resistant populations, even cross-resistance, to Tribenuron-methyl is high mainly in wheat, winter wheat and spring barley.

General recommendations

According to HRAC (2016), for farmers to assess the risk of developing herbicide resistance, they need to evaluate their farming practices as well as the biology and herbicide susceptibility of their target weeds.

The Table 3.3-1 provides a checklist of resistance risk factors and can rank the risk of resistance development from LOW to HIGH.

Table 3.3-1: Cropping system evaluation (from hracglobal.com)

MANAGEMENT OPTION	LOW RISK	MODERATE RISK	HIGH RISK
Herbicide mix or rotation in cropping system	> 2 modes of action	2 modes of action	1 mode of action
Weed control in cropping system	Cultural*, mechanical and chemical	Cultural and chemical	Chemical only
Use of same mode of action per season	Once	More than once	Many times
Cropping system	Full rotation	Limited rotation	No rotation
Resistance status to mode of action	Unknown	Limited	Common
Weed infestation	Low	Moderate	High
Control in last three years	Good	Declining	Poor

**Cultural control can be by using cultivation, stubble burning, competitive crops, stale seedbeds, etc.*

Some farming practices increase the risk of resistance:
- Frequent use of herbicides with a similar mechanism of action – this is the most important of all factors
- Monocultures and crop rotations that rely on the same herbicide mechanism of action for weed control
- Lack of non-chemical weed control practices such as cultivation, stubble burning, stale seedbeds and competitive and cover crops

Weed biology is also linked to the risk of resistance:
- Density of weeds – more weeds means a higher chance of resistance
- Frequency of resistance in the population – greater genetic diversity means a higher chance of resistance
- Reproductive capacity – weeds that produce a high number of seeds can spread resistance more quickly

The Concerned Member States for MT-565SG-OR2-C are Poland, Germany, Hungary, Romania.
Since 1950s, in Europe, cereals crops are mostly grown in monoculture in rotation with fodder crops (Agreste, 2016). However, in 2014, three UK crops (wheat, barley and oilseed rape) accounted for 80.8% of total arable cropland. Thereby, farmers may opt for the same crop type in successive seasons what encourages the growth of the same weed species and application of the same selects for resistant-weeds. The longer such systems are practised the more likely it is that resistance will develop.
Herbicides, with fungicides, are the most used pesticides in cereals crops. Weed management has become problematic on an increasing surface of cereals lands and the use of herbicides has increased to 25% from 2013 to 2016 (ADquation). As an element of comparison, in France in 2014, the number of herbicide applications in bread wheat, durum wheat, barley and triticale were respectively 2.5, 1.9, 2.2 and 1.7 (Agreste, 2014).
The use of herbicides seems to remain the principal method adopt by growers for weeding (Compagnone et al., 2008). However, several combined factors (e.g. environmental and health preoccupation, development of resistance, reduction of the number of available and efficient active substances) encourage grow-

ers to combine cultural and herbicide control to optimise weed management in a more sustainable way. Practices such as crop rotation, use of resistant/competitive varieties, under sowing, intercropping, tillage, delayed drilling, physical and mechanical weed control have been part of good farm practice for centuries and are key principles Integrated Weed Management (Pesticide Reduction Programme, 2004; PostNote, 2015; PAN EUROPE, 2017).

- The most the rotation is long and varied the most the weeds community will be varied and the less it will be specialised (Agrobio-bretagne.fr 2010).
- Competitive varieties are less affected by the presence of weeds.
- False or stale seedbed technique is a preventive method, which aims to reduce weed emergence in the next crop cycle (PAN Europe, 2017).
- Mulching or covering the soil with plant residues/wastes or synthetic mulches is one of the most popular management practices. According to a meta-analysis straw mulching and plastic mulching can increase wheat yield respectively by of 20% and 35% at low water input (Qin et al., 2015).

Conclusion on the risk of resistance development

To summarize the situation regarding resistance to MCPA and to Tribenuron-methyl in Europe:

- Only *Papaver rhoeas* has evolved MCPA resistant in cereals crops but with a cross-resistance to ALS-inhibitor which is the mode of action of Tribenuron-methyl.
- Already 14 weed species have evolved Tribenuron-methyl resistant in cereals crops among which 4 broad-leaved weed species (*Galium spurium*, *Kochia scoparia*, *Papaver rhoeas* and *Sinapis arvensis*) have developed cross-resistance to Synthetic Auxin herbicides (quinchlorac, dicamba, fluoxypyr and 2,4-D) which is the mode of action of MCPA.

Therefore, the risk of resistance development among broad-leaved weeds in cereals crops depends on the cropping systems and seem to be low for MCPA but could be high for Tribenuron-methyl particularly in wheat, winter wheat and spring barley. Thereby, it seems interesting to combine those two active substances to optimise the control of broad-leaved weeds in cereals crops.

MT-565SG-OR2-C combines two modes of action (ALS-inbibitor and Synthetic Auxin) what should reduce the risk of resistance development. However, because cross-resistance between herbicides with these modes of action have already occurred on some broad-leaved species in Europe, some guidelines should be used in order to prevent the resistance from appearing against this coformulation.

Comments of zRMS:	<u>**Resistance policy**</u> <u>**MCPA**</u> In accordance with the provisions of Article 14 of Directive 2009/128/EC and EC Regulation 1107/2009. Since 1th January 2014, farmers in the EU have been obliged to use integrated weed management techniques to control of weeds.Combining a method of mechanical cotrol with chemical control is practised in the control of herbicide resistant weeds. For effective chemical control of resistant biotype,herbicides of different mechanism of action should be applied. For resistant biotypes of cornflower or corn poppy, usage of herbicides from the group HRAC 0 is advised. No confirmed resistance of dicotyledonous weeds to MCPA has been demonstrated in Poland, although resistant weed biotypes occurring in agricultural crops in Europe have been reported. A very cogent explanation of the applicant's MCPA status was cited. Applicant : **According to the literature and the International survey of herbicide resistant weeds, the risk that broad-leaved weeds develop resistant populations, even**

	cross-resistance, to MCPA in cereals crops is relatively low but exists **Tribenuron-methyl** is a commonly applied in Poland and worldwide active substance of herbicides used to control the main weeds in cereal cultivation. Many registered herbicides in Poland contain tribenuron-methyl. The beginning of use of this a.s. is dated to the 80s. Tribenuron-methyl shows high effectiveness in combating dicotyledonous weeds in the early stages of plant development and high selectivity in relation to cereals. In Poland, resistant biotypes of chamomile (*Matricaria chamomilla*), Ref.2018, field poppy (*Papaver rhoeas L.*), cornflower (*Centaurea cyanus*) Ref. 2013, 2020, mayweed (*Tripleurospermum inodorum*) Ref. 2018 were identified. 4 weed species originating in Poland were indicated on the list: Cases of tribenuron methyl resistance indicated in the HRAC database. The mechanism of tribenuron-methyl action: HRAC group B :ALS inhibition is indicated. Due to the occurrence of resistant weed biotypes in Poland, it is necessary to apply an appropriate antiresistant strategy for tribenuron-methyl. The applicant has presented important elements of the anti-immune policy. , which are indicated in the label of Haksar Top 565 SG. These points which include the strategy for managing resistance to tribenuron-methyl + MCPA should be in line with EPPO PP 1/213 (4) guidelines and publicy available. The benefits of Haksar Top 565 SG (Tribenuron-methyl +MCPA) justify a policy on the use of herbicides based on these a.s . and allow it to be introduced and maintained on the market. This policy must be strictly defined and its principles widely available and applied by agricultural producers. The applicant in section 3.3 has provided current data on weed resistance to tribenuron-methyl and MCPA. The prevalence of tribenuron-methyl has influenced the emergence of biotypes resistant to this active substance. In Poland, resistant biotypes of chamomile (*Matricaria chamomilla*), Ref.2018, field poppy (*Papaver rhoeas L.*), cornflower (*Centaurea cyanus*) Ref. 2013, 2020, mayweed (*Tripleurospermum inodorum*) Ref. 2018. The authors of the research indicate that resistant biotypes of the mentioned species come from specific locations where tribenuron- methyl was often used to protect cereals and cereals were often found in crop rotation. This favored the emergence of resistant biotypes of the aforementioned weed species. 4 weed species originating in Poland were listed: Cases of tribenuron methyl resistance indicated in the HRAC database. The data quoted from the HRAC data base indicate many weed species showing resistance to tribenuron-methyl in different countries and on different continents. **The applicant has presented in the label of Haksar Top 565 SG the relevant elements and data necessary to conduct an anti-resistance policy in accordance with the EPPO PP 1/213 guidelines (4).** References: 1) Adamczewski K., Matysiak K., Kierzek R. Występowanie biotypów rumianku pospolitego (*Matricaria chamomilla* L. = *M. recutita* L.) odpornego na tribenuron metylowy). Fragmenta Agronomica 35 (2018) 7-13. 2) Heap I. Global perspective of herbicide-resistant weeds. Pest Management Science 70 (2014) 1306-1315. 3) Kierzek R. Odporność chwastów na herbicydy. (2014) www.agropolska.pl/uprawa/ochrona-roslin/odpornosc-chwastow-na-herbicydy,2.html 4) Rey-Caballero J., Menéndez J., Osuna M.D., Salas M., Torra J. Target-

	ssite and non-target-site resistance mechanisms to ALS inhibiting herbicides in *Papaver rhoeas*. Pesticide Biochemistry and Physiology 138 (2017) 57-65. 5) Stankiewicz-Kosyl M., Synowiec A., Haliniarz M., Wenda-Piesik A., Domaradzki K., Parylak D., Wrochna M., Pytlarz E., Gala-Czekaj D., Marczewska-Kolasa K., Marcinkowska K., Praczyk T. Herbicide resistance and management options of *Papaver rhoeas* L. and *Centaurea cyanus* L. in Europe: a review. Agronomy 10 (2020) 1-22.

3.4 Adverse effects on treated crops (KCP 6.4)

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

A total of ~~116~~ 115selectivity trials investigating the phytotoxicity, the impact on yield and on quality parameters of MT-565SG-OR2-C on treated plants were implemented in 2016 and 2017.
The selectivity of MT-565SG-OR2-C was tested when applied in autumn (36 trials) or in spring (80 trials).

Autumn application timing: trials were undertaken in winter wheat (11 trials), winter barley (9 trials), winter rye (8 trials) and winter triticale (~~8~~ 7 trials).
Trials were located in the North Eastern EPPO zone in Poland (~~16~~ 15 trials) and in the Maritime EPPO zone in Germany (20 trials).

Table 3.4-1: Presentation of trials (selectivity trials, transformation trials...) – Autumn application timing

Crop*	Country	Type of trial**	Number of trials			Years	GEP, non-GEP, official***	Comments (any other relevant information)
			Maritime zone	North-eastern zone	South-eastern zone			
Winter wheat	Germany	S + Y	7	-	-	2016 – 2017	GEP	
	Poland	S + Y	-	4	-	2016 – 2017	GEP	
Total – Winter wheat	-	-	**7**	**4**	-	**2016 – 2017**	**GEP**	
Winter barley	Germany	S + Y	5	-	-	2016 – 2017	GEP	
	Poland	S + Y	-	4	-	2016 – 2017	GEP	
Total – Winter barley	-	-	**5**	**4**	-	**2016 – 2017**	**GEP**	
Winter rye	Germany	S + Y	4	-	-	2016 – 2017	GEP	
	Poland	S + Y	-	4	-	2016 – 2017	GEP	
Total – Winter rye	-	-	**4**	**4**	-	**2016 – 2017**	**GEP**	
Winter triticale	Germany	S + Y	4	-	-	2016 – 2017	GEP	
	Poland	S + Y	-	4 3	-	2016 – 2017	GEP	
Total – Winter triticale	-	-	**4**	**4 3**	-	**2016 – 2017**	**GEP**	
TOTAL	-	-	**20**	**~~16~~ 15**	-	-	-	

* 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

Spring application timing: trials were undertaken in winter wheat (21 trials), winter barley (12 trials), winter rye (7 trials), winter triticale (8 trials), spring wheat (4 trials), spring barley (~~23~~ 22 trials) and oat (5 trials).
Trials were located in the North Eastern EPPO zone in Poland (30 trials), in the Maritime EPPO zone in Germany (20 trials) and UK (14 trials) and in the South-eastern EPPO zone in Hungary (9 trials) and Romania (7 trials).

Table 3.4-2: Presentation of trials (selectivity trials, transformation trials...) – Spring application timing

Crop*	Country	Type of trial**	Number of trials			Years	GEP, non-GEP, official***	Comments (any other relevant information)
			Maritime zone	North-eastern zone	South-eastern zone			
Winter wheat	Germany	S + Y	4	-	-	2016 - 2017	GEP	
	UK	S + Y	5	-	-	2016 - 2017	GEP	
	Poland	S + Y	-	4	-	2016 - 2017	GEP	
	Hungary	S + Y	-	-	5	2016 - 2017	GEP	
	Romania	S + Y	-	-	3	2016 - 2017	GEP	
Total – Winter wheat	-	-	**9**	**4**	**8**	-	-	
Winter barley	Germany	S + Y	4	-	-	2017	GEP	
	UK	S + Y	4	-	-	2017	GEP	
	Poland	S + Y	-	4	-	2017	GEP	
Total – Winter barley	-	-	**8**	**4**	-	-	-	
Winter rye	Germany	S + Y	3	-	-	2016 - 2017	GEP	
	Poland	S + Y	-	4	-	2016 - 2017	GEP	
Total – Winter rye	-	-	**3**	**4**	-	-	-	
Winter triticale	Germany	S + Y	4	-	-	2017	GEP	
	Poland	S + Y	-	4	-	2017	GEP	
Total – Winter triticale	-	-	**4**	**4**	-	-	-	
Spring wheat	Poland	S + Y	-	4	-	2016 – 2017	GEP	
Total – Spring wheat	-	-	-	**4**	-	-	-	
Spring barley	Germany	S + Y	5	-	-	2016 - 2017	GEP	
	UK	S + Y	5	-	-	2016 - 2017	GEP	
	Poland	S + Y	-	5	-	2016 - 2017	GEP	
	Hungary	S + Y	-	-	~~4~~ 3	2016 - 2017	GEP	

Crop*	Country	Type of trial**	Number of trials			Years	GEP, non-GEP, official***	Comments (any other relevant information)
			Maritime zone	North-eastern zone	South-eastern zone			
	Romania	S + Y	-	-	4	2016 - 2017	GEP	
Total – Spring barley	-	-	**10**	**5**	**8**	-	-	
Oat	Poland	S + Y	-	5	-	2016 - 2017	GEP	
Total – Oat	-	-	-	**5**	-	-	-	
TOTAL	-	-	**34**	**30**	**~~16~~ 15**	-	-	

* 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

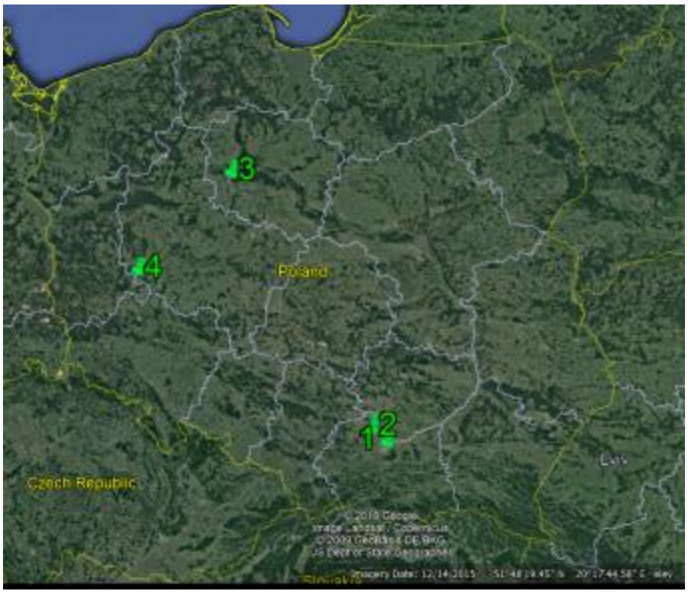
Localisation of selectivity trials in the North Eastern EPPO zone

Figure 3.4-3: Trial map – Selectivity trials performed on winter wheat in the North-Eastern EPPO zone – Autumn application timing

Autumn - Winter wheat – NE

Number on the map	Test report	Year	Trial location
1	255_01_F16_499	2016	Załuski (09-152) Poland
2	255_02_F16_500	2016	Szydłowo (64-930) Poland
3	420_01_F17_43	2017	Kołaczkowo (62-306) Poland
4	421_01_F17_44	2017	Lipce Reymontowskie (96-127) Poland

Figure 3.4-4: Trial map – Selectivity trials performed on winter wheat in the North-Eastern EPPO zone – Spring application timing



Spring - Winter wheat – NE

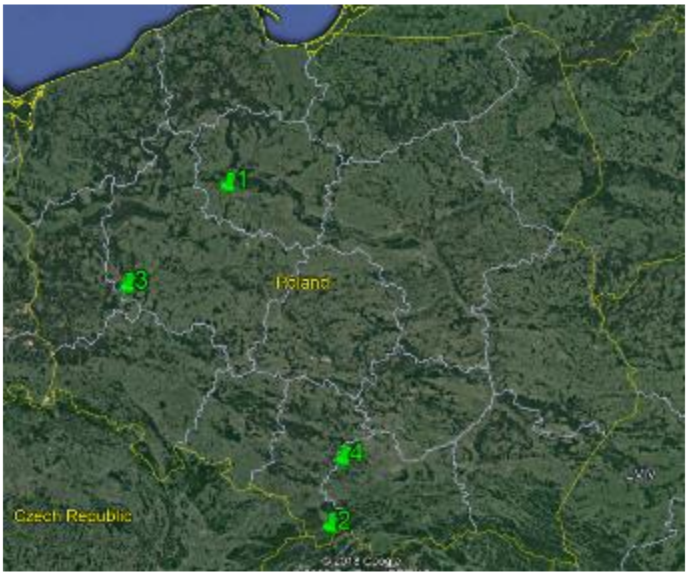
Number on the map	Test report	Year	Trial location
1	PL 16 070 PL1	2016	Kozlica (32-125) Poland
2	PL 17 032 PL1	2017	Przestańsko (32-095) Poland
3	SRPL17-082-395HS (CH_H_MTT_SEL01)	2017	Żędowo (89-200) Poland
4	SRPL17-083-395HS (CH_H_MTT_SEL02)	2017	Potrzebowo (64-150) Poland

Figure 3.4-5: Trial map – Selectivity trials performed on winter barley in the North-Eastern EPPO zone – Autumn application timing

Autumn - Winter barley – NE

Number on the map	Test report	Year	Trial location
1	AH/16/JO/33/Pr/b	2016	Przybroda (64-090) Poland
2	AH/16/JO/33/Zł/b	2016	Złotniki (62-002) Poland
3	422_01_F17_45	2017	Słupca (62-400) Poland
4	423_01_F17_46	2017	Krzywiń (64-010) Poland

Figure 3.4-6: **Trial map – Selectivity trials performed on winter barley in the North-Eastern EPPO zone – Spring application timing**



Spring - Winter barley – NE

Number on the map	Test report	Year	Trial location
1	SRPL17-095-395HS	2017	Murczyn (88-400) Poland
2	SRPL17-096-395HS	2017	Pulki (21-130) Poland
3	SRPL17-097-395HS	2017	Potrzebowo (64-150) Poland
4	SRPL17-098-395HS	2017	Huta (64-700) Poland

Figure 3.4-7: **Trial map – Selectivity trials performed on winter rye in the North-Eastern EPPO zone – Autumn application timing**

Autumn - Winter rye – NE

Number on the map	Test report	Year	Trial location
1	AH/16/ŻO/33/Br/b	2016	Brody (64-310) Poland
2	AH/16/ŻO/33/Gr/b	2016	Gorzyń (64-400) Poland
3	AH/17/ŻO/19/ZŁ/b/OR2-C/sel-3	2017	Złotniki (62-002) Poland
4	AH/17/ŻO/19/Br/b/OR2-C/sel-4	2017	Brody (64-310) Poland

Figure 3.4-8: Trial map – Selectivity trials performed on winter rye in the North-Eastern EPPO zone – Spring application timing

Spring - Winter rye – NE

Number on the map	Test report	Year	Trial location
1	PL 16 072 PL1	2016	Ojrzanowo (89-210) Poland
2	PL 17 036 PL1	2017	Gulczewo (88-190) Poland
3	SRPL17-088-395HS (CH_H_MTT_SEL03)	2017	Murczyn (88-400) Poland
4	SRPL17-089-395HS (CH_H_MTT_SEL04)	2017	Pulki (24-130) Poland

Figure 3.4-9: Trial map – Selectivity trials performed on winter triticale in the North-Eastern EPPO zone – Autumn application timing

Autumn - Winter triticale – NE

Number on the map	Test report	Year	Trial location
1	256_01_F16_501	2016	Jabłonna (64-308) Poland
2	256_02_F16_502	2016	Szydłowo (64-930) Poland
3	AH/17/MT/PszO/19/Pr/b/OR2-C/sel-1	2017	Przybroda (62-090) Poland
4	AH/17/PszO/19/ZŁ/b/OR2-C/sel-2	2017	Złotniki (62-002) Poland

Figure 3.4-10: Trial map – Selectivity trials performed on winter triticale in the North-Eastern EPPO zone – Spring application timing

Spring - Winter triticale – NE

Number on the map	Test report	Year	Trial location
1	MT-565SG-T-75WG-OR2-C-PL-18	2017	Slawecin (89-620) Poland
2	MT-565SG-T-75WG-OR2-C-PL-19	2017	Cerekwica (88-400) Poland
3	MT-565SG-T-75WG-OR2-C-PL-20	2017	Ogorzeliny (89-665) Poland
4	MT-565SG-T-75WG-OR2-C-PL-21	2017	Rozdroze (13-100) Poland

Figure 3.4-11: Trial map – Selectivity trials performed on spring wheat in the North-Eastern EPPO zone – Spring application timing

Spring – Spring wheat – NE

Number on the map	Test report	Year	Trial location
1	NUZ 12 + 13/16 – Trial 1	2016	Puławy (24-100) Poland
2	NUZ 12 + 13/16 – Trial 2	2016	Puławy (24-100) Poland
3	MT-565SG-T-75WG-OR2-C-PL-13	2017	Jankow (55-216) Poland
4	MT-565SG-T-75WG-OR2-C-PL-14	2017	Piskorzowek (55-216) Poland

Figure 3.4-12: Trial map – Selectivity trials performed on spring barley in the North-Eastern EPPO zone – Spring application timing

Spring – Spring barley – NE

Number on the map	Test report	Year	Trial location
1	MT-565SG-T-75WG-OR2-C-PL-15	2017	Piskorzów (55-216) Poland
2	MT-565SG-T-75WG-OR2-C-PL-16	2017	Łysakowo (13-100) Poland
3	MT-565SG-T-75WG-OR2-C-PL-17	2017	Białożewin (88-400) Poland
4	NUZ 12 + 13-16_sel_2016_RIII	2016	Puławy (24-100) Poland
5	NUZ 12 + 13-16_sel_2016_RIV	2016	Puławy (24-100) Poland

Figure 3.4-13: Trial map – Selectivity trials performed on oat in the North-Eastern EPPO zone – Spring application timing

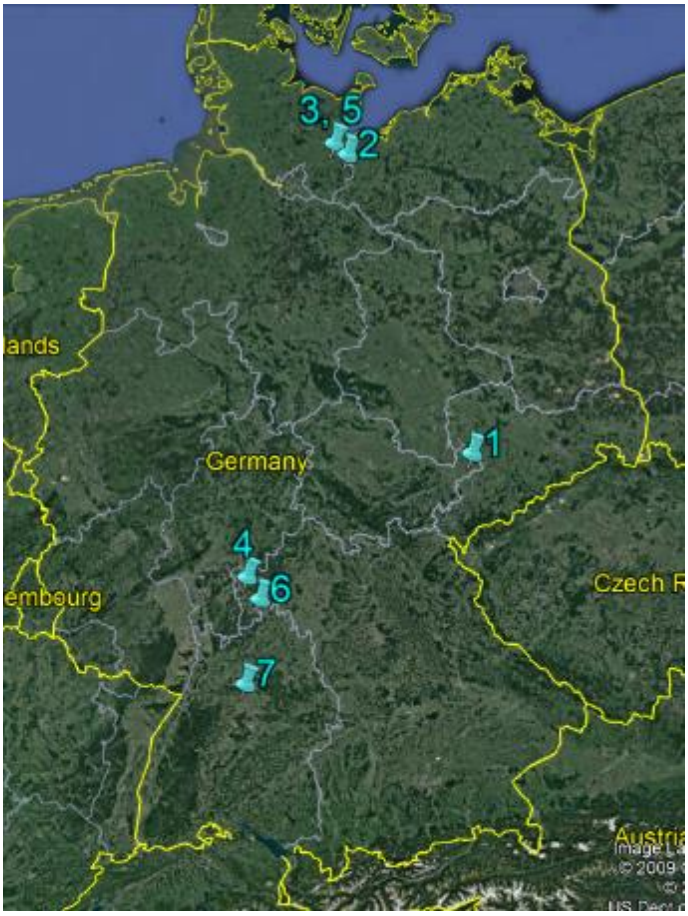
Spring - Oat – NE

Number on the map	Test report	Year	Trial location
1	NUZ 12 + 13/16 (trial 5)	2016	Puławy (24-100) Poland
2	NUZ 12 + 13/16 (trial 6)	2016	Puławy (24-100) Poland
3	SRPL17-102-395HS	2017	Szczepankowo (88-306) Poland

Number on the map	Test report	Year	Trial location
4	SRPL17-103-395HS	2017	Wąsosz (89-200) Poland
5	SRPL17-104-395HS	2017	Waszkowo (64-125) Poland

Localisation of selectivity trials in the Maritime EPPO zone

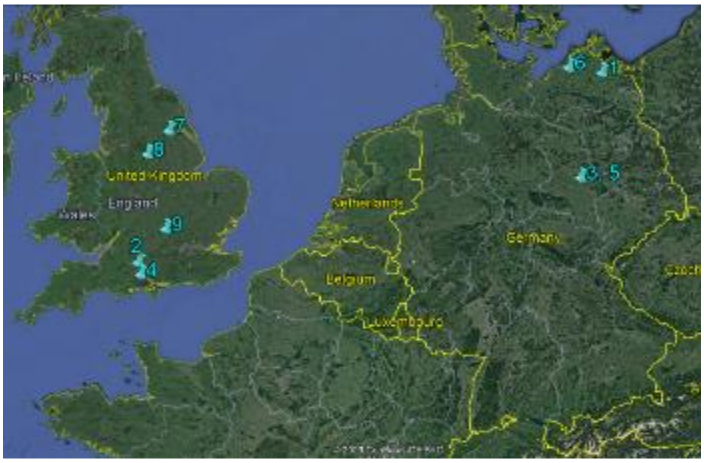
Figure 3.4-14: Trial map – Selectivity trials performed on winter wheat in the Maritime EPPO zone – Autumn application timing



Autumn - Winter wheat – MAR

Number on the map	Test report	Year	Trial location
1	AB5-17-27858-DE01	2016	Bornshain (04603) Germany
2	AB5-17-27858-DE02	2016	Alt-Horst (23883) Germany
3	AB5-17-27858-DE03	2016	Kastorf (23847) Germany
4	AB5-17-27858-DE04	2016	Großwallstadt (63868) Germany
5	CFZ-18-32130-DE01	2017	Kastorf (23847) Germany
6	CFZ-18-32130-DE03	2017	Monbrunn (63897) Germany
7	S17-07141-01	2017	Markgröningen (71706) Germany

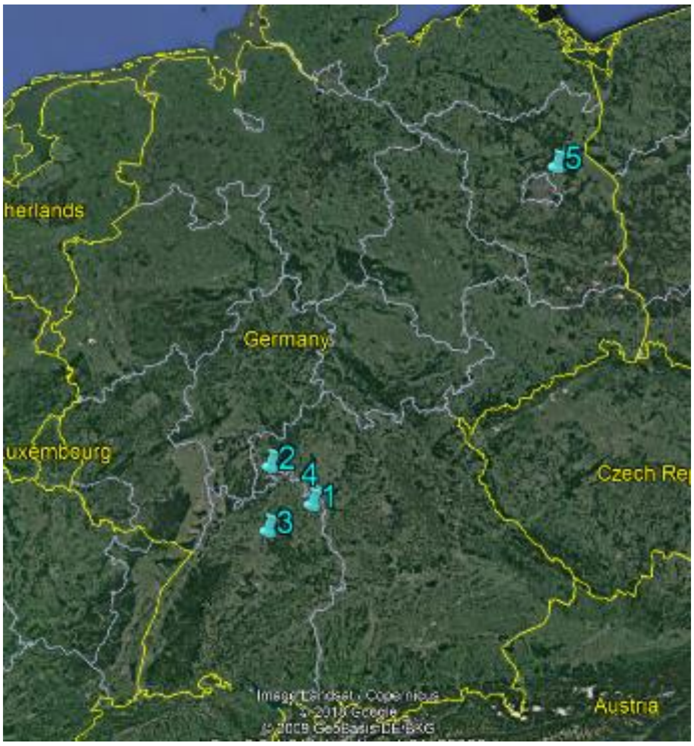
Figure 3.4-15: Trial map – Selectivity trials performed on winter wheat in the Maritime EP-PO zone – Spring application timing



Spring - Winter wheat – MAR

Number on the map	Test report	Year	Trial location
1	16 1060 1628	2016	Tützpatz (17091) Germany
2	289A	2016	Stratford Tony (SP6 2DA) UK
3	17 1067 1011	2017	Nienburg (06429) Germany
4	719A	2017	Bisterne (BH24 3BU) UK
5	17 1067 1447	2017	Nienburg (06429) Germany
6	G-111-QUI-17-382	2017	Mecklenburg Vorpommern (18258) Germany
7	725A	2017	Epworth, Doncaster (DN9 1LQ) UK
8	725B	2017	Derbyshire (S80 3EJ) UK
9	725C	2017	Watlington (OX49 5DX) UK

Figure 3.4-16: Trial map – Selectivity trials performed on winter barley in the Maritime EP-PO zone – Autumn application timing



Autumn - Winter barley – MAR

Number on the map	Test report	Year	Trial location
1	AB5-17-27858-DE09	2016	Herrentierbach (74572) Germany

Number on the map	Test report	Year	Trial location
2	AB5-17-27858-DE10	2016	Miltenberg-Monbrunn (63897) Germany
3	AB5-17-27858-DE11	2016	Ilsfeld (74360) Germany
4	AB5-17-27858-DE12	2016	Riedbach (74575) Germany
5	S17-07142-01	2017	Ahrensfelde (16356) Germany

Figure 3.4-17: Trial map – Selectivity trials performed on winter barley in the Maritime EP-PO zone – Spring application timing

Spring - Winter barley – MAR

Number on the map	Test report	Year	Trial location
1	17 1047 1454	2017	Motterwitz (04668) Germany
2	17 1060 1453	2017	Tützpatz (17901) Germany
3	G-111-QUI-17-391	2017	Fienstorfter Mühle 40 (18184) Germany
4	726A	2017	Gussage St Micael (BH21 5JA) United Kingdom
5	726B	2017	Halloughton (NG25 0QP) United Kingdom
6	726C	2017	Wotton-Under-Edge (GL12 7PL) United Kingdom
7	726D	2017	Cottenham (CB24 8UG) United Kingdom
8	1710695127	2017	Goch (47574) Germany

Figure 3.4-18: Trial map – Selectivity trials performed on winter rye in the Maritime EPPO zone – Autumn application timing

Autumn - Winter rye – MAR

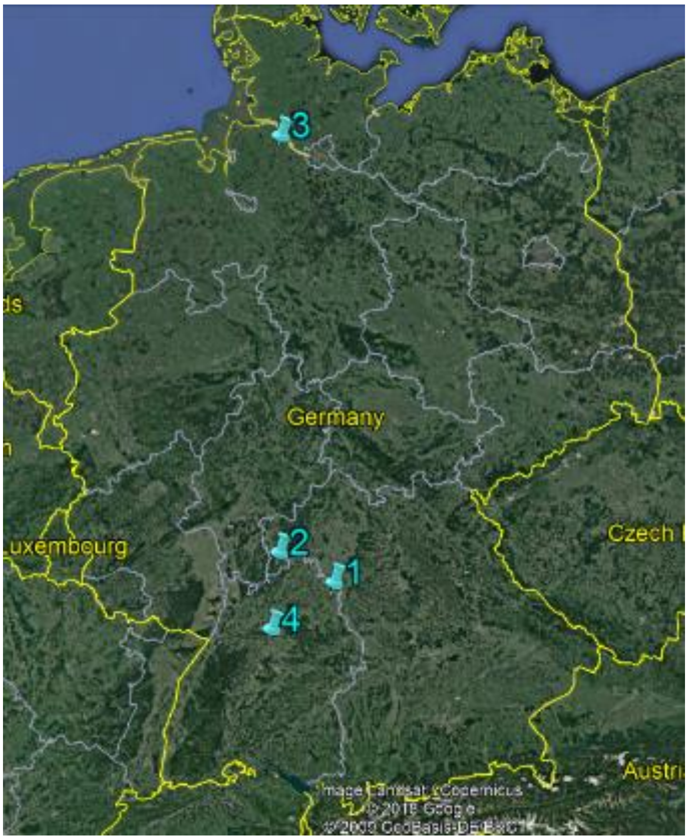
Number on the map	Test report	Year	Trial location
1	AB5-17-27858-DE07	2016	Itzestd (23845) Germany
2	AB5-17-27858-DE08	2016	Schoenhaide (04626) Germany
3	S17-07145-01	2017	Mulsum (27449) Germany
4	S17-07146-01	2017	Blumberg (16356) Germany

Figure 3.4-19: Trial map – Selectivity trials performed on winter rye in the Maritime EPPO zone – Spring application timing

Spring - Winter rye – MAR

Number on the map	Test report	Year	Trial location
1	16 1062 1649	2016	Trossin (0480) Germany
2	17 1069 5004	2017	Kalkar (47546) Germany
3	G-111-QUI-17-384	2017	Gotthun (17207) Mecklenburg Vorpommern, Germany

Figure 3.4-20: Trial map – Selectivity trials performed on winter triticale in the Maritime EPPO zone – Autumn application timing



Autumn - Winter triticale – MAR

Number on the map	Test report	Year	Trial location
1	AB5-17-27858-DE05	2016	Schrozberg (74575) Germany
2	AB5-17-27858-DE06	2016	Amorbach (63916) Germany
3	S17-07143-01	2017	Oldendorf-Sunde (21726) Germany
4	S17-07144-01	2017	Markgröningen (71706) Germany

Figure 3.4-21: Trial map – Selectivity trials performed on winter triticale in the Maritime EPPO zone – Spring application timing

Spring - Winter triticale – MAR

Number on the map	Test report	Year	Trial location
1	1710471451	2017	Motterwitz (04668) Germany
2	1710611452	2017	Ebrach (96157) Germany
3	1710695125	2017	Goch (47574) Germany
4	G-111-QUI-17-388	2017	Wildenhain (4862) Germany

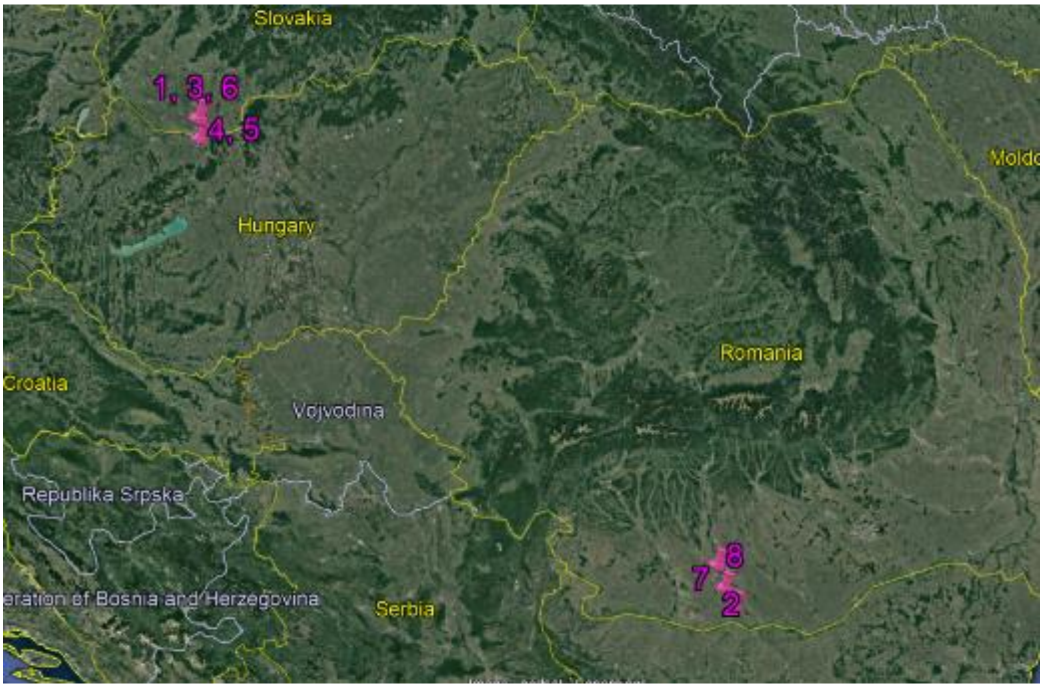
Figure 3.4-22: Trial map – Selectivity trials performed on spring barley in the Maritime EPPO zone – Spring application timing

Spring – Spring barley – MAR

Number on the map	Test report	Year	Trial location
1	16 1069 5125	2016	Weeze (47652) Germany
2	17 1047 1013	2017	Motterwitz (04668) Germany
3	290A	2016	Tarrant Hinton (DT11 8GY) Dorset United Kingdom
4	17 1047 1446	2017	Motterwitz (04668) Germany
5	17 1069 5122	2017	Weeze (47652)Germany
6	G-111-QUI-17-379	2017	Zumroda (04603) Thüringen Germany
7	722A	2017	Davidston Farm, Newtyle (PH12 8UT) United Kingdom
8	722B	2017	Stratford Tony Wiltshire (SP5 4AT) United King-dom
9	722C	2017	Kilnwick Percy (YO42 IUF) East Yorkshire United Kingdom
10	722D	2017	Brackley (NN13 5GH) Northamptonshire United Kingdom

Localisation of selectivity trials in the South Eastern EPPO zone

Figure 3.4-23: Trial map – Selectivity trials performed on winter wheat in the South-eastern EPPO zone – Spring application timing



Spring - Winter wheat – SE

Number on the map	Test report	Year	Trial location
1	EU 16 120 KO1	2016	Komárom (2921) Hungary
2	RO 16-029 DE1	2016	Corabia (235300) Romania
3	EU 17 112 KO1	2017	Komárom (2921) Hungary
4	EU 17 112 KO2	2017	Kocs (2898) Hungary
5	EU 17 112 KO3	2017	Kocs (2898) Hungary
6	EU 17 112 KO4	2017	Komárom (2921) Hungary
7	RO 17-008 DE1	2017	Crusovu (237046) Romania
8	RO 17-008 DE2	2017	Caracal (235200) Romania

Figure 3.4-24: Trial map – Selectivity trials performed on spring barley in the South-eastern EPPO zone – Spring application timing

Spring – Spring barley – SE

Number on the map	Test report	Year	Trial location
1	EU 16 157 KO1	2016	Komárom (2921) Komárom-Esztergom Hungary
2	RO 16-033 DE1	2016	Galati (807245) Piscu/Moldova Romania
3	EU 17 106 KO1	2017	Komárom (2921) Komarom-Esztergom Hungary
4	RO 17-004 DE1	2017	Spantov (917230) Romania
5	EU 17 109 KO1	2017	Mocsa (2911) Komarom-Esztergom Hungary
6	EU 17 109 KO2	2017	Mocsa (2911) Komarom-Esztergom Hungary
7	RO 17-006 DE1	2017	Spantov (917230) Romania
8	RO 17-006 DE2	2017	Manastirea (917170) Romania

In all selectivity trials, the phytotoxicity and impact on yield and quality parameters of the test product MT-565SG-OR2-C was compared to one commercial reference already registered to control weeds in winter cereals (Autumn application timing: Table 3.4-25; Spring application timing Table 3.4-26).

Table 3.4-25: Presentation of reference standards used in trials (selectivity trials, transformation trials...) – Autumn application timing

Crop(s)	Reference standard	Country(ies) where the product is used (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	Legato Pro 425 SC	Poland	R-159/2012	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	
	Carmina 640	Germany	006284-00	Diflufenican Chlortoluron	SC	40 g/l 600 g/l	Winter cereals: 3.5 l/ha on grass weeds 2.5 l/ha on dicotyledonous	2.5 l/ha – 5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
							weeds		
	Legato Pro 425 SC	Germany	Registered in Poland (Authorization number: R-159/2012)	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter barley	Legato Pro 425 SC	Poland	R-159/2012	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	
	Carmina 640	Germany	006284-00	Diflufenican Chlortoluron	SC	40 g/l 600 g/l	Winter cereals: 3.5 l/ha on grass weeds 2.5 l/ha on dicotyledonous weeds	2.5 l/ha – 5 l/ha	
	Legato Pro 425 SC	Germany	Registered in Poland (Authorization number: R-159/2012)	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter rye	Legato Pro 425 SC	Poland	R-159/2012	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	
	Carmina 640	Germany	006284-00	Diflufenican Chlortoluron	SC	40 g/l 600 g/l	Winter cereals: 3.5 l/ha on grass weeds 2.5 l/ha on dicotyledonous weeds	2.5 l/ha – 5 l/ha	
	Legato Pro 425 SC	Germany	Registered in Poland (Authorization number: R-159/2012)	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter triticale	Legato Pro 425 SC	Poland	R-159/2012	Diflufenican Chlortoluron	SC	25 g/l 400 g/l	Winter cereals: 2.0 - 2.5 l/ha	2.5 l/ha – 5 l/ha	
	Carmina 640	Germany	006284-00	Diflufenican Chlortoluron	SC	40 g/l 600 g/l	Winter cereals: 3.5 l/ha on grass weeds 2.5 l/ha on dicotyledonous weeds	2.5 l/ha – 5 l/ha	
	Legato Pro	Germany	Registered in	Diflufenican	SC	25 g/l	Winter cereals:	2.5 l/ha – 5	

Crop(s)	Reference standard	Country(ies) where the product is used (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.			
	425 SC		Poland (Authorization number: R-159/2012)	Chlortoluron		400 g/l	2.0 - 2.5 l/ha	l/ha	

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

Table 3.4-26: Presentation of reference standards used in trials (selectivity trials, transformation trials...) – Spring application timing

Crop(s)	Reference standard	Country(ies) where the product is used (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 soft wheat	Chwastox Extra 300 SL	Poland	R-77/2010	MCPA	SL	300 g/l	Spring wheat, winter barley, spring triticale, oat, winter wheat, winter barley, rye: 3 l/ha	3 l/ha – 6 l/ha	
	Chwastox Turbo 340 SL	Poland	R-94/2014	MCPA Dicamba	SL	300 g/l 40 g/l	Spring barley, oat: 2 l/ha Winter wheat, winter triticale, rye: 2.5 l/ha	2.5 l/ha – 5 l/ha	
	U46 M-Fluid	Germany	0050939-000	MCPA	SL	500 g/l	Spring wheat, spring barley, oat, spring rye: 1.4 l/ha Winter wheat, winter barley, winter triticale, winter rye: 1.5 l/ha	1500 ml/ha – 3000 ml/ha	
	Agritox	UK	14894	MCPA	SL	500 g/l	Spring barley, winter barley, spring oat, spring rye, winter rye, spring wheat, winter wheat: 3.3 l/ha	3.3 l/ha – 6.6 l/ha	
	Granstar 50 SX	Hungary	04.2/1679-1/2018	Tribenuron-methyl	SG	50%	Winter and Spring	30 g/ha and 60 g/ha	Applied with the adjuvant

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
							cereals (winter wheat, winter barley, spring barley, rye, oat, tritica-le): 25-40 g/ha		TREND 90 and MECOMORN 750 SL
	Mecomorn 750 SL	Hungary	04.2/12238-2/2014	MCPA	SL	750 g/l	Winter wheat, winter barley, spring barley, oat, rye, triticale: 0.8-1 l/ha	733 ml/ha – 1466 ml/ha	Applied with the adjuvant TREND 90 and GRAN-STAR 50 SX
	Rival Star 75 GD	Romania	2366/27.03.2008	Tribenuron-methyl	WG	750 g/kg	Wheat, oat: 15-20 g/ha Barley: 10-15 g/ha	20 g/ha – 40 g/ha	Name used in the trials: Rival Star
	Dicopur M	Romania	1782/13.03.1997	MCPA	EC	750 g/l	Wheat, barley: 1 l/ha	733 ml/ha - 1467 ml/ha	Applied with Rival Star 75 GD

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter barley	U46M-Fluid	Germany	060939-00	MCPA	SL	500 g/l	Winter wheat, winter rye, winter barley, spring bar-ley, spring wheat, spring rye, oat, triticale: 1.5 l/ha	1000 ml/ha – 2000 l/ha 1500 ml/ha – 3000 l/ha	
	Premier D 750 SL	Poland	R-142/2016	MCPA Dicamba	SL	660 g/l 90 g/l	Winter wheat, winter barley, winter triticale, winter rye: 1,25 l/ha Spring wheat, spring bar-ley, spring triticale, spring oat: 1.25 l/ha	1.25 l/ha – 2.5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter rye	Chwastox Extra 300 SL	Poland	R-77/2010	MCPA	SL	300 g/l	Spring wheat, winter barley, spring triti-cale, oat, winter wheat, winter barley, rye: 3 l/ha	3 l/ha – 6 l/ha	
	U46 M-Fluid	Germany	0050939-000	MCPA	SL	500 g/l	Spring wheat, spring bar-ley, oat, spring rye: 1.4 l/ha Winter wheat, winter barley, winter triticale, winter rye: 1.5 l/ha	1500 ml/ha – 3000 ml/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Winter triticale	Chwastox Turbo 340 SL	Poland	R-94/2014	MCPA Dicamba	SL	300 g/l 40 g/l	Spring barley, oat: 2 l/ha Winter wheat, winter triticale, rye: 2.5 l/ha	2.5 l/ha – 5 l/ha	
	U46 M-Fluid	Germany	0050939-000	MCPA	SL	500 g/l	Spring wheat, spring bar-ley, oat, spring rye: 1.4 l/ha Winter wheat, winter barley, winter triticale, winter rye: 1.5 l/ha	1500 ml/ha – 3000 ml/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Spring wheat	Chwastox 750 SL	Poland	R-71/2010	MCPA	SL	750 g/l	Spring wheat, spring bar-ley, spring triticale, oat:	0.75 l/ha 1.5 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
							0.75 l/ha Winter barley, winter wheat, winter triticale, rye: 1 l/ha		
	Chwastox Turbo 340 SL	Poland	R-94/2014	MCPA Dicamba	SL	300 g/l 40 g/l	Spring barley, Spring wheat: 2 l/ha Winter wheat, winter triticale, rye: 2.5 l/ha	2.0 l/ha 4 l/ha	

Crop(s)	Reference standard	Country(ies) where the product is used (1)	Authorization number	Active substance(s)	Formulation		Registered application rate(3)	Application rate in trials (per treat-ment)	Remark(4)
					Type(2)	Concentration of a.s.			
Spring barley	Chwastox Turbo 340 SL	Poland	R-94/2014 (report) R-66/2017 (database) R-254/2017b (double dose)	MCPA Dicamba	SL	300 g/l 40 g/l	Spring barley, oat: 2 l/ha Winter wheat, winter triticale, rye: 2.5 l/ha	2 l/ha – 4 l/ha	
	Granstar 75 WG	Poland	R-92/2010	Tribenuron-methyl	WG	750 g/kg	Spring barley, spring wheat: 15 to 25 g/ha depending on the weed	20 g/ha 40 g/ha	Applied with the adjuvant TREND 90
	Chwastox 750 SL	Poland	R-71/2010	MCPA	SL	750 g/l	Spring barley, spring wheat, triticale, oat: 0.75 – 1 l/ha	0.75 l/ha 1.5 l/ha	
	Agritox	United King-dom	14894	MCPA	SC	500 g/l	Winter and spring wheat, barley, rye and oats: 3.3 l/ha	3.3 l/ha – 6.6 l/ha	
	U46M-Fluid	Germany	060939-00	MCPA	SL	500 g/l	Winter wheat, winter rye, winter barley, spring barley, spring wheat, spring rye, oat, triticale: 1.5 l/ha	1000 ml/ha – 2000 l/ha 1500 ml/ha – 3000 l/ha	
	Granstar 50 SX	Hungary	04.2/1679-1/2018	Tribenuron-methyl	SG	50%	Winter wheat,	30 g/ha – 60 g/ha	Applied with

Crop(s)	Reference standard	Country(ies) where the product is used (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 barley, spring barley, rye, triticale, oat: 25-40 g/ha		Mecomorn 750 SL and with the adjuvant TREND 90
	Mecomorn 750 SL	Hungary	04.2/12238-2/2014	MCPA	SL	750 g/l	Winter wheat, winter barley, spring barley, rye, triticale, oat: 0.8-1 l/ha	0.8 l - 1 l/ha	Applied with Granstar 50 SX and with the adjuvant TREND 90
	Rival Star 75 GD	Romania	2366/27.03.2008	Tribenuron-methyl	GD	750 g/kg	Wheat, oat: 15-20 g/ha Barley: 10-15 g/ha	20 g/ha – 40 g/ha	Applied with Dicopur M Name used in the trials: Rival Star
	Dicopur M	Romania	1782/13.03.1997	MCPA	EC	750 g/l	Wheat, barley: 1 l/ha	580; 733; 1467ml/ha (2017 trials) 587 ml/ha (2016 trials)	Applied with Rival Star 75 GD

Crop(s)	Reference standard	Country(ies) where the product is used (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.			
Oat	Chwastox 750 SL	Poland	R-71/2010	MCPA	SL	750 g/l	Spring wheat, spring barley, spring triticale, oat: 0.75 l/ha Winter barley, winter wheat, winter triticale, rye: 1 l/ha	0.75 l/ha 1.5 l/ha	
	Chwastox Turbo 340 SL	Poland	R-94/2014	MCPA Dicamba	SL	300 g/l 40 g/l	Spring barley, oat: 2 l/ha Winter wheat, winter triticale, rye: 2.5 l/ha	2.0 l/ha 4 l/ha	

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

Material and methods

A total of ~~116~~ 114 trials selectivity trials, implemented in 2016 and 2017, evaluated the adverse effects on treated crops (phytotoxicity, impact on yield and on quality parameters) of MT-565SG-OR2-C. Furthermore, phytotoxicity of MT-565SG-OR2-C was assessed in 147 efficacy trials implemented from 2016 to 2018. Trials were located in North Eastern, Maritime or South-eastern EPPO zones, the material and methods are detailed per EPPO zone hereunder.

Trials were carried out in accordance with the EPPO standard PP 1/135(4) 'Phytotoxicity assessment' and no weeds were present in selectivity trials.

North-Eastern EPPO zone

In the North Eastern EPPO zone, adverse effects on crops (phytotoxicity, impact on yield and on quality parameters) of MT-565SG-OR2-C were evaluated in **~~46~~ 45 selectivity trials** conducted in Poland in 2016 and in 2017.

The selectivity of MT-565SG-OR2-C when ***applied in autumn*** was evaluated in ~~16~~ 15 trials implemented in winter wheat (4 trials), winter barley (4 trials), winter rye (4 trials) and winter triticale (~~4~~ 3 trials).
The selectivity of MT-565SG-OR2-C when ***applied in spring*** was evaluated in 30 trials implemented in winter wheat (4 trials), winter barley (4 trials), winter rye (4 trials), winter triticale (4 trials), spring wheat (4 trials), spring barley (5 trials) and oat (5 trials).

MT-565SG-OR2-C ***applied in autumn and spring*** was tested at the doses N and 2N and the tested rates to evaluate the phytotoxicity were the following:

1) 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha), corresponding to the 'N' dose.
2) 2 kg/ha (30 g a.i. of Tribenuron-methyl/ha + 1100 g a.i. of MCPA/ha), corresponding to the '2N' dose.

Commercial reference products were listed in Table 3.4-25 (autumn application timing) and in Table 3.4-26 (spring application timing).

The main details on trial methodology for selectivity trials in the North Eastern EPPO zone are summarized in the following table.

Table 3.4-27: Details on trial methodology – North Eastern EPPO zone – Selectivity trials – Autumn application timing

		Winter wheat	Winter barley	Winter rye	Winter triticale
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/135(4) Phytotoxicity assessment			
	Specific guidelines	PP 1/93(3) Weeds in cereals			
Experimental design	Plot design	Randomized complete block (UTC included)			
	Plot size	20 - 21 m²	20 – 21 m²	19.6 – 20 m²	20 - 21 m²
	Number of replications	4 replications in all trials			
Crop	Trials per crop	7 trials	4 trials	4 trials	4 trials
	Year of the trials	2016: 2 trials 2017: 3 trials	2016: 2 trials 2017: 2 trials	2016: 2 trials 2017: 2 trials	2016: 2 trials 2017: 2 trials
	Countries	Poland			
	Varieties per crop	Memory Ostroga	Rosita Antonella	Kier (2) Bono F1	Gringo Trapero

		Julius Hondia	Zenek Gloria	Stakkato	Grenado Witon
	Sowing period	September	September	September	September - October
Application	Application timing(s)	Autumn			
	Crop stage (BBCH)* at application	BBCH 13 - 24	BBCH 13 - 23	BBCH 13 - 23	BBCH 13 - 21
	Number of applications Intervals between applications	1 application -			
	Spray volumes	200 – 300 l/ha	200 – 400 l/ha	230 – 400 l/ha	200 - 300 l/ha
Assessment	Assessment types	Phytotoxicity (%), Vigor (%), Ground cover (%), Yield (kg/plot or a subdivision/plot, tons/ha), TWK (g/1000 grains), HLW (kg/100l), Moisture content (%), Protein content (%), Grain size (%/100 g)			
Other relevant information	e.g. Field / Greenhouse...	Field trials			

Table 3.4-28: Details on trial methodology – North Eastern EPPO zone – Selectivity trials – Spring application timing

		Winter wheat	Winter bar-ley	Winter rye	Winter triticale	Spring wheat	Spring barley	Oat
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/135(4) Phytotoxicity assessment						
	Specific guidelines	PP 1/93(3) Weeds in cereals						
Experimental design	Plot design	Randomized complete block (UTC included)						
	Plot size	16.8 - 21 m²	21 m²	21 – 30 m²	21 – 33 m²	15 – 36 m²	21 – 37.5 m²	19.8 – 23.4 m²
	Number of replications	4 replications in all trials						
Crop	Trials per crop	4 trials	4 trials	4 trials	4 trials	4 trials	5 trials	5 trials
	Year of the trials	2016: 1 trial 2017: 3 trials	2017: 4 trials	2016: 1 trial 2017: 3 trials	2017: 4 trials	2016: 2 trials 2017: 2 trials	2016: 2 trials 2017: 3 trials	2016: 2 trials 2017: 3 trials
	Countries	Poland						
	Varieties per crop	Julius Florian Kohelia Bamberka	Wootan Chalup (2) Meridian	Brasetto (2) Dankowskie Rubin Dankowskie zlote	Toledo Tulus Gringo (2)	Tybalt Izera Arabella Lennox	Xanadu Ella Eunova Iron Pinguin	Zuch (2) Arden Bingo Harnaś
	Sowing period	October	September - October	September - October	September - October	March	March - April	March
Application	Application timing(s)	Spring						
	Crop stage (BBCH)* at application	BBCH 14 - 37	BBCH 14 - 30	BBCH 30 - 32	BBCH 13 - 39	BBCH 23 - 39	BBCH 13 - 31	BBCH 14 - 29
	Number of applications Intervals between applications	1 application -						
	Spray volumes	150 – 300 l/ha	150 – 300 l/ha	250 – 300 l/ha	200 – 300 l/ha	200 – 300 l/ha	200 – 300 l/ha	200 – 400 l/ha

Assessment	Assessment types	Phytotoxicity (%), Vigor (%), Ground cover (%), Yield (kg/plot or a subdivision/plot, tons/ha), TWK (g/1000 grains), HLW (kg/100l), Moisture content (%), Protein content (%), Grain size (%/100 g)
Other relevant information	e.g. Field / Greenhouse...	Field trials

Crop stages at application were in accordance with the GAP table.
There was no deviation to the protocol in selectivity trials from North Eastern EPPO zone.

Furthermore, the phytotoxicity of MT-565SG-OR2-C was evaluated in **63 efficacy trials** conducted in Poland in 2016 and in 2017. Efficacy trials were performed on winter wheat (13 trials), winter barley (10 trials), winter rye (12 trials), winter triticale (10 trials), spring wheat (6 trials), spring barley (6 trials) and oat (6 trials). Phytotoxicity was evaluated at autumn and spring application timings.

In efficacy trials, MT-565SG-OR2-C was tested at 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha).

Maritime EPPO zone
In the Maritime EPPO zone, adverse effects on crops (phytotoxicity, impact on yield and on quality parameters) of MT-565SG-OR2-C were evaluated in **54 selectivity trials** conducted in Germany and UK in 2016 and in 2017.

The selectivity of MT-565SG-OR2-C when ***applied in autumn*** was evaluated in 20 trials implemented in winter wheat (7 trials), winter barley (5 trials), winter rye (4 trials) and winter triticale (4 trials).
The selectivity of MT-565SG-OR2-C when ***applied in spring*** was evaluated in 34 trials implemented in winter wheat (9 trials), winter barley (8 trials), winter rye (3 trials), winter triticale (4 trials) and spring barley (10 trials).

MT-565SG-OR2-C ***applied in autumn and spring*** was tested at the doses N and 2N and the tested rates to evaluate the phytotoxicity were the following:

1) 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha), corresponding to the ‘N’ dose.
2) 2 kg/ha (30 g a.i. of Tribenuron-methyl/ha + 1100 g a.i. of MCPA/ha), corresponding to the ‘2N’ dose.

Commercial reference products were listed in Table 3.4-25 (autumn application timing) and in Table 3.4-26 (spring application timing).

The main details on trial methodology for selectivity trials in the Maritime EPPO zone are summarized in the following table.

Table 3.4-29: Details on trial methodology – Maritime EPPO zone – Selectivity trials – Autumn application timing

		Winter wheat	Winter barley	Winter rye	Winter triticale
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/135(4) Phytotoxicity assessment			
	Specific guidelines	PP 1/93(3) Weeds in cereals			
Experimental design	Plot design	Randomized complete block (UTC included)			
	Plot size	15 – 30 m²	24 – 30 m²	24 – 30 m²	24 – 30 m²
	Number of replications	4 replications in all trials			

Crop	Trials per crop	7 trials	5 trials	4 trials	4 trials
	Year of the trials	2016: 4 trials 2017: 3 trials	2016: 4 trials 2017: 1 trial	2016: 2 trials 2017: 2 trials	2016: 2 trials 2017: 2 trials
	Countries	Germany			
	Varieties per crop	Reform (2) Elixer Cerubino RGT Reform Boregar Patras	Sandra (3) California Kosmos	KWS Gatano Brassetto SU Forsetti Gatano	Lombardo (3) Angostino
	Sowing period	September - October	September	September - October	September - October
Application	Application timing(s)	Autumn			
	Crop stage (BBCH)* at application	BBCH 13 - 14	BBCH 13 - 22	BBCH 13 - 23	BBCH 13 - 21
	Number of applications Intervals between applications	1 application -			
	Spray volumes	200 – 400 l/ha	200 – 300 l/ha	200 – 300 l/ha	200 – 400 l/ha
Assessment	Assessment types	Phytotoxicity (%), Vigor (%), Ground cover (%), Yield (kg/plot or a subdivision/plot, tons/ha), TWK (g/1000 grains), HLW (kg/100l), Moisture content (%), Protein content (%), Grain size (%/100 g)			
Other relevant information	e.g. Field / Greenhouse...	Field trials			

Table 3.4-30: Details on trial methodology – Maritime EPPO zone – Selectivity trials – Spring application timing

		Winter wheat	Winter barley	Winter rye	Winter triticale	Spring barley
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/135(4) Phytotoxicity assessment				
	Specific guidelines	PP 1/93(3) Weeds in cereals				
Experimental design	Plot design	Randomized complete block (UTC included)				
	Plot size	22.5 - 37.5 m²	22.5 – 30 m²	18 – 27.5 m²	18 – 30 m²	21 – 30 m²
	Number of replications	4 replications in all trials				
Crop	Trials per crop	9 trials	8 trials	3 trials	4 trials	10 trials
	Year of the trials	2016: 2 trials 2017: 7 trials	2017: 8 trials	2016: 1 trial 2017: 2 trials	2017: 4 trials	2016: 2 trials 2017: 8 trials
	Countries	Germany, United Kingdoms				
	Varieties per crop	Arezzo (2) Tobak Santiago Dickens JB Diego Julius Skyfall Crusoe	Meridian (2) Tenor Lomerit KWS Glacier Bazooka Volume Keeper	Brasetto (2) Dukato	Agostino (2) Barolo Lamberto	Solist (2) Simba (2) Quench Propino (2) Planet (2) Concerto
	Sowing period	September - November	September - October	September - November	September - November	March - April

Application	Application timing(s)	Spring				
	Crop stage (BBCH)* at application	BBCH 29 - 39	BBCH 30 - 39	BBCH 23 - 32	BBCH 23 - 32	BBCH 24 - 39
	Number of applications Intervals between applications	1 application -				
	Spray volumes	200 – 400 l/ha	200 – 400 l/ha	300 – 400 l/ha	200 – 400 l/ha	200 – 400 l/ha
Assessment	Assessment types	Phytotoxicity (%), Vigor (%), Ground cover (%), Yield (kg/plot or a subdivision/plot, tons/ha), TWK (g/1000 grains), HLW (kg/100l), Moisture content (%), Protein content (%), Grain size (%/100 g)				
Other relevant information	e.g. Field / Greenhouse...	Field trials				

Crop stages at application were in accordance with the GAP table.
There was no deviation to the protocol in selectivity trials from Maritime EPPO zone.

Furthermore, the phytotoxicity of MT-565SG-OR2-C was evaluated in **63 efficacy trials** conducted in Germany and UK in 2016 and in 2017. Efficacy trials were performed on winter wheat (21 trials), winter barley (11 trials), winter rye (11 trials), winter triticale (9 trials) and spring barley (11 trials). Phytotoxicity was evaluated at autumn and spring application timings.

In efficacy trials, depending on the application timing considered, MT-565SG-OR2-C was tested at 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha).

<u>South-eastern EPPO zone</u>
In the South-eastern EPPO zone, adverse effects on crops (phytotoxicity, impact on yield and on quality parameters) of MT-565SG-OR2-C were evaluated in **~~16~~ 15 selectivity trials** conducted in Hungary and Romania in 2016 and in 2017.

The selectivity of MT-565SG-OR2-C when ***applied in spring*** was evaluated in all ~~16~~ 15 trials implemented in winter wheat (8 trials) and spring barley (~~8~~ 7 trials).

MT-565SG-OR2-C ***applied in spring*** was tested at the doses N and 2N and the tested rates to evaluate the phytotoxicity were the following:

1) 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha), corresponding to the 'N' dose.
2) 2 kg/ha (30 g a.i. of Tribenuron-methyl/ha + 1100 g a.i. of MCPA/ha), corresponding to the '2N' dose.

Commercial reference products were listed in Table 3.4-26 (spring application timing).

The main details on trial methodology for selectivity trials in the South-eastern EPPO zone are summarized in the following table.

Table 3.4-31: Details on trial methodology – South-eastern EPPO zone – Selectivity trials – Spring application timing

		Winter wheat	Spring barley
Guidelines	General guidelines	PP 1/135(4) Phytotoxicity assessment PP 1/152(4) Design and analysis of efficacy evaluation trials PP 1/181(4) Conduct and reporting of efficacy evaluation trials including GEP PP 1/135(4) Phytotoxicity assessment	
	Specific guidelines	PP 1/93(3) Weeds in cereals	

Experimental design	Plot design	Randomized complete block (UTC included)	
	Plot size	12 - 21 m²	17.5 – 21 m²
	Number of replications	4 replications in all trials	
Crop	Trials per crop	8 trials	~~8~~ 7 trials
	Year of the trials	2016: 2 trials 2017: 6 trials	2016: 2 trials 2017: ~~6~~ 5 trials
	Countries	Hungary and Romania	
	Varieties per crop	GK Berény GK Futar (2) Rustic Glosa (2) Izvor GK Elet	Conchita Paula ~~Scarlett~~ Bolyhos (2) Maltea (3)
	Sowing period	October	March
Application	Application timing(s)	Spring	
	Crop stage (BBCH)* at application	BBCH 25 - 39	BBCH 23 - 37
	Number of applications Intervals between applications	1 application -	
	Spray volumes	200 – 250 l/ha	200 – 250 l/ha
Assessment	Assessment types	Phytotoxicity (%), Vigor (%), Ground cover (%), Yield (kg/plot or a subdivision/plot, tons/ha), TWK (g/1000 grains), HLW (kg/100l), Moisture content (%), Protein content (%), Grain size (%/100 g)	
Other relevant information	e.g. Field / Greenhouse...	Field trials	

Crop stages at application were in accordance with the GAP table.
There was no deviation to the protocol in selectivity trials from South-eastern EPPO zone.

Furthermore, the phytotoxicity of MT-565SG-OR2-C was evaluated in **14 efficacy trials** conducted in Hungary and Romania in 2016 and in 2017. Efficacy trials were performed on winter wheat (7 trials) and spring barley (7 trials). Phytotoxicity was evaluated at spring application timing.

In efficacy trials, MT-565SG-OR2-C was tested at 1 kg/ha (15 g a.i. of Tribenuron-methyl/ha + 550 g a.i. of MCPA/ha).

Comments of zRMS:	The dossier is accompanied by selectivity test reports numbered from 1-116. Report No. 72 was not attached. Report No. 104 (U17106KO1) has no evaluation results. In this situation, 114 reports are assessed, not 116.

3.4.1 Phytotoxicity to host crop (KCP 6.4.1)

All selectivity and efficacy trials were carried out by officially recognized organisations, in accordance with the Principles of Good Experimental Practices (GEP), and conducted according to the EPPO guideline PP 1/135 (~~3~~ 4) "Phytotoxicity assessment".

The phytotoxicity of MT-565SG-OR2-C was observed in all efficacy and selectivity trials presented in this dossier.
MT-565SG-OR2-C is intended to be applied either in autumn or in spring (post-emergence) for the control of weeds in cereals. The selectivity of the tested product will be therefore investigated by application timing first, and by EPPO zone secondly.

Comments of zRMS:	PP 1/135 (4) Phytotoxicity assessment has been in force since 2014. All studies were carried out after 2014, and in the experience reports from trials performed by Anadiag, Quintus and Oxford Agricultural Trials Limited there is a reference to a non-current version of PP 1/135 (3)

3.4.1.1 Autumn application timing

Phytotoxicity was assessed in North-Eastern EPPO zone in ~~16~~ 15 selectivity trials and 20 efficacy trials and in the Maritime EPPO zone in 20 selectivity trials and 26 efficacy trials for autumn application timing of MT-565SG-OR2-C.

No phytotoxicity was observed in 72 trials out of 82 trials efficacy and selectivity trials.
Few phytotoxicity symptoms, with at maximum 5% of the crop damaged, were observed in 13 trials out of 82 efficacy and selectivity trials. Those symptoms were mainly observed after application and disappeared almost or completely at the end of the trial.

In both North-Eastern and Maritime EPPO zones, phytotoxicity symptoms observed at N or 2N were transitory in all the trials and no phytotoxicity symptoms were observed in spring assessments.

Environmental conditions at application are therefore important to consider. Indeed, high humidity can result in crop injury because droplets of moisture remain on a crop surface for longer time periods. However, when sprayed plants are in need of water, it increases the probability of injury. Spray under extremely hot and sunny conditions increases the possibility of injury on the crop.
Furthermore, after application, high thermal amplitude with negative temperatures or a water excess are unfavourable for herbicide selectivity.
Herbicidal products are most efficient when there is a combination of warm temperatures and good relative humidity. If there are heavy rainfalls after application herbicide molecules might be dragged in deeply in the soil and be in contact with the roots of the crop what will slow it development.

Table 3.4-32: Phytotoxicity of MT-565SG-OR2-C – Winter wheat – Autumn application timing – (summarized results)

Number of trials with…		Selectivity trials				Efficacy trials	
Winter wheat		MT-565SG-OR2-C		Std reference		MT-565SG-OR2-C	Std reference
Autumn Appl Timing		N	2N	N	2N	N	N
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	3	3	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0
Maritime EPPO zone		**(7 trials)**				**(9 trials)**	
Nb of trials with no phyto		6	5	7	7	9	9
Maximum of phytotoxicity	1% to 5% >5% to 10%	1	1 1	0	0	0	0

recorded during the trials	>10% to 15% >15 %						
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	 1	1 1	0	0	0	0

Table 3.4-33: Phytotoxicity of MT-565SG-OR2-C – Winter barley – Autumn application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter barley		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std refer-ence**
Autumn Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	4	4	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Maritime EPPO zone		**(5 trials)**				**(6 trials)**	
Nb of trials with no phyto		5	5	4	4	6	6
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0

Table 3.4-34: Phytotoxicity of MT-565SG-OR2-C – Winter rye – Autumn application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter rye		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std refer-ence**
Autumn Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	4	4	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Maritime EPPO zone		**(4 trials)**				**(6 trials)**	
Nb of trials with no phyto		4	4	4	4	6	6
Maximum of	1% to 5%	0	0	0	0	0	0

phytotoxicity recorded during the trials	>5% to 10% >10% to 15% >15 %						
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0

Table 3.4-35: Phytotoxicity of MT-565SG-OR2-C – Winter triticale – Autumn application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter triticale		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std refer-ence**
Autumn Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	3	3	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	1	0	0
Maritime EPPO zone		**(4 trials)**				**(4 trials)**	
Nb of trials with no phyto		4	4	4	4	3	4
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	1	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	1	0

Comments of zRMS:	The applicant presented the results of 15 selectivity trials carried out in in two growing seasons 2016/ 2017 and 2017/2018 in Poland (4 in winter wheat, 4 in winter barley , 4 in winter rye, and 3 in winter triticale) and 20 selectivity trials carried out in in two growing seasons 2016/ 2017 and 2017/2018 in Germany (7 in winter wheat, 5 in winter barley , 4 in winter rye, and 4 in winter triticale). The number of trials is sufficient and their location is adequate to carry out the evaluation. The methods used in the presented trials were appropriate and trials submitted for evaluation are satisfactorily representative for winter cereals. There were not observed any phytotoxicity symptoms on tested product in all trials carried out in winter barley, winter rye and winter triticale. Also, in none of the experiments carried out in winter wheat in Poland, phytotoxic symptoms were noted. **The results presented for evaluation were considered satisfactory, stating that HAKSAR TOP 565 SG (MT-565SG-OR2-C) applied in autumn was selective for winter cereals.**

3.4.1.2 Spring application timing

Phytotoxicity was assessed in ~~80~~ 79 selectivity trials implemented in North-eastern (30) Maritime (34) and South-eastern (~~16~~ 15) EPPO zones on winter wheat, winter barley, winter rye, winter triticale, spring wheat, spring barley and oat.
Selectivity of MT-565SG-OR2-C was also recorded in 101 efficacy trials performed in North-eastern (45), Maritime (41) and South-eastern (15) EPPO zones on winter wheat, winter barley, winter rye, winter triticale, spring wheat, spring barley and oat.

Negligible phytotoxicity symptoms were observed in 5 trials out of 181 trials efficacy and selectivity trials.

In both North Eastern and Maritime EPPO zones, phytotoxicity symptoms observed at N or 2N were transitory in all the trials.

Environmental conditions at application are therefore important to consider. Indeed, high humidity can result in crop injury because droplets of moisture remain on a crop surface for longer time periods. However, when sprayed plants are in need of water, it increases the probability of injury. Spray under extremely hot and sunny conditions increases the possibility of injury on the crop.
Furthermore, after application, high thermal amplitude with negative temperatures or a water excess are unfavourable for herbicide selectivity.
Herbicidal products are most efficient when there is a combination of warm temperatures and good relative humidity. If there are heavy rainfalls after application herbicide molecules might be dragged in deeply in the soil and be in contact with the roots of the crop what will slow it development.

Table 3.4-36: Phytotoxicity of MT-565SG-OR2-C – Winter wheat – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter wheat		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(9 trials)**	
Nb of trials with no phyto		4	4	4	3	9	9
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	1	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	1	0	0
Maritime EPPO zone		**(9 trials)**				**(13 trials)**	
Nb of trials with no phyto		9	8	9	9	13	13
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	1	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	1	0	0	0	0
South-eastern EPPO zone		**(8 trials)**				**(8 trials)**	
Nb of trials with no phyto		7	6	7	7	8	8
Maximum of phytotoxicity	1% to 5% >5% to 10%	1	2	1	1	0	0

recorded during the trials	>10% to 15% >15 %						
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	1	2	1	1	0	0

Table 3.4-37: Phytotoxicity of MT-565SG-OR2-C – Winter barley – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter barley		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	4	4	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Maritime EPPO zone		**(8 trials)**				**(5 trials)**	
Nb of trials with no phyto		8	8	8	8	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0

Table 3.4-38: Phytotoxicity of MT-565SG-OR2-C – Winter rye – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter rye		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(7 trials)**	
Nb of trials with no phyto		4	4	4	4	7	7
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Maritime EPPO zone		**(3 trials)**				**(5 trials)**	
Nb of trials with no phyto		3	3	3	3	5	5
Maximum of phytotoxicity recorded	1% to 5% >5% to 10% >10% to	0	0	0	0	0	0

during the trials	15% >15 %						
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0

Table 3.4-39: Phytotoxicity of MT-565SG-OR2-C – Winter triticale – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Winter triticale		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	3	2	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	2	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	1	2	0	0
Maritime EPPO zone		**(4 trials)**				**(5 trials)**	
Nb of trials with no phyto		4	4	4	4	5	4
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	1
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	1

Table 3.4-40: Phytotoxicity of MT-565SG-OR2-C – Spring wheat – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Spring wheat		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(4 trials)**				**(6 trials)**	
Nb of trials with no phyto		4	4	4	4	5	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	 1	 1
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	1	1

Table 3.4-41: Phytotoxicity of MT-565SG-OR2-C – Spring barley – Spring application timing – (summarized results)

Number of trials with…	**Selectivity trials**		**Efficacy trials**	
Spring barley	**MT-565SG-OR2-C**	**Std reference**	**MT-565SG-**	**Std reference**

						OR2-C	
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(5 trials)**				**(7 trials)**	
Nb of trials with no phyto		5	5	5	5	7	7
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Maritime EPPO zone		**(10 trials)**				**(13 trials)**	
Nb of trials with no phyto		10	10	10	10	13	13
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
South-eastern EPPO zone		**(8 trials)**				**(7 trials)**	
Nb of trials with no phyto		8	8	8	8	7	7
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15% >15 %	0	0	0	0	0	0

Table 3.4-42: Phytotoxicity of MT-565SG-OR2-C – Oat – Spring application timing – (summarized results)

Number of trials with…		**Selectivity trials**				**Efficacy trials**	
Oat		**MT-565SG-OR2-C**		**Std reference**		**MT-565SG-OR2-C**	**Std reference**
Spring Appl Timing		**N**	**2N**	**N**	**2N**	**N**	**N**
North- eastern EPPO zone		**(5 trials)**				**(6 trials)**	
Nb of trials with no phyto		4	4	5	5	6	5
Maximum of phytotoxicity recorded during the trials	1% to 5% >5% to 10% >10% to 15% >15 %	1	 1	0	0	0	1
Level of symptoms at the last assessments	0% to 5% >5% to 10% >10% to 15%	1	1	0	0	0	1

	>15 %							

Comments of zRMS:	*Winter cereals – spring application* The applicant presented the results of 16 selectivity trials carried out in in two years 2016 and 2017 in Poland (4 in winter wheat, 4 in winter barley , 4 in winter rye, and 4 in winter triticale) and 24 selectivity trials carried in two years 2016 and 2017 in Germany (9 in winter wheat, 8 in winter barley, 3 in winter rye, and 4 in winter triticale). Additionally, the applicant presented 9 selectivity studies conducted in Great Britain and 8 studies conducted South-eastern EPPO zone. The number of trials is sufficient and their location is adequate to carry out the evaluation. The methods used in the presented trials were appropriate and trials submitted for evaluation are satisfactorily representative for winter cereals. There were not observed any phytotoxicity symptoms on tested product, in the recommended dose, in all selectivity trials carried out in Poland and Geramany. **The results presented for evaluation were considered satisfactory, stating that HAKSAR TOP 565 SG (MT-565SG-OR2-C) applied in spring was selective for winter cereals.** *Springs cereals* The applicant presented the results of 14 selectivity trials carried out in in two years 2016 and 2017 in Poland (4 in spring wheat, 5 in spring barley and 5 in oat) and 5 selectivity trials carried in 2017 in Germany in spring barley. Additionally, the applicant presented 5 selectivity studies conducted in Great Britain and 7 studies conducted in South-eastern EPPO zone in spring barley. The number of trials is sufficient and their location is adequate to carry out the evaluation. The methods used in the presented trials were appropriate and trials submitted for evaluation are satisfactorily representative for spring cereals. There were not observed any phytotoxicity symptoms on tested product in all trials carried out in spring wheat and spring barley. Only in one experiment in oat (CH_H_MTT_SEL09) symptoms of phytotoxic effects of the tested product were observed, which, however, did not reduce the yield. Symptoms of phytotoxicity MT-565SG-OR2-C of applied with adjuvant Sarbio 90 EC noted on the crop as chlorosis only in the first observation, seven days after application A (7DAA) of level 5% (MT-565SG-OR2-C 1000 g/ha+ Sarbio 50 mL/100L) and 12.5% (MT-565SG-OR2-C 2000 g/ha+ Sarbio 100 mL/100L). Total phytotoxicity was 3.5% and 8.5%, respectively. On the other assessments there were no visual symptoms of phytotoxicity of the crop. **The results presented for evaluation were considered satisfactory, stating that HAKSAR TOP 565 SG (MT-565SG-OR2-C) was selective for spring cereals.**

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

3.4.2.1 Autumn application timing

In the North Eastern EPPO zone the impact of a post-emergence application of MT-565SG-OR2-C during autumn, at the proposed label rate of 1 kg/ha or at the double dosage of 2 kg/ha, was evaluated in ~~16~~ 15 selectivity trials in 2016 and 2017. Trials were performed on winter wheat (4), on winter barley (4), on winter rye (4) and on winter triticale (~~4~~ 3).

In the Maritime EPPO zone the impact of a post-emergence application of MT-565SG-OR2-C during autumn, at the proposed label rate of 1 kg/ha or at the double dosage of 2 kg/ha, was evaluated in 17 selectivity trials in 2016 and 2017. Trials were performed on winter wheat (4), on winter barley (5), on winter rye (4) and on winter triticale (4).

Yield was assessed in North-Eastern EPPO zone in ~~16~~ 15 selectivity trials and in the Maritime EPPO zone in 17 selectivity trials for applications of MT-565SG-OR2-C in autumn.

No negative effect on the yield were observed in the ~~33~~ 32 selectivity trials.

According to the performed trials in the North-Eastern and Maritime EPPO zones, the post-emergence application of MT-565SG-OR2-C applied in autumn at proposed label rates or at the double dosage did not impair yield of any of the tested cereals crops.

Comments of zRMS:	The applicant in this registration report has not provided a tabular summary of the results obtained. However, the attached test reports provide results of 31 experiments carried out on many different varieties of winter cereals, showing the effect of the tested product on the yield of winter cereals. The experiments were conducted in Poland (15) and the Germany (17) in two growing seasons 2016/ 2017 and 2017/2018. The number of tests and their location is sufficient to conduct an evaluation. **The lack of negative impact on the yield, combined with the lack of phytotoxicity symptoms, fully confirms that the product HAKSAR TOP 565 SG (MT-565SG-OR2-C) is safe for winter cerals plants in autumn application.**

3.4.2.2 Spring application timing

In the North Eastern EPPO zone the impact of a post-emergence application of MT-565SG-OR2-C during spring, at the proposed label rate of 1 kg/ha or at the double dosage of 2 kg/ha, was evaluated in 31 selectivity trials in 2016 and 2017. Trials were performed on winter wheat (4), on winter barley (4), on winter rye (5), on winter triticale (4), spring wheat (4), spring barley (5) and oat (5).

In the Maritime EPPO zone the impact of a post-emergence application of MT-565SG-OR2-C during spring, at the proposed label rate of 1 kg/ha or at the double dosage of 2 kg/ha, was evaluated in 33 selectivity trials in 2016 and 2017. Trials were performed on winter wheat (9), on winter barley (9), on winter rye (3), on winter triticale (4) and spring barley (8).

In the South-eastern EPPO zone the impact of a post-emergence application of MT-565SG-OR2-C during spring, at the proposed label rate of 1 kg/ha or at the double dosage of 2 kg/ha, was evaluated in 16 selectivity trials in 2016 and 2017. Trials were performed on winter wheat (8) and spring barley (~~8~~ 7).

Yield was assessed in North-Eastern EPPO zone in 31 selectivity trials, in the Maritime EPPO zone in 33 selectivity trials and in the South-eastern EPPO zone in ~~16~~ 15 selectivity trials for applications of MT-565SG-OR2-C in spring.

No negative effect on the yield were observed in the 80 selectivity trials.

According to the performed trials in the North-Eastern, Maritime and South-eastern EPPO zones, the post-emergence application of MT-565SG-OR2-C applied in spring at proposed label rates or at the double dosage did not impair yield of any of the tested cereals crops.

Comments of zRMS:	<u>*Winter cereals – spring application*</u> The applicant in this registration report has not provided a tabular summary of the

	results obtained. However, the attached test reports provide results of 40 experiments carried out on many different varieties of winter cereals (winter wheat, winter barley, winter rye, winter triticale), showing the effect of the tested product on the yield of winter cereals. The experiments were conducted in Poland (16) and the Germany (24) in two years 2016 and 2017. Additionally, the applicant presented 9 selectivity studies conducted in Great Britain and 8 studies conducted South-eastern EPPO zone. The number of tests and their location is sufficient to conduct an evaluation. **The lack of negative impact on the yield, combined with the lack of phytotoxicity symptoms, fully confirms that the product product HAKSAR TOP 565 SG (MT-565SG-OR2-C) is safe for winter cerals plants in spring application.** *Spring cereals* The applicant in this registration report has not provided a tabular summary of the results obtained. However, the attached test reports provide results of 19 experiments carried out on different spedie nad many varieties of spring cereals, showing the effect of the tested product on the yield of spring cereals. The experiments were conducted in Poland (14) and the Germany (5) in two years 2016 and 2017. Additionally, the applicant presented 5 selectivity studies conducted in Great Britain and 7 studies conducted in South-eastern EPPO zone in spring wheat. The number of tests and their location is sufficient to conduct an evaluation. **The lack of negative impact on the yield, combined with the lack of phytotoxicity symptoms, fully confirms that the product HAKSAR TOP 565 SG (MT-565SG-OR2-C) is safe for spring cerals plants.**

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

Several parameters investigating the quality of plants and plants products were recorded in selectivity trials: the moisture content, the weight of thousand kernel (TKW), the grain hectolitre weight (HLW), the protein content and the grain size.
Those parameters were not consistently recorded in all selectivity trials.

3.4.3.1 Autumn application timing

In the North-eastern EPPO zone, effects on quality of plants or plant products of MT-565SG-OR2-C applied during autumn was investigated in ~~16~~ 15 selectivity trials implemented on winter wheat (4), winter barley (4), winter rye (4) and winter triticale (~~4~~ 3).

In the Maritime EPPO zone, effects on quality of plants or plant products of MT-565SG-OR2-C applied during autumn was investigated in 19 selectivity trials implemented on winter wheat (6), winter barley (5), winter rye (4) and winter triticale (4).

A total of 35 selectivity trials were implemented to investigate the potential negative effects of MT-565SG-OR2-C when sprayed during autumn on cereals.
Trials were undertaken in North-eastern EPPO zone (16) and in Maritime EPPO zone (19) on winter wheat, winter barley, winter rye and winter triticale.

In the North-eastern EPPO zone, 16 selectivity trials between 2016 and 2017 in Poland on winter wheat, winter barley, winter rye and winter triticale revealed no negative impact of MT-565SG-OR2-C on moisture content, TKW, HLW, protein content and size of grains.

In the Maritime EPPO zone, 19 selectivity trials between 2016 and 2017 in Germany and UK on winter wheat, winter barley, winter rye and winter triticale revealed no / negligible negative impact of MT-565SG-OR2-C on moisture content, TKW, HLW, protein content and size of grains.

3.4.3.2 Spring application timing

applied during spring was investigated in 30 selectivity trials implemented on winter wheat (4), winter barley (4), winter rye (4), winter triticale (4), spring wheat (4), spring barley (5) and oat (5).

In the Maritime EPPO zone, effects on quality of plants or plant products of MT-565SG-OR2-C applied during spring was investigated in 34 selectivity trials implemented on winter wheat (9), winter barley (8), winter rye (3), winter triticale (4) and spring barley (10).

In the South-eastern EPPO zone, effects on quality of plants or plant products of MT-565SG-OR2-C applied during spring was investigated in 16 selectivity trials implemented on winter wheat (8) and spring barley (~~8~~ 7).

A total of ~~80~~ 79 selectivity trials were implemented to investigate the potential negative effects of MT-565SG-OR2-C when sprayed during spring on cereals.
Trials were undertaken in North-eastern EPPO zone (30), in Maritime EPPO zone (34) and in South-eastern EPPO zone (~~16~~ 15) on winter wheat, winter barley, winter rye, winter triticale, spring wheat, spring barley and oat.

In the North-eastern EPPO zone, 30 selectivity trials between 2016 and 2017 in Poland on winter wheat, winter barley, winter rye and winter triticale, spring wheat, spring barley and oat revealed no negative impact of MT-565SG-OR2-C on moisture content, TKW, HLW and protein content.

In the Maritime EPPO zone, 34 selectivity trials between 2016 and 2017 in Germany and UK on winter wheat, winter barley, winter rye, winter triticale and spring barley revealed no / negligible negative impact of MT-565SG-OR2-C on moisture content, TKW, HLW and protein content.

In the South-eastern EPPO zone, ~~16~~ 15 selectivity trials between 2016 and 2017 in Hungary and Romania on winter wheat and spring barley revealed no negative impact of MT-565SG-OR2-C on moisture content, TKW, HLW and protein content.

Comments of zRMS:	*Winter cereals – spring application* The applicant in this registration report has not provided a tabular summary of the results obtained. However, the attached test reports provide results of 35 experiments carried out on different species and many varieties of winter cereals, showing the impact of HAKSAR TOP 565 SG (MT-565SG-OR2-C) applied in spring on moisture content, TKW, HLW and protein content. The experiments were conducted in Poland (30) and the Germany (15) in two years 2016 and 2017. The number of tests and their location is sufficient to conduct an evaluation. In all the presented experiments, that tested product HAKSAR TOP 565 SG (MT-565SG-OR2-C) had no significant negative impact on on the quality parameters of winter cereal grain. **The lack of negative impact on the weight of thousand grain weigh, hectolitre, moisture of grain and protein content combined with the lack of phytotoxicity symptoms, fully confirms that the product HAKSAR TOP 565 SG (MT-565SG-OR2-C) applied in spring is safe for winter cereals plants.** *Spring cereals* The applicant in this registration report has not provided a tabular summary of the results obtained. However, the attached test reports provide results of 19 experiments carried out on different varieties of sprig wheat, spring barley and oat, showing the impact of HAKSAR TOP 565 SG (MT-565SG-OR2-C) on moisture

	content, TKW, HLW and protein content . The experiments were conducted in Poland (14) and the Germany (5) in two years 2016 and 2017. The number of tests and their location is sufficient to conduct an evaluation. In all the presented experiments, that tested product HAKSAR TOP 565 SG (MT-565SG-OR2-C) had no significant negative impact on on the quality parameters of spring cereal grain. **The lack of negative impact on the weight of thousand grain weigh, hectolitre, and moisture of grain combined with the lack of phytotoxicity symptoms, fully confirms that the product HAKSAR TOP 565 SG (MT-565SG-OR2-C) is safe for spring cereals plants.**

3.4.4 Effects on transformation processes (KCP 6.4.4)

There were no trial assessing the effect of MT-565SG-OR2-C application on transformation processes.

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

There were no trial evaluating the impact of MT-565SG-OR2-C applications on treated plants or products to be used for propagation.

Comments of zRMS:	In the course of studies carried out in Poland and Germany in the season of 2016 and 2017 on product product HAKSAR TOP 565 SG (MT-565SG-OR2-C) the herbicide has not been observed to have any negative influence on yield. The product may be used in seed crops of winter and spring ceresals.

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

3.5.1 Impact on succeeding crops (KCP 6.5.1)

Impact on succeeding crops (KCP 6.5.1)

This section has been prepared in accordance with the EPPO guideline PP 1/207 (2) “Effects on succeeding crops”.
The study on the toxicity to non-target terrestrial plants has been carried out with HAKSAR TOP 565 SG (MT-565SG-OR2-C). Please refer to Terrestrial Plant Test: MCPA + TRIBENURON METYL 565 SG Terrestrial Plant Test: Seedling Emergence and Seedling Growth Test, Aneta Gierbuszewska, 2018, Study code G/160/17.

The study is described in detail in Section 9 of the dRR (chapter 9.10). For the ER_{50} values of the tested species please refer to Table 3.1.1-1 below.

Table 3.1.1-1: EC_{50}-values (L/ha) of different test plants

Test plant		ER_{50} HAKSAR TOP 565 SG (g/ha)
Common name	**Scientific name (lat.)**	**Seedling-emergence-test**
Carrot	*Daucus carota*	26.7

Sunflower	*Helianthus annuus*	642.3
Cabbage	*Brassica olerace var. capitata*	49.3
Pea	*Pisum sativum*	163.2
Bean	*Phaseolus vulgaris*	>1000
Tomato	*Solanum lycopersicon*	435.4
Onion	*Allium cepa*	54.9
Perennial ryegrass	*Lolium perenne*	671.6
Oats	*Avena sativa*	>1000
Wheat	*Triticum aestivum*	516.8

In the study, doses were indicated as g product/ha therefore, ER_{50} were recalculated to ER_{50} expressed as mg a.s./kg soil, taking into consideration: bulk density of soil = 1.5 g/cm^{3}and soil depth 5 cm. The lowest value for *Daucus carota* was taken into consideration in calculations.
These values, PEC values and TER-calculation based on ER_{50} -values are given in the following table.

Table 3.1.1-2: PEC-values and TER-calculation of HAKSAR TOP 565 SG based on ER50 -values.

Succeeding crop$^{(1)}$	Days after application$^{(2)}$	ER50 mg/kg soil$^{(3)}$	PEC$^{(4)}$		TER$^{(5)}$	
			mg/kg soil e.g. 5 cm	mg/kg soil e.g. 20 cm	ER50/PEC e.g. 5 cm	ER50/PEC e.g. 20 cm
Daucus carota	0	0.0356	1.33	0.33	**0.027**	**0.1**
Daucus carota	30	0.0356	0.74	0.15	**0.048**	**0.34**
Daucus carota	100	0.0356	0.099	0.025	**0.36**	1.42
Daucus carota	300	0.0356	0.0005	0.000137	71.2	259

(1) possible following crops in a regular crop rotation
(2) adequate value for following crop in a regular crop rotation
(3) ER50 -values of succeeding crops
(4) PEC (soil depth e.g. 5/20 cm)
(5) TER (soil depth e.g. 5/20 cm)

As it was indicated above, TER value was >1 after 100 days from application of the product when depth 20 cm was considered and after 300 days when depth 5 cm was considered.
If it is necessary to liquidate a plantation treated with the product as a result of damage to plants by frosts, diseases or pests after performing pre-sowing cultivation, other plants can be grown.

Comments of zRMS:	In the course of studies carried out in Poland and Germany in the season of 2016 and 2017 on product product HAKSAR TOP 565 SG (MT-565SG-OR2-C) the herbicide has not been observed to have any negative influence on yield. The product may be used in seed crops of winter and spring ceresals.

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

Impact on other plants including adjacent crops

This section has been prepared in accordance with the EPPO guideline PP 1/256 (1) "Effects on adjacent crops".

PEC values (drift) were calculated for different distances between cereals and adjacent crops. The results are given in the following table.

Table 3.5.2-1: PEC-values for single application (drift) according to Ganzelmeier, BBA 1995

Distance to adjacent crop (m)	% drift	Drift test product (g/ha)
1	2.77	27.7
3	0.95	9.5
5	0.57	5.7
10	0.29	2.7
15	0.20	2

Risk assessments are conducted based on the current Guidance Document on Terrestrial Ecotoxicology (SANCO/10329/ rev.2 final, 2002) for the GAP uses at an intended maximum use rate of 1000 g product/ha, corresponding to 550 g MCPA/ha and 15 g tribenuron methyl/ha for the use in cereals.

The study on the toxicity to non-target terrestrial plants has been carried out with HAKSAR TOP 565 SG (MCPA + TRIBENURON METYL 565 SG). Please refer to Terrestrial Plant Test: MCPA + TRIBENURON METYL 565 SG Terrestrial Plant Test: Seedling Emergence and Seedling Growth Test, Aneta Gierbuszewska, 2018, Study code G/160/17, and Terrestrial plants test: MCPA + TRIBENURON METYL 565 SG, Terrestrial Plant Test: Vegetative Vigour Test, Weronika Dec, 2018, Study code G/161/17.
The studies are described in detail in Section 9 of the dRR (chapter 9.10). For the ER50 values of the tested species please refer to Table 3.5.2-2 below.

Table 3.5.2-2: ER_{50}-values (L/ha) of different test plants

Test plant		ER_{50} *HAKSAR TOP 565 SG* (g/ha)	
Common name	**Scientific name (lat.)**	**Seedling-emergence-test**	**Vegetative-vigour-test**
Carrot	*Daucus carota*	26.7	9.3
Sunflower	*Helianthus annuus*	642.3	18.4
Cabbage	*Brassica olerace var. capitata*	49.3	199.9
Pea	*Pisum sativum*	163.2	243.9
Bean	*Phaseolus vulgaris*	>1000	290.8
Tomato	*Solanum lycopersicon*	435.4	31.2
Onion	*Allium cepa*	54.9	29.6
Perennial ryegrass	*Lolium perenne*	671.6	456.7

Oats	*Avena sativa*	>1000	>1000
Wheat	*Triticum aestivum*	516.8	>1000

Table 3.5.2-3: TER values of HAKSAR TOP 565 SG for different crops at different distances after single application

Crops	ER_{50} (L product/ha)	Drift rate: Distance in m HAKSAR TOP 565 SG				
		1m	**3m**	**5m**	**10m**	**15m**
		27.7	**9.5**	**5.7**	**2.7**	**2**
Daucus carota	9.3	**0.33**	**0.98**	1.63	3.44	4.65

Of the species tested with the current formulation, *Daucus carota* was the most sensitive species.
As outlined above, an acceptable risk is indicated for terrestrial non-target plants, when 5m buffer strip is applied, as the respective TER values is >1, as requested in EPPO guideline PP 1/256. No further testing required.

Comments of zRMS:	In the course of studies carried out in Poland and Germany in the season of 2016 and 2017 on product product HAKSAR TOP 565 SG (MT-565SG-OR2-C) the herbicide has not been observed to have any negative influence on yield. The product may be used in seed crops of winter and spring ceresals.

Tank cleaning

As HAKSAR TOP 565 SG is an herbicide for control of weeds, an insufficient tank cleaning can cause negative effects on the next crops. Therefore, an appropriate tank cleaning has to be performed after application of HAKSAR TOP 565 SG.
According to Appendix 4 of EPPO guideline PP 1/292(1), up to 2.6% of the spray solution will remain in the PAE following application (according to ISO 16119).

Assuming a dose of 1kg product/ha in 200 L water/ha and a product containing 550 g/kg of MCPA and 15 g/kg of Tribenuron methyl the following would therefore apply:

Table 3.5.2-4: Calculation of washout according to Appendix 4 of EPPO PP 1/292(1)

Calculations	
Amount of a.i. in 1000 L sprayer (assuming 200 L ha^{-1} water)	1000/200 = 5 5 x 1kg product (application dose in 1 ha) = 5kg product in 1000 L sprayer 1 kg product contains 550 g/kg of MCPA and 15 g/kg of tribrnuron methyl, therefore 5kg product (in the 1000 L sprayer), contains 2750 g of MCPA and 75 g of tribenuron methyl.
Amount left in sprayer after spraying (2.6%)	5kg product x 2.6% = 0.13 kg product (containing 71.5 g MCPA and 1.95 g of tribrnuron methyl)
Situation A (without washing)	
Dose applied (at 200 L/ha) to	0.13 kg product / 2.5 ha = 0.052 kg product/ha (containing 28.6 g MCPA

2.5 ha (without washing)	and 0.78g of tribrnuron methyl)
Situation B (one washout - procedure)	
Amount of product left in sprayer after 1st stage of washout procedure (washing tank with 1000 L water and then empty it)	0.13 kg product x 2.6% = 0.003338 kg product/ha
Dose applied (at 200 L/ha) to 2.5 ha after first washout procedure	0.003338 kg product / 2.5 ha = 0.001352 kg product / ha
Situation C (two washout - procedure)	
Amount left in sprayer after 2nd stage of washout procedure (washing tank with 1000 L water and then empty it)	0.003338 kg product x 2.6% = 0.00008788 kg product/ha
Dose applied (at 200 L/ha) to 2.5 ha after second washout procedure	0.00008788 kg product / 2.5 ha = 0.00003552 kg product/ha

The studies for non-target plants shows (please refer to respective chapter in section 9 of the dRR) that the most sensitive species is *Ducus Carota* with an ER_{50} value of 0.0093 kg product/ha. Assuming a leftover of 2.6% of the spray solution, which results in 0.052 kg product/ha, the TER value without washing (situation A of the table above) is 0.18 which is below the trigger value of 1 and indicate risk. With the theoretical tank residue rate of 0.001352 kg product/ha after one washing (situation B of the table), a TER value of 6.88 is calculated and is above the trigger value of 1 so indicate no risk.

Therefore, farmers may follow good agricultural practice to conduct cleaning procedures of the spray equipment one time after application, as the TER trigger value of 1 is exceeded after the first cleaning procedure. However, for safety reasons the farmers are on current labels instructed to “fill and flush the contents of the spray tank a minimum of three times”.

Comments of zRMS:	The information regarding the tank cleaning contained in registration report and in the label is quite sufficient.

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).

Comments of zRMS:	No effects on beneficial or other non-target organisms were observed in any of the efficacy and selectivity trials carried out winter and spring cereals.

3.6 Other/special studies

No other / special studies are presented in this dossier.

3.7 List of test facilities including the corresponding certificates

GEP certificates are included in the Biological Assessment Dossier.

Table 3.7-1: List of test facilities

Test facility	Address	Certificate (Yes or No)
Fertico Sp. z o.o	Goliany 43, 05-620 Błędów Poland	Yes
Institute of Soil Science and Plant Cultivation - IUNG	PIB w Puławach	No
Staphyt	Staphyt, Sevilla, 21 Gines 41960 SPAIN Subcontracted to Staphyt, Langenburger Str. 35 Blaufelden, 74572 GERMANY	Yes
Staphyt	Staphyt, Sevilla, 21 Gines 41960 SPAIN Subcontracted to Agrofil-SZMI Kft. Petofi S. u. 7. Gyor-Moson-Sopron, 9235 HUNGARY	Yes
SynTech Research Poland	SynTech Research Poland Sp. z o.o. Ul. Jagiellońska 69/1 85-027 Bydgoszcz POLAND	Yes
Poznan University of Life Sciences	ul. Wojska Polskiego 28, 60-637 Poznań POLAND	Yes
BioChem Agrar	BioChem agrar GmbH Kupferstraße 6 D-04827 Machern GERMANY	Yes
Biochem Agrar	Biochem Agrar GmbH Niederlassung AGROPLAN Bünnert 72, D-47589 Uedem Germany	Yes
Anadiag Deutschland	Anadiag Deutschland GmbH Versuchsstation Bondorf Haitinger Höfe 4 D-71149 Bondorf GERMANY	Yes
Eurofins Agroscience Services GmbH	Carl-Goerdeler-Weg 5 21684 Stade GERMANY	Yes
Anadiag Hungary	H2921, Komárom, Széchenyi Istrvánút 12 HUNGARY	Yes
Anadiag Polska	Ul. Sadowa 16/22, 95-100 Zgierz POLAND	Yes
Anadiag Romania	Deveselu, Eroilor str. no. 305A OLT 237130 Caracal, OLT/OLTENIA ROMANIA	Yes
Quintus GmbH	Quintus GmbH Liepen 7 D-17194 Hohen Wangelin GERMANY	Yes
Oxford Agricultural Trials Limited	West Farm Barns – Launton Road - Stratton Audley –	Yes

Test facility	Address	Certificate (Yes or No)
	Bicester OXON - OX279AS UNITED KINGDOM	
The Institute of Soil Science and Plant Cultivation-State Research Institute	Czartoryskich 8, 24-100 Puławy POLAND	Yes

Appendix 1 Lists of data considered in support of the evaluation

List of data submitted by the applicant and relied on

Bridging trials

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter wheat						
KCP 6.1.1-01	MT-565SG-OR2-C	G. PIOTROWSKI	2016	Evaluation of the efficacy of MT-565SG-OR2-C against weeds in winter wheat SynTech Research Poland Sp. z o.o. SRPL18-074-428HE (MT-565SG-OR2-C-PL01) GEP, Unpublished	Y	Ciech Sarzyna
NORTH-EASTERN EPPO zone – Spring barley						
KCP 6.1.1-02	MT-565SG-OR2-C	G. PIOTROWSKI	2016	Evaluation of the efficacy of MT-565SG-OR2-C against weeds in winter wheat SynTech Research Poland Sp. z o.o. SRPL18-075-428HE (MT-565SG-OR2-C-PL02) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter wheat						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.1.1-03	MT-565SG-OR2-C	C. KAY	2018	Evaluation of the efficacy of MT-565SG-OR2-C and MT-565SG-OR2-C + SarBio 90 EC against weeds in winter and spring cereals Oxford Agricultural Trials Limited 330-18-CIE-WIN v1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.1.1-04	MT-565SG-OR2-C	A. HET-TERICH	2018	Efficacy of MT-565SG-OR2-C and MT-565SG-OR2-C + SarBio 90 EC in postemergence application Hetterich Fieldwork GbR Ciech18-GE37 GEP, Unpublished	Y	Ciech Sarzyna
Maritime EPPO zone – Spring barley						
KCP 6.1.1-05	MT-565SG-OR2-C	C. KAY	2018	Evaluation of the efficacy of MT-565SG-OR2-C and MT-565SG-OR2-C + SarBio 90 EC against weeds in winter and spring cereals Oxford Agricultural Trials Limited 329B-18-CIE-DIC GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.1.1-06	MT-565SG-OR2-C	A. HET-TERICH	2018	Evaluation of the efficacy of MT-565SG-OR2-C and MT-565SG-OR2-C + SarBio 90 EC against weeds in winter cereals Hetterich Fieldwork GbR Ciech18-GE20 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
South-Eastern EPPO zone – Winter wheat						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.1.1-07	MT-565SG-OR2-C	T. BARASITS	2016	Evaluation of the efficacy of MT-565SG-OR2-C and MT-565SG-OR2-C + SarBio 90 EC against weeds in winter cereals SynTech Research Hungary Kft. SRHU18-092-428HE GEP, Unpublished	Y	Ciech Sarzyna

Efficacy trials

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter barley						
KCP 6.2-01	MT-565SG-OR2-C	ŁUKASZ SOBIECH	2016	Efficacy of herbicide MCPA+Tribenuron Metyl 565 SG for control weeds in winter barley. GEP Trial, POLAND, 2016 Poznan University of Life Sciences AH/16/JO/33/Br/a GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-02	MT-565SG-OR2-C	ŁUKASZ SOBIECH	2016	Efficacy of herbicide MCPA+Tribenuron Metyl 565 SG for control weeds in winter barley. GEP Trial, POLAND, 2016 Poznan University of Life Sciences AH/16/JO/33/Pr/a GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-03	MT-565SG-OR2-C	JACEK MATUSIAK	2017	Efficacy of MT - 565SG – OR2 - C in control of weeds in winter barley. GEP Trial, POLAND, 2017 Fertico Sp. z o.o. 417_01_F17_40 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-04	MT-565SG-OR2-C	ADAM SZE-MENDERA	2017	Efficacy of MT - 565SG – OR2 - C in control of weeds in winter barley. GEP Trial, POLAND, 2017 Fertico Sp. z o.o. 418_01_F17_41 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-05	MT-565SG-OR2-C	KRZYSZTOF RUSEK	2017	Efficacy of MT - 565SG – OR2 - C in control of weeds in winter barley. GEP Trial, POLAND, 2017 Fertico Sp. z o.o. 419_01_F17_42 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter barley						
KCP 6.2-06	MT-565SG-OR2-C	C. FERNAN-DEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE17 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-07	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE18 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-08	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE20 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-09	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter Barley, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07131-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-10	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter Barley, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07132-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-11	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter Barley, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07134-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter barley						
KCP 6.2-12	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Syntech Research Poland SRPL17-090-395HE (CH_H_MTT_EFF09) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-13	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Syntech Research Poland SRPL17-091-395HE (CH_H_MTT_EFF10) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-14	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Syntech Research Poland SRPL17-092-395HE (CH_H_MTT_EFF11) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-15	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Syntech Research Poland SRPL17-093-395HE (CH_H_MTT_EFF12) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-16	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Syntech Research Poland SRPL17-094-395HE (CH_H_MTT_EFF13) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter barley						
KCP 6.2-17	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2016	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter barley BioChem Agrar 17 1069 5126 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-18	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Quintus G-111-QUI-17-133 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-19	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Quintus G-111-QUI-17-134 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-20	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Quintus G-111-QUI-17-389 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-21	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in Winter barley Quintus G-111-QUI-17-390 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter wheat						
KCP 6.2-22	MT-565SG-OR2-C	K. FELCZAK	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter wheat, Poland 2016/2017 Fertico Sp. Z o.o. 253_01_F16_493 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-23	MT-565SG-OR2-C	K. RUSEK	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter wheat, Poland 2016/2017 Fertico Sp. Z o.o. 253_02_F16_494 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-24	MT-565SG-OR2-C	A. SZEMEN-DERA	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter wheat, Poland 2016/2017 Fertico Sp. Z o.o. 253_03_F16_495 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-25	MT-565SG-OR2-C	K. FELCZAK	2017	Efficacy of MT - 565SG – OR2 - C in control of weeds in winter cereals, Poland 2017/2018 Fertico Sp. Z o.o. 415_01_F17_38 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-26	MT-565SG-OR2-C	A. SZEMEN-DERA	2017	Efficacy of MT - 565SG – OR2 - C in control of weeds in winter wheat, Poland 2017/2018 Fertico Sp. Z o.o. 416_01_F17_39 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter wheat						
KCP 6.2-27	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE04 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-28	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE05 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-29	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE07 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-30	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE08 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-31	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE09 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-32	MT-565SG-OR2-C	C. FERNANDEZ	2017	Efficacy evaluation of MT-565SG-OR2-C in winter wheat to control of weeds, registration trials, Germany 2017. Staphyt CFZ-18-32129-DE01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-33	MT-565SG-OR2-C	C. FERNANDEZ	2017	Efficacy evaluation of T-75WG-OR2-C in winter cereals to control of weeds, registration trials, Germany 2018. Staphyt CFZ-18-32867-DE01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-34	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter wheat, 1 site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07125-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-35	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter wheat, 1 site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07128-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-36	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter wheat, 1 site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07129-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter wheat						
KCP 6.2-37	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat. Anadiag Polska PL 16 066 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-38	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat. Anadiag Polska PL 16 066 PL2 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-39	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Polska PL 17 030 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-40	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Polska PL 17 030 PL2 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-41	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Syntech Research Poland SRPL17-078-395HE (CH_H_MTT_EFF01) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-42	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Syntech Research Poland SRPL17-079-395HE (CH_H_MTT_EFF02) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-43	MT-565SG-OR2-C	G. PIOTROWSKI / A.GARBOWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Syntech Research Poland SRPL17-080-395HE (CH_H_MTT_EFF03) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-44	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Syntech Research Poland SRPL17-081-395HE (CH_H_MTT_EFF04) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested prod-uct	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter wheat						
KCP 6.2-45	MT-565SG-OR2-C	D. BOURAS / K.-W. MAßMANN	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaved weeds on winter wheat BioChem Agrar 16 1069 5120 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-46	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Oxford Agricultural Trials Limited 288A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-47	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2017	Evaluate the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat, Germany, 2017 BioChem Agrar 17 1061 1009 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-48	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2017	Evaluate the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat, Germany, 2017 BioChem Agrar 17 1064 1008 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-49	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat BioChem Agrar 17 1069 5123 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-50	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Quintus G-111-QUI-17-380 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-51	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Quintus G-111-QUI-17-381 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-52	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Oxford Agricultural Trials Limited 718A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-53	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Oxford Agricultural Trials Limited 723A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-54	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Oxford Agricultural Trials Limited 724A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-55	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Oxford Agricultural Trials Limited 724B GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
South-Eastern EPPO zone – Winter wheat						
KCP 6.2-56	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Hungary EU 16 116 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-57	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + TRIBENURON METHYL 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Romania RO 16-017 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-58	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Anadiag Hungary EU 17 132 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-59	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter wheat Anadiag Hungary EU 17 133 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-60	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Hungary EU 17 096 KO1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-61	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Romania RO 17-002 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-62	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Romania RO 17-007 DE1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter rye						
KCP 6.2-63	MT-565SG-OR2-C	Ł. SOBIECH	2016	Efficacy of herbicide MCPA+Tribenuron Metyl 565 SG for control weeds in winter rye Poznań University of Life Sciences AH/16/ŻO/33/Br/a GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-64	MT-565SG-OR2-C	Ł. SOBIECH	2016	Efficacy of herbicide MCPA+Tribenuron Metyl 565 SG for control weeds in winter rye Poznań University of Life Sciences AH/16/ŻO/33/Pr/a GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-65	MT-565SG-OR2-C	Ł. SOBIECH	2016	Efficacy of herbicide MCPA+Tribenuron Metyl 565 SG for control weeds in winter rye Poznań University of Life Sciences AH/16/ŻO/33/Zł/a GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-66	MT-565SG-OR2-C	Ł. SOBIECH	2017	Efficacy of herbicide MT-565SG-OR2-C for control weeds in winter rye Poznań University of Life Sciences AH/17/ŻO/19/Br/a/OR2-C3 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-67	MT-565SG-OR2-C	Ł. SOBIECH	2017	Efficacy of herbicide MT-565SG-OR2-C for control weeds in winter rye Poznań University of Life Sciences AH/17/ŻO/19/Zł/a/OR2-C2 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested prod-uct	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter rye						
KCP 6.2-68	MT-565SG-OR2-C	C. FERNAN-DEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registra-tion trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE13 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-69	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE14 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-70	MT-565SG-OR2-C	C. FERNANDEZ	2017	Efficacy evaluation of MT-565SG-OR2-C in winter rye to control of weeds, registration trials, Germany 2017. Staphyt CFZ-18-32129-DE03 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-71	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter rye, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07138-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-72	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter rye, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07139-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-73	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broad-leaved weeds in Winter rye, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07140-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter rye						
KCP 6.2-74	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye Anadiag Polska PL 16 068 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-75	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye Anadiag Polska PL 16 068 PL2 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-76	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye Anadiag Polska PL 17 034 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-77	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of T-75WG-OR2-C and MT-565SG-OR2-C against weeds in winter rye SynTech Research Poland Sp. Z.o.o SRPL17-084-395HE (CH_H_MTT_EFF05) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-78	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of T-75WG-OR2-C and MT-565SG-OR2-C against weeds in winter rye SynTech Research Poland Sp. Z.o.o SRPL17-085-395HE (CH_H_MTT_EFF06) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-79	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of T-75WG-OR2-C and MT-565SG-OR2-C against weeds in winter rye SynTech Research Poland Sp. Z.o.o SRPL17-086-395HE (CH_H_MTT_EFF07) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-80	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	Evaluation of the efficacy of T-75WG-OR2-C and MT-565SG-OR2-C against weeds in winter rye SynTech Research Poland Sp. Z.o.o SRPL17-087-395HE (CH_H_MTT_EFF08) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested prod-uct	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter rye						
KCP 6.2-81	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2017	Evaluate the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye, Germany, 2017 BioChem Agrar 17 1061 1003 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-82	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2017	Evaluate the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye, Germany, 2017 BioChem Agrar 17 1064 1002 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-83	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluate the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter rye BioChem Agrar 17 1069 5001 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-84	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2017	Evaluate the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds on winter rye, Germany, 2017 BioChem Agrar 17 1061 1448 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-85	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter rye Quintus G-111-QUI-17-383 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter triticale						
KCP 6.2-86	MT-565SG-OR2-C	J. MATUSIAK	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter triticale, Poland 2016/2017 Fertico Sp. Z o.o. 254_01_F16_496 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-87	MT-565SG-OR2-C	A. SZEMENDERA	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter triticale, Poland 2016/2017 Fertico Sp. Z o.o. 254_02_F16_497 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-88	MT-565SG-OR2-C	K. RUSEK	2016	Efficacy of MCPA + Tribenuron Metyl 565 SG in control of weeds in winter triticale, Poland 2016/2017 Fertico Sp. Z o.o. 254_03_F16_498 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-89	MT-565SG-OR2-C	L. SOBIECH	2017	Efficacy of herbicide MT-565SG-OR2-C for control of weeds in winter triticale – trial season 2018 Poznan University of Lifesciences AH17PszO19PraOR2-C1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-90	MT-565SG-OR2-C	L. SOBIECH	2017	Efficacy of herbicide MT-565SG-OR2-C for control of weeds in winter triticale – trial season 2018 Poznan University of Lifesciences AH17PszO19ZłaOR2-C GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter triticale						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-91	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE10 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-92	MT-565SG-OR2-C	C. FERNANDEZ	2016	Efficacy evaluation of MCPA+Tribenuron Metyl 565 SG in winter cereals to control of weeds, registration trials. GEP Trial, GERMANY, 2016 Staphyt CFZ-17-27857-DE11 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-93	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broadleaved weeds in Winter Triticale, 1 site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07135-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-94	MT-565SG-OR2-C	C. DIENER	2017	Determination of efficacy of MT-565SG-OR2-C applied post-emergence in Autumn 2017 against broadleaved weeds in Winter Triticale, 1 site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07136-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Winter triticale						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-95	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale SGS Polska S.p. Z.o.o MT-565SG-T-75WG-OR2-C-PL-08 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-96	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale SGS Polska S.p. Z.o.o MT-565SG-T-75WG-OR2-C-PL-09 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-97	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale SGS Polska S.p. Z.o.o MT-565SG-T-75WG-OR2-C-PL-10 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-98	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale SGS Polska S.p. Z.o.o MT-565SG-T-75WG-OR2-C-PL-11 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-99	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale SGS Polska S.p. Z.o.o MT-565SG-T-75WG-OR2-C-PL-12 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter triticale						
KCP 6.2-100	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale BioChem Agrar 17 1061 1450 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-101	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale BioChem Agrar 17 1069 5124 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-102	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale Quintus G-111-QUI-17-385 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-103	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale Quintus G-111-QUI-17-386 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-104	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in winter triticale Quintus G-111-QUI-17-387 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Spring barley						
KCP 6.2-105	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in spring barley. Institute of Sol Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 1 (Spring barley) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-106	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in spring barley. Institute of Sol Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 2 (Spring barley) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-107	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2 and T-75WG-OR2-C against weeds in spring barley. SGS Polska Sp. Zo.o. MT-565SG-T-75WG-OR2-C-PL4 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-108	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2 and T-75WG-OR2-C against weeds in spring barley. SGS Polska Sp. Zo.o. MT-565SG-T-75WG-OR2-C-PL5 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-109	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2 and T-75WG-OR2-C against weeds in spring barley. SGS Polska Sp. Zo.o. MT-565SG-T-75WG-OR2-C-PL6 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-110	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2 and T-75WG-OR2-C against weeds in spring barley. SGS Polska Sp. Zo.o. MT-565SG-T-75WG-OR2-C-PL7 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Spring barley						
KCP 6.2-111	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaved weeds on spring barley BioChem agrar GmbH 16 1061 1641 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-112	MT-565SG-OR2-C	D. BOURAS / U. ZICKART	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaved weeds on spring barley BioChem agrar GmbH 16 1064 1642 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-113	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on spring barley Oxford Agricultural Trials Limited 308A GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-114	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluate the efficacy of Tribenuron methyl 750 g/kg WG against broadleaf weeds on spring barley, Germany, 2017 BioChem agrar GmbH 17 1069 5005 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-115	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley BioChem agrar GmbH 17 1061 1445 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-116	MT-565SG-OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley BioChem agrar GmbH 17 1064 1444 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-117	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Quintus G-111-QUI-17-378 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-118	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Oxford Agricultural Trials Limited 711A GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-119	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on spring barley Oxford Agricultural Trials Limited 720A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-120	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Oxford Agricultural Trials Limited 721A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-121	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Oxford Agricultural Trials Limited 721B GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
South-Eastern EPPO zone – Spring barley						
KCP 6.2-122	MT-565SG-OR2-C	D. BOUR-AS	2016	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on winter wheat Anadiag Hungary EU 16 156 KO1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-123	MT-565SG-OR2-C	D. BOUR-AS	2016	Evaluation of the efficacy of MCPA 550 g/kg + TRIBENURON METHYL 15 G/KG SG against broadleaf weeds on spring barley Anadiag Romania RO 16-032 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-124	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Anadiag Hungary EU 17 129 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-125	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Anadiag Hungary EU 17 130 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-126	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on spring barley Anadiag Hungary EU 17 105 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-127	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG against broadleaf weeds on spring barley Anadiag Romania RO 17-003 DE1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-128	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring barley Anadiag Romania RO 17-005 DE1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Spring wheat						
KCP 6.2-129	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + Tribenuron metyl 565 SG and Tribenuron metyl 75 WG spring wheat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 1 (Spring wheat) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-130	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + Tribenuron metyl 565 SG and Tribenuron metyl 75 WG spring wheat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 2 (Spring wheat) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-131	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + Tribenuron metyl 565 SG and Tribenuron metyl 75 WG spring wheat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 3 (Spring wheat) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-132	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring wheat SGS Polska Sp. Z.o.o. MT-565SG-T-75WG-OR2-C-PL01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-133	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring wheat SGS Polska Sp. Z.o.o. MT-565SG-T-75WG-OR2-C-PL02 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-134	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the efficacy of MT-565SG-OR2-C and T-75WG-OR2-C against weeds in spring wheat SGS Polska Sp. Z.o.o. MT-565SG-T-75WG-OR2-C-PL03 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
NORTH-EASTERN EPPO zone – Oat						
KCP 6.2-135	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + TRIBENURON METYL 565 SG in oat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 1 (oat) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.2-136	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + TRIBENURON METYL 565 SG in oat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 2 (oat) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-137	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the efficacy of MCPA + TRIBENURON METYL 565 SG in oat. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 3 (oat) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-138	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	EVALUATION THE EFFICACY OF HERBICIDE MT-565SG-OR2-C AGAINST WEEDS IN OAT SynTech Research Poland SRPL17-099-395HE (CH_H_MTT_EFF14) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-139	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	EVALUATION THE EFFICACY OF HERBICIDE MT-565SG-OR2-C AGAINST WEEDS IN OAT SynTech Research Poland SRPL17-100-395HE (CH_H_MTT_EFF15) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.2-140	MT-565SG-OR2-C	G. PI-OTROWSKI	2017	EVALUATION THE EFFICACY OF HERBICIDE MT-565SG-OR2-C AGAINST WEEDS IN OAT SynTech Research Poland SRPL17-101-395HE (CH_H_MTT_EFF16) GEP, Unpublished	Y	Ciech Sarzyna

Selectivity trials

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter barley						
KCP 6.4-01	MT-565SG–OR2-C	R. IDZIAK	2016	Determination of crop safety of MCPA + Tribenuron Metyl 565 SG in winter barley Poznań University of Life Sciences AH/16/JO/33/Pr/b GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-02	MT-565SG–OR2-C	R. IDZIAK	2016	Determination of crop safety of MCPA + Tribenuron Metyl 565 SG in winter barley Poznań University of Life Sciences AH/16/JO/33/Zł/b GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-03	MT-565SG–OR2-C	K. FELCZAK	2017	Selectivity of MT-565SG-OR2-C applied in control of weeds in winter barley, Poland 2017/2018 Fertico Sp. Z o.o. 422_01_F17_45 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-04	MT-565SG–OR2-C	K. FELCZAK	2017	Selectivity of MT-565SG-OR2-C applied in control of weeds in winter barley, Poland 2017/2018 Fertico Sp. Z o.o. 423_01_F17_46 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter barley						
KCP 6.4-05	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE09 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-06	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE10 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-07	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE11 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-08	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of crop safety of MCPA + Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE12 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-09	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in Winter barley, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07142-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter barley						
KCP 6.4-10	MT-565SG-OR2-C	D. REMBISZ	2017	Evaluation of the selectivity of herbicide T-75WG-OR2-C and MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in winter barley SynTech Research Poland Sp. z o.o. SRPL17-095-395HS (CH_H_MTT_SEL05) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-11	MT-565SG-OR2-C	GRZEGORZ PIOTROWSKI	2017	Evaluation of the selectivity of MT-565SG-OR2-C and T-75WGOR2-C for winter barley SynTech Research Poland Sp. z o.o. SRPL17-096-395HS (CH_H_MTT_SEL06) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-12	MT-565SG-OR2-C	GRZEGORZ PIOTROWSKI	2017	Evaluation of the selectivity of herbicide T-75WG-OR2-C and MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in winter barley SynTech Research Poland Sp. z o.o. SRPL17-097-395HS (CH_H_MTT_SEL07) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-13	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the selectivity of herbicide T-75WG-OR2-C and MT-565SG-OR2-C used with adjuvant Sarbio 90 EC against weeds in winter barley SynTech Research Poland Sp. z o.o. SRPL17-098-395HS (CH_H_MTT_SEL08) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter barley						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-14	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley, Germany, 2017 BioChem agrar GmbH 17 1047 1454 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-15	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley, Germany, 2017 BioChem agrar GmbH 17 1060 1453 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-16	MT-565SG-OR2-C	U. STRÖBELE	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley Quintus GmbH G-111-QUI-17-391 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-17	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley Oxford Agricultural Trials Limited 726A CGEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-18	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley Oxford Agricultural Trials Limited 726B CGEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-19	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley Oxford Agricultural Trials Limited 726C CGEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-20	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley Oxford Agricultural Trials Limited 726D CGEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-21	MT-565SG-OR2-C	U. LABUSH	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter barley BioChem agrar GmbH 17 1069 5127 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter wheat						
KCP 6.4-22	MT-565SG–OR2-C	K. FELCZAK	2016	Selectivity of MCPA + Tribenuron Metyl 565 SG applied in control of weeds in Winter wheat, Poland 2016/2017 Fertico Sp. Z o.o. 255_01_F16_499 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-23	MT-565SG–OR2-C	K. FELCZAK	2016	Selectivity of MCPA + Tribenuron Metyl 565 SG applied in control of weeds in Winter wheat, Poland 2016/2017 Fertico Sp. Z o.o. 255_02_F16_500 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-24	MT-565SG–OR2-C	K. FELCZAK	2017	Selectivity of MT-565SG-OR2-C applied in control of weeds in Winter wheat, Poland 2017/2018 Fertico Sp. Z o.o. 420_01_F17_43 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-25	MT-565SG–OR2-C	K. FELCZAK	2017	Selectivity of MT-565SG-OR2-C applied in control of weeds in Winter wheat, Poland 2017/2018 Fertico Sp. Z o.o. 421_01_F17_44 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter wheat						
KCP 6.4-26	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-27	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE02 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-28	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE03 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-29	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE04 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-30	MT-565SG–OR2-C	I. SCHMIDT	2017	Selectivity evaluation of MT-565SG-OR2-C in winter wheat, GEP Trial, GERMANY, 2017 Staphyt CFZ-18-32130-DE01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-31	MT-565SG–OR2-C	I. SCHMIDT	2017	Selectivity evaluation of MT-565SG-OR2-C in winter wheat, GEP Trial, GERMANY, 2017 Staphyt CFZ-18-32130-DE03 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-32	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in winter wheat, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07141-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter soft wheat						
KCP 6.4-33	MT-565SG–OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat Anadiag Polska PL 16 070 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-34	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat Anadiag Polska PL 17 032 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-35	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the selectivity of herbicide MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in winter wheat SynTech Research Poland SRPL17-082-395HS (CH_H_MTT_SEL01) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-36	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the selectivity of herbicide T-75WG-OR2-C and MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in winter wheat. SynTech Research Poland SRPL17-083-395HS (CH_H_MTT_SEL02) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO Zone – Winter soft wheat						
KCP 6.4-37	MT-565SG–OR2-C	D. BOURAS / U. ZICKART	2016	Evaluation of the crop safety of MCPA 550 g/kg +Tribenuron methyl 15 g/kg SG on winter wheat BioChem agrar GmbH 16 1060 1628 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-38	MT-565SG–OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat Oxford Agricultural Trials Limited 289A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-39	MT-565SG–OR2-C	D. BOURAS / U. ZICKART	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat BioChem agrar 17 1067 1011 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-40	MT-565SG–OR2-C	D. BOURAS / U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat, Germany, 2017 BioChem agrar 17 1067 1447 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-41	MT-565SG–OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Quintus GmbH G-111-QUI-17-382 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-42	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat Oxford Agricultural Trials Limited 719A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-43	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Oxford Agricultural Trials Limited 725A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-44	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Oxford Agricultural Trials Limited 725B GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-45	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Oxford Agricultural Trials Limited 725C GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
South-Eastern EPPO zone – Winter wheat						
KCP 6.4-46	MT-565SG–OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter wheat Anadiag Hungary EU 16 120 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-47	MT-565SG–OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + TRIBENURON METHYL 15 G/KG SG on winter wheat Anadiag Romania RO 16-029 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-48	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Hungary EU 17 112 KO1 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-49	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Hungary (Quality analyses: Anadiag Italia) EU 17 112 KO2 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-50	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Hungary EU 17 112 KO3 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-51	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Hungary EU 17 112 KO4 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-52	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Romania RO 17-008 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-53	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter wheat Anadiag Romania RO 17-008 DE2 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested prod-uct	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter rye						
KCP 6.4-54	MT-565SG–OR2-C	R. IDZIAK	2016	Determination of crop safety of MCPA + Tribenuron Metyl 565 SG in winter rye Poznań University of Life Sciences AH/16/ŻO/33/Br/b GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-55	MT-565SG–OR2-C	R. IDZIAK	2016	Determination of crop safety of MCPA + Tribenuron Metyl 565 SG in winter rye Poznań University of Life Sciences AH/16/ŻO/33/Gr/b GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-56	MT-565SG–OR2-C	A. FALIGOWSKA	2017	SELECTIVITY OF MT-565SG-OR2-C IN WINTER CEREALS TO CONTROL OF WEEDS Poznań University of Life Sciences AH/17/ŻO/19/ZŁ/b/OR2-C/sel-3 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-57	MT-565SG–OR2-C	A. FALIGOWSKA	2017	SELECTIVITY OF MT-565SG-OR2-C IN WINTER CEREALS TO CONTROL OF WEEDS Poznań University of Life Sciences AH/17/ŻO/19/Br/b/OR2-C/sel-4 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter rye						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-58	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE07 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-59	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE08 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-60	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in Rye, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07145-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-61	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in Rye, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07146-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter rye						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-62	MT-565SG–OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter rye Anadiag Polska PL 16 072 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-63	MT-565SG–OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter rye Anadiag Polska PL 17 036 PL1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-64	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the selectivity of herbicide MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in winter rye SynTech Research Poland SRPL17-088-395HS (CH_H_MTT_SEL03) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-65	MT-565SG-OR2-C	G. PIOTROWSKI	2017	Evaluation of the selectivity of MT-565SG-OR2-C and T-75WGOR2-C for winter rye SynTech Research Poland SRPL17-089-395HS (CH_H_MTT_SEL04) GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO Zone – Winter rye						

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-66	MT-565SG–OR2-C	D. BOURAS / U. ZICKART	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter rye BioChem agrar GmbH 16 1062 1649 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-67	MT-565SG–OR2-C	D. BOURAS / B. LORENZ	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on winter rye BioChem agrar GmbH 17 1069 5004 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-68	MT-565SG-OR2-C	D. BOURAS / U. STROBELE	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter rye Quintus GmbH G-111-QUI-17-384 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested prod-uct	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter triticale						
KCP 6.4-69	MT-565SG–OR2-C	K. FELCZAK	2016	Selectivity of MCPA+Tribenuron Metyl 565 SG applied in control of weeds in Winter triticale, Poland 2016/2017 Fertico Sp. Z o.o. 256_01_F16_501 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-70	MT-565SG–OR2-C	K. FELCZAK	2016	Selectivity of MCPA+Tribenuron Metyl 565 SG applied in control of weeds in Winter triticale, Poland 2016/2017 Fertico Sp. Z o.o. 256_02_F16_502 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-71	MT-565SG–OR2-C	AGNIESZKA FALIGOWSKA	2017	SELECTIVITY OF MT-565SG-OR2-C IN WINTER CEREALS TO CONTROL OF WEEDS Poznań University of Life Sciences AH/17/MT/PszO/19/Pr/b/OR2-C/sel-1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-72	MT-565SG–OR2-C	AGNIESZKA FALIGOWSKA	2017	SELECTIVITY OF MT-565SG-OR2-C IN WINTER CEREALS TO CONTROL OF WEEDS Poznań University of Life Sciences AH/17/PszO/19/ZŁ/b/OR2-C/sel-2 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
Maritime EPPO zone – Winter triticale						
KCP 6.4-73	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE05 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
KCP 6.4-74	MT-565SG–OR2-C	A. BINISZEWSKA / I. SCHMIDT	2016	Determination of Crop safety of MCPA+Tribenuron Metyl 565 SG in winter cereals, Germany 2016 Staphyt AB5-17-27858-DE06 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-75	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in Winter triticale, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07143-01 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-76	MT-565SG–OR2-C	C. DIENER	2017	Determination of crop safety of MT-565SG-OR2-C in Winter triticale, 1 Site in Germany 2017/2018 Eurofins Agroscience Services GmbH S17-07144-01 GEP, Unpublished	Y	Ciech Sarzyna

Annex Point	Tested product	Author	Year	Title Company Report No. GLP or GEP, Published or Unpublished	Data protection claimed Y/N	Owner
North-Eastern EPPO zone – Winter triticale						
KCP 6.4-77	MT-565SG-OR2-C	B. KATULSKI E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in post-emergence application in winter triticale SGS Polska Sp. z o.o. MT-565SG-T-75WG-OR2-C-PL-18 GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-78	MT-565SG-OR2-C	B. KATULSKI E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in post-emergence application in winter triticale SGS Polska Sp. z o.o. MT-565SG-T-75WG-OR2-C-PL-19 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-79	MT-565SG-OR2-C	B. KATULSKI E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in post-emergence application in winter triticale SGS Polska Sp. z o.o. MT-565SG-T-75WG-OR2-C-PL-20 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-80	MT-565SG-OR2-C	B. KATULSKI E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in post-emergence application in winter triticale SGS Polska Sp. z o.o. MT-565SG-T-75WG-OR2-C-PL-21 GEP, Unpublished	Y	Ciech Sarzyna

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Maritime EPPO Zone – Winter triticale						
KCP 6.4-81	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter triticale, Germany, 2017 BioChem agrar 1710471451 GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-82	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter triticale, Germany, 2017 BioChem agrar 1710611452 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-83	MT-565SG-OR2-C	B. LORENZ	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter triticale, Germany, 2017 BioChem agrar 1710695125 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-84	MT-565SG-OR2-C	U. STRÖBELE	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in winter triticale QUINTUS G-111-QUI-17-388 GEP, Unpublished	Y	Ciech Sarzyna

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North-Eastern EPPO zone – Spring barley						
KCP 6.4-85	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley SGS Polska Sp. Z o.o. MT-565SG-T-75WG-OR2-C-PL-15 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-86	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley SGS Polska Sp. Z o.o MT-565SG-T-75WG-OR2-C-PL-16 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-87	MT-565SG-OR2-C	E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley SGS Polska Sp. Z o.o MT-565SG-T-75WG-OR2-C-PL-17 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-88	MT-565SG-OR2-C	J. GRABIŃSKI / P. NIERÓBCA	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in cereals. IUNG - Institute of Soil Science and Plant Cultivation NUZ 12 + 13-16_sel_2016_RIII GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-89	MT-565SG-OR2-C	J. GRABIŃSKI / P. NIERÓBCA	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in cereals. IUNG - Institute of Soil Science and Plant Cultivation NUZ 12 + 13-16_sel_2016_RIV GEP, Unpublished	Y	Ciech Sarzyna

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Maritime EPPO zone – Spring barley						
KCP 6.4-90	MT-565SG-OR2-C	U. ZICKART	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley BioChem agrar GmbH 16 1069 5125 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-91	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley, Germany, 2017 BioChem agrar GmbH 17 1047 1013 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-92	MT-565SG-OR2-C	U. ZICKART	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley, Germany, 2017 BioChem agrar GmbH 17 1047 1446 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-93	MT-565SG-OR2-C	U. LABUSCH	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley BioChem agrar GmbH 17 1069 5122 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-94	MT-565SG-OR2-C	U. STRÖBELE	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Quintus GmbH G-111-QUI-17-379 GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-95	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Oxford Agricutural Trials Limited 722A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-96	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Oxford Agricutural Trials Limited 722B GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-97	MT-565SG-OR2-C	D. BOURAS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley Oxford Agricutural Trials Limited 290A GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-98	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Oxford Agricutural Trials Limited 722C GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-99	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Oxford Agricutural Trials Limited 722D GEP, Unpublished	Y	Ciech Sarzyna

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South-Eastern EPPO zone – Spring barley						
KCP 6.4-100	MT-565SG-OR2-C	D. BOUR-AS	2016	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley Anadiag Hungary EU 16 157 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-101	MT-565SG-OR2-C	D. BOUR-AS	2016	Evaluation of the crop safety of MCPA 550 g/kg + TRIBENURON METHYL 15 G/KG SG on spring barley Anadiag Romania RO 16-033 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-102	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Anadiag Hungary EU 17 109 KO1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-103	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley Anadiag Hungary EU 17 109 KO2 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-104	MT-565SG-OR2-C	D. BOUR-AS	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley Anadiag Hungary EU 17 106 KO1 GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-105	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MCPA 550 g/kg + Tribenuron methyl 15 g/kg SG on spring barley ANADIAG Romania RO 17-004 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-106	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley ANADIAG Romania RO 17-006 DE1 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-107	MT-565SG-OR2-C	D. BOURAS	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring barley ANADIAG Romania RO 17-006 DE2 GEP, Unpublished	Y	Ciech Sarzyna

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NORTH-EASTERN EPPO zone – Spring wheat						
KCP 6.4-108	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in cereals. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 1 (Spring wheat) GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-109	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG and TRIBENURON METYL 75 WG in cereals. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 2 (Spring wheat) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-110	MT-565SG-OR2-C	B. KATULSKI / E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring wheat MT-565SG-T-75WG-OR2-C-PL-13 SGS Polska Sp. Z.o.o. GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-111	MT-565SG-OR2-C	B. KATULSKI / E. WALCZAK	2017	Evaluation of the crop safety of MT-565SG-OR2-C and T-75WG-OR2-C in spring wheat MT-565SG-T-75WG-OR2-C-PL-14 SGS Polska Sp. Z.o.o. GEP, Unpublished	Y	Ciech Sarzyna

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NORTH-EASTERN EPPO zone – Oat						
KCP 6.4-112	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG in cereals. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 5 GEP, Unpublished	Y	Ciech Sarzyna

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KCP 6.4-113	MT-565SG-OR2-C	J. GRABINSKI	2016	Evaluation of the selectivity of MCPA + TRIBENURON METYL 565 SG in cereals. Institute of Soil Science and Plant Cultivation - IUNG NUZ 12 + 13/16 – Trial 6 GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-114	MT-565SG-OR2-C	Dawid Rembisz	2017	Evaluation of the selectivity of herbicide MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in oat SynTech Research Poland Sp. z o.o. SRPL17-102-395HS (CH_H_MTT_SEL09) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-115	MT-565SG-OR2-C	Dawid Rembisz	2017	Evaluation of the selectivity of herbicide MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in oat SynTech Research Poland Sp. z o.o. SRPL17-103-395HS (CH_H_MTT_SEL10) GEP, Unpublished	Y	Ciech Sarzyna
KCP 6.4-116	MT-565SG-OR2-C	Dawid Rembisz	2017	Evaluation of the selectivity of herbicide MT-565SG-OR2-C used with adjuvant Sarbio 90 EC in oat SynTech Research Poland Sp. z o.o. SRPL17-104-395HS (CH_H_MTT_SEL11) GEP, Unpublished	Y	Ciech Sarzyna