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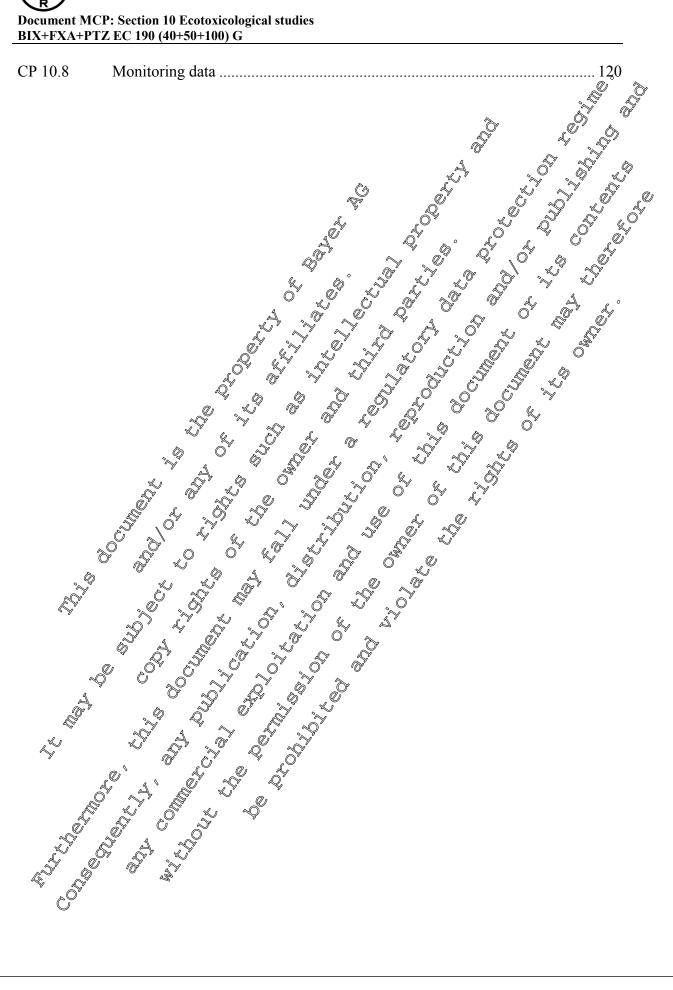
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Version history

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Date	Data points containing amendments or additions ¹ and brief description	Docament luciting and
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CP 10 ECOTOXICOLOGICAL STUDIES ON THE PLANT PROTECTION PRODUCT

Introduction

The representative formulation submitted in the first Annex I listing process is no longer considered as a representative formulation for the renewal of fluoxastrobin. One of the two representative formulations used for the submission of the renewal of the approval of fluoxastrobin is the spray formulation Bixafen + Fluoxastrobin + Prothioconazole 100 (40+50-100 g/L; 'BIX + FXA + PIZ EC190'). The summaries of formulation studies and the risk assessment will be presented in this Dossier.

Ecotoxicological endpoints used in the following fisk assessment were derived from studies with the formulated product, the active substance fluoxastrobin and the metabolites lived in the residue definition for risk assessment.

In this dossier only endpoints used for the risk assessment are presented. For an overview of all available endpoints for fluoxastrobin and its metabolites please refer to the respective section of the MCA document. In order to facilitate discrimination between new and information admitted during the Annex I inclusion process, the previously evaluated information is ritter in great out.

Use pattern considered in the risk assessment

There are two key use patterns for the formulation, BIX4FXA+PTZEC 190. The first consists of two applications in wheat, rye triticale and spelt at a maximum rate of 2 x 175 L per hectare at growth stage 30-69. The second consists of two applications in barley and oats at a maximum rate of 1.75 L per hectare at growth stage 30-61.

Table CP 10-1: Intended application pattern

Crop	Timing of	Namber of	Application	Maximumo	&pplic	eation rate per	treatment
•	ppplication	application	Application and interval	label rate pec treatment		[g/ha]	
Į Š	r (range) (peÇ			
				ti catificity	7		
	.\$^	4 2		(trange) 🔊	D: f	El	D.,,4h.;,,,,,,
			days	YL/hay,	Bixafen	Fluoxastrobi n	Prothioconaz ole
Wheat,) (C)			11	oic
	⊗BBCH ©	1-2	A 4-21 6	Ô1.75	70	87.5	175
rye, triticale	<u>3</u> 30-69	O, ~Ô.		©1.73	70	67.3	1/3
unicale 2	PRCH &						
Barley	BBCH 30-61	i -2 🦠	¼ 4°21 ॄ≪0	1.50	60	75	150
		A . O'					
Oats	BBCH	1-2°)	14-20 T	1.75	70	87.5	175
	30-61		W 4				

Risk envelope

For envelope type risk assessment, the critical application pattern is defined as multiple application of 2×1 , 1 L product/ka at BBCH 30–69 with an application interval of 14 days. All other are considered as less critical. To enable a possible differentiation in mitigation measures adapted to the use rate, TER calculations for the less critical application patterns will also be provided in domains where exposure mitigation via use restriction is needed to pass risk assessment for the critical GAP (envelope rate).

Definition of the residue for risk assessment

Due to changes in the requirements under EU Regulation 1107/2009, additional degradation products were proposed to be included in the residue definition. All studies necessary to describe the ecotoxicological profile of these metabolites in the relevant environmental compartments are summarized in this document. The residue definition is presented in Table CP010-2.

Table CP 10-2: Definition of the residue for risk assessment

Compartment	Residue Definition for Risk seessment
Soil	fluoxastrobin (E- isomer),
	HEC 5725 -Z-isomer,
	HEC 5725 - Z-isomer, HEC 5725 - des chlorophanyl (M48 F)
	HEC 5725 -Z-isomer, HEC 5725-carboxylic acid (M40) HEC 5725-E-des-chlorophenyl (M48-E),
	HEC 5725-E-des-chlorophenyl (M48-E), 2-chlorophenol (M82)
Groundwater	
	fluoxastrobin (E-isomer), HEC 5725-Z-isomer,
	HEC 5725-Z-isomer, HEC 5725-carboxylic acid (M70), HEC 5725-E-des-chlorophetyl (M48-E),
	HEC 5725-E-des-chloropheroy (M48-E),
	2-chlorophenol (M&Y) 4 4 4 6
Surface water	fluoxastrobin (E_7) somer),
	HEC 5725-Z-isomer,
	HEC 5725-calloxylic acid (M40), & Q Q Q
	HEC 5725 D-deszchloropheryl (M48-E)
Sediment	fluoxastrobin (E Somer)
	HEC 5725-Z-isomer & S A A S S
Air	none O C C C

A list of metabolities, which contains the structures, the synonyms and code numbers attributed to the compound fluorestrobin, is presented in Document N3 of this document.

Compounds addressed in this document

In addition to the active substance Quoxastrobin, the degradation products summarised in the Table CP 10-2 were addressed in this document.

In this paragraph the approach to the risk assessment of the Z-isomer of fluoxastrobin is specifically considered. The chemical structure of fluoxastrobin contains an oxime ether moiety. Due to the substitution pattern of that double bond E- and Z-isomers exist. The common name fluoxastrobin denotes the E-isomer. The Z-isomer is known to be an impurity in technical fluoxastrobin (specification limit 2 mg/kg). The Z-isomer can be formed from the E-isomer by photolytic processes exclusively. The transformation will lead to an equilibrium state in which the E-isomer is the more stable and energetically preferred isomer (ratio in aqueous solution about 10:1 = E / Z). In the environment the Z-isomer shows very similar degradation behaviour and a better soil sorption than the E-isomer. Further, the Z-isomer shows a very similar toxicological profile. A study with Daphnia magna performed with an increased amount of Z-Isomer (isomer ratio (E/Z) = 65/35 demonstrated an at least comparable, potentially lower ecotoxicological profile than the parent E-isomer, demonstrating that there is no further risk for the aquatic compartment (please refer to CA 8.2.4.1 M-030533-01-1). Taking this information into account, both isomers can be evaluated as sum of E+Z-isomers, providing a conservative environmental risk assessment.

CP 10.1 Effects on birds and other terrestrial vertebrates

The risk assessment has been performed according to "European Food Safety Authority; Guidance Document on Risk Assessment for Birds & Mammals on request from EFSA" (EFSA Journal 2009, 7(12):1438. doi:10.2903/j.efsa.2009.1438), referred to in the following as "EFSA" GD 2009"

CP 10.1.1 Effects on birds

Table CP 10.1.1-1: Endpoints used in Tier 1 risk assessment

Test substance	Exposure	species/origin	, V	Endpoint		Reference
	Acute risk assessment	Colinus virginianus (Bobwhite quaix)	@extrapol	$\equiv 3776 \text{ mg/kg}$	bw ₁	; 2003 M-024735- 02-1
Fluoxastrobin	Reproductive risk assessment	Lowest NOEL from finas platyntynchos (Mal ard deciv)	NOE	51 mg as/kg i		2003; M-087968- 00-1

Bold values used for the risk assessment

Table CP 10.1.1-2: Relevant generic aviant focal species for risk assessment on Ther 1 level according to

Crop scenario	Scenario S	Generio Tocal species	Representative species	Short cu base	
				RUD90	RUDm
Cereals 2 × 0.0875 kg ha		Small omnivorous bird	Woodlark (LuUula arborea)	12.0	5.4
BBCH 30-69 14 d interval	BBCH 240	Small omnivorous bird	Woodlark Lullula arborea)	7.2	3.3

Bold: Species considered in risk assessment (only worst case for each species)

Table CP 10.10-3: Tier 1 acute risk assessment for birds

Crop scenario	General focal species	Appl. rate [kg a.s.[ha]	SV ₉₀	MAF90	DDD	LD ₅₀ [mg a.s./kg bw]	TERA	Trigger
Fluoxastrobin								
Cereals BBCH 30-39	Small omniverous bird	Q 0.0875	12.0	1.2	1.3	3776	2997	10

The TER value calculated in the acute risk assessment on Tier 1 level exceeds the a-prioriacceptability tragger of 10 for the evaluated scenario. Thus, the acute risk to birds can be considered as low and acceptable without need for further, more realistic risk assessment.

Acute Fisk assessment for birds drinking contaminated water from pools in leaf whorls

In the EFSA GD 2009, section 5.5, step 1 the following guidance is given on the selection of relevant scenarios for assessing the risk of pesticides via drinking water to birds and mammals:

¹⁾ LD₅₀ extrapolated with EFSA GD factor 1.888 (10 birds, no mortality; Efo Section 2.1.2, Tab. 1)

<u>Leaf scenario</u>: Birds taking water that is collected in leaf whorls after application of a pesticide to a crop and subsequent rainfall or irrigation.

<u>Puddle scenario</u>: Birds and mammals taking water from puddles formed on the soil surface of whield when a (heavy) rainfall event follows the application of a pesticide to a crop or bare soil.

For the crops under assessment in this evaluation (cereals) the leaf scenario is not considered relevant. The risk for birds from drinking water in puddles is addressed in Table CP 10.1.1-5.

LONG-TERM REPRODUCTIVE ASSESSMENT

Table CP 10.1.1-4: Tier 1 reproductive risk assessment for birds

Crop	Generic focal species	Appl. rate MAFm Ass./ha		OEL ng.a.s./ TEKLT Trigger
Fluoxastrobin	1			
Cereals BBCH 30-39	Small omnivorous bird "lark"	000875 5.4	0.5\$ 0.4	146 5

The TER_{LT} value calculated in the reproductive risk assessment on Tier 10 evel exceeds the a-prioriacceptability trigger of 5 for the evaluated scenario. Thus, the risk to birds can be considered as low and acceptable without need to further, more realistic risk assessment.

Long-term risk assessment for birds drinking contaminated water in puddles

Table CP 10.1.1- 5: Evaluation of potential concept for exposure of birds drinking water (escape clause)

Crop &	Soc L/kgl	Application rate 2 a & [g as/ha]	O [mo%sk/	Dall S	clause"	Conclusion
Fluoxastrobin	Ö »					
Cercals	\$ \$\$8.2 ₹	87.5 * 2	_≫ ° 5_1©″	3 .4	≤ 3000	No concern

a) annual application rate (without interception used as theoretical worst case

RISK ASSESSMENT OF SECONDARY POISONING

Substances with a high bioaccumulation potential could theoretically bear a risk of secondary poisoning for birds feeding or contaminated prey tike fish or earthworms. For organic chemicals, a log $P_{\rm OW} > 3$ is used to trigger an in-depth evaluation of the potential for bioaccumulation.

As the log P_{OW} of the active substance fluorestrobin and its metabolites is below the trigger (< 3), no evaluation of secondary poisoning is needed see Document MCA 2.7).

CP 10.14.1 Scute Gral toxicity

No additional studies are available or required as the toxicity can be derived from the studies on the active substance.

CP 10.1.1.2 Higher tier data on birds

Since fluoxastrobin is of low toxicity to birds, no higher tier data are needed.

CP 10.1.2 Effects on terrestrial vertebrates other than birds

Table CP 10.1.2-1: Endpoints used in risk assessment

Test substance	Exposure	species/origin	Endpoint	Š	Reference
	Acute risk assessment	Rat	LD ₅₀ > 2000 mg	g a. Ag bw	19 9 6; M-6) 2717, (
Fluoxastrobin	Long-term risk assessment	Rat	NOA Z 163 Mg a	S./kg diet (R)	1998; Me012710 01-1

Bold values used for the risk assessment

Table CP 10.1.2- 2: Relevant generic focal species for Pier 1 sk assessment

Сгор	Scenario		Shortc Long- tegn RA based on RUD	ut value acute RA based on RUD ₉₀
	BBCH ≥ 200		3 .9	5.4
Cereals 2×0.0875 kg/ha	BBCH 40	Small herbi@rous Common voley (Microtus association)	21.7	40.9
BBCH 30-69 14 d interval	врен 30	Small offinivorous Wood mouse Manusal "meuse" (Apodemus Sylvaticus)	3.9	8.6
	SBBCH ≥ 40	Small omnivorous	2.3	5.2

Bold: Species considered in Tier 1 risk assessment (only worst case for each species)

ACUTE DIETARY RISK ASSESSMENT

Table CR 10.1.2-3: Ties 1 acute DDD and TER calculation for manimals

Crop	Generic focal species Applyrate	DBB	™ MAF90	DDD	LD ₅₀ [mg/kg bw]	TERA	Trigger
Fluoxastrobin							
Cereals BBCI 20	Small insectivorous of may may may "Sharey"	5.4		0.6		> 3527	10
Cereals BBCH ≥ 40	mayimal "sarew" Small herbivorous manipial "vote" 0.0875	40.9	1.2	4.3	> 2000	> 466	10
Cereals BBCH 30 - 39	Small omnivorous @ mammal @nouse \$	8.6		0.9		> 2215	10

The TER values calculated in the acute risk assessment on Tier 1 level exceed the a-priori acceptability trigger of 10 for all evaluated scenarios. Thus, the acute risk to mammals can be considered as low and acceptable without need for further, more realistic risk assessment.

LONG-TERM REPRODUCTIVE ASSESSMENT

Table CP 10.1.2-4: Tier 1 long-term DDD and TER calculation for mammals

			DDD				NO(A)EL	(
Crop	Generic focal species	Appl. rate [kg/ha	SVm	MAFm	ftwa	DDD	Jmg kg/bw/d]	TERAT	Trigger
Fluoxastrobin						Ž.	•		
Cereals BBCH ≥ 20	Small insectivorous mammal "shrew"		1.9	4		Ø.i		1320	
Cereals BBCH ≥ 40	Small herbivorous mammal "vole"	0.0875	21.2	1.4	0.55	1.4		P16	\$\frac{1}{5}\tilde{\chi}\$
Cereals BBCH 30 - 39	Small omnivorous mammal "mouse"		\$\int_3'.9			9 .3		649	

The TER_{LT} values calculated in the reproductive risk assessment on Tier 1 level exceed the a-priori-acceptability trigger of 5 for all evaluated scenarios. Thus, the risk to mampfuls can be considered as low and acceptable without need for further, more realistic risk assessment.

Long-term risk assessment for mammals drinking contaminated water

The puddle scenario is relevant for the long-term risk assessment,

Table CP 10.1.2- 5: Evaluation of potential concern for exposure of manimals drinking water

Crop	L/kgl	Application rate * 2 a)	môas/	Rat Application	o & on rate *	Clause" No concern if ratio	Conclusion
Fluoxastrobin O			o' 4.7				
Cereals O	\$48.2 ₄	87.5 * 2	′ ့163 "	01.0	7 _@	≤ 3000	No concern

a): annual application rate (without inferception) used as the oretical worst case

RISK ASSESSMENT OF SECONDARY POLSONING

Substances with a high biogecumulation potential could theoretically bear a risk of secondary poisoning for mampals if reeding on contaminated prey like fish or earthworms. For organic chemicals, a logPow 3 is used to trigger an indepth caluation of the potential for bioaccumulation.

As the $\log P_{\rm OW}$ of the active substance fluor astrobin and its metabolites is below the trigger (< 3), no evaluation of secondary poisoning is needed (see Pocument MCA 2.7).

CP 10.1.2.1 Acute oral foxicity to mammals

The acute oral toxicity of the product Boxafen + Fluoxastrobin + Prothioconazole EC 190 in rat was studied by 2010, M-388101-01-1, the study is summarised in the MCP 7 document (toxicology). According to ECD guideline 423 the results of this study correspond to $LD_{50} \ge 5000$ mg/k, body weight.

CP 10 Q2.2 Higher tier data on mammals

No additional studies are required; the risk assessment indicates acceptable risk at Tier 1.

CP 10.1.3 Effects on other terrestrial vertebrate wildlife (reptiles and amphibians) .

CP 10.2 Effects on aquatic organisms

The risk assessment was performed according to the Regulation (FC) No 1407/2009 and following theoretisk assessment for plant protection products for aquatic organisms of edge of-field surface waters (2013).

Ecotoxicological endpoints used in risk assessment

Table CP 10.2-1: Endpoints relevant for risk assessment

Test substance	Test species	F	Endpoint 😞	Reference
1 est substance	Fish, acute	1	Simpoint	
	Oncorhynchus mykiss	LC_{50}	0.435 mg a.s./10	;
	(rainbow trout)	1030	<u> </u>	19 99; 10~016770 -01-1
	Fish, chronic		***	<u>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u>
	Oncorhynchus mykiss	NOEC	0.0286 n@ a.s./L	
	(rainbow trout)			2901; M984463-01-1
	Invertebrate, acute	<i>a</i> .		
	Daphnia magna	P	0.9 mg 8./L	; 1999,
	(cladoceran)			M-011257-01
	Invertebrate, acute	E CO	O.15 mg ag/L	
	Gammarus pulex	O EGO X	0.15 mg a /L	
	(amphipod)			
	Acanthocyclops venustus,	EC50	2 0.9 kg/a s /IO	
	(copepod)	EC50		
	Cloeon dipterun		Y Wmarket &	
	(mayfly) O	\$ 50 LJ	mg ¿c./L	
	Daphnia gr. Aleata	© EC5	1.3 Og a.s.	; 2003; M-
	(cladocerán)	EC ₅		109491-01-1
	Asellus oquaticus	$E\mathcal{C}_{50}$; 2003; M- 109491-01-1
	(Kapod)		Wy mg s./L	
	Chaolorus oloxuriped	ECD		
	'> (diptera)		(3) ~ (1) ~ (1)	*
	Simocephadus vetalus (3.2 n/g/a.s./L	
	(claroceran)	\$ 50 20		
	Marine invertebite, actie	J 50 27	0.0004 mg 7.s./L	
Fluoxastrobin	An Oricamysis bahid	LOS â	0.0004 mg S.s./L	
20	(Moldopsis bahid mysid			2002; M-082793-01-1
Fluoxastrobin	Strimp) V	EC50	_ <u>o</u>	
, Ø	Invertebrate acute	EC50	0.488 mg a.s./L ¹⁾	G - MCA 0 2 4 2
		FC 50	9 0.488 mg a.s./L ¹	See. MCA 8.2.4.2
	using species	EC50		
	Invertebrate, Wronico	NOIO		; 2000; M-
(Daphnia yagna Y Clad Geran		0.18 mg a.s./L	042059-01-1
	- O 1 - O 1	O NOW	9	
	O Gallmary Pyler			
	Gannarus pulex Y		0.0316 mg a.s./L	2003; M-
	(cooducted with EC100	NO DE	0.0510 mg a.s./L	110286-01-1
Ž,	formulation)			
, W	V Invertebrate, Chronic			; 2012; M-
	Habrophlebia lauta	NOEC	0.0422 mg a.s./L	444119-01-1
Q)	(Mayfly)	Y	0.0 122 mg u.s./E	KCA 8.2.5.2
K,	Inverte rate, chronic			; 2012; M-
	Neocaridina heteropoja	NOEC	0.060 mg a.s./L	442121-01-1
F.	(Freshwater shrimp)	NOLC	0.000 mg a.s./L	KCA 8.2.5.2
	4			130/1 0.2.3.2
	Marine invertebrate,			
	chronic	NOECsurvival	0.00061 mg a.s./L	
	Americamysis bahia	NOEC _{survival}	0.0047 mg a.s./L	;
pO"	(Mysidopsis bahia, mysid	годогерго	0.001/1116 4.5./12	2002; M-082820-01-1
	shrimp)			

Test substance	Test species	Eı	ndpoint	Reference
	Sediment dweller, chronic Chironomus riparius (chironomid)	EC ₁₅	2.13 mg a.s./L	20 6 0; M-0 042042-0Y-1
	Pseudokirchneriella subcapitata (green algae)	E _b C ₅₀ E _r C ₅₀	0.35 mg a.s./L 2.10 mg a.s./L	; 2000; M-003313 (V-1
	<i>Lemna gibba</i> (Duck weed)	E _b C ₅₀ E _r C ₅₀	> 6.0 mg a.s./L > 6.0 mg/a.s./L	; 200°; M-037727-010
	Lemna gibba (Duck weed)	E _b Co	1.45/mg a.s./L 3.88 mg a.s./L	; 2092; M- 083021-01-1- K(3 8.2.7
HEC 5725 F	Fish, acute Oncorhynchus mykiss (rainbow trout)		> 1,52 mg Qn./L	; 2000; M-033495-01-1
HEC 5725-E- des- chlorophenyl	Invertebrate, acute Daphnia magna (cladoceran)	ECO	> 100 mg p, m//L	2 000; M 03822 0 -01-1
	Pseudokirchng fella as subcapirQa (green) gae)	ErC C	7100 no p.m.(f) 100 ng p.m)/L	; 2000; W -025012-01-1
	Fist Facute Oncorhynchus Aykiss C (12 Abow Pout)	LC ₅₀ V	>95.7 ing p.ns./2	2001; M- 052093-01-1
	Inverteb ed ie, acute <i>Daplojia ma</i> kua © (cladocegai)	\$ C50 5	000 mg/p.m./2	2001; M-030332- 01-1
HEC 5725- carboxylic acid	(chonomio &		ng Km./L	.; 2001; M- 078605-01-1
	PseudokirckgeriellA Subcadtata & (Selokastrum Saprigornutum) green algas	FC 50 F C 50	mg p.m./L	.; 2001; M- 073836-01-1
	Fish acute of Cheorhy ichus hekiss O (saubow tout)	©C50	2.6 mg p.m./L	; 2006; M- 277036-01-1 KCA 8.2.1
	Fish Fronic Finephalus promelas (fathead migrow)	Ø Ø ØEC	4 mg p.m./L	EFSA Scientific Report 102 (2007) ; 2006; M- 277036-01-1
	Invertebrate, acute Daphina magna (Sadoceran)	EC50	7.4 mg p.m./L	; 2006; M- 277036-01-1 KCA 8.2.1
2-chlorophemy	Invertebrate, chronic Daph Quanagna (All Roceran)	NOEC	0.3 mg p.m./L ²⁾	EFSA Scientific Report 102 (2007) ; 2006; M- 277036-01-1
	Padokirchneriella subcapitata (Selenastrum capricornutum, green algae)	ErC50	70 mg p.m./L	EFSA Scientific Report 102 (2007) ; 2006; M- 277036-01-1 KCA 8.2.1

Test substance	Test species	En	ndpoint	Reference
	Fish, acute Oncorhynchus mykiss (Rainbow trout)	LC ₅₀	3.02 mg prod./L	;; 201.QM- 385971-0.71 KCP 1002.1
BIX+FXA+PTZ EC 190 (40+50+100) G	Invertebrate, acute Daphnia magna (Cladoceran)	EC ₅₀	2.08 mg prod./0	© 2010;
	Pseudokirchneriella subcapitata (Green alga)	E _r C ₅₀ NOE _r C	5.86 mg rhod./L 0.98 mg prod./L	387058-01-07 (C) KG 10.22

a.s.: active substance; p.m.: pure metabolite; prod.: formulated product.

When using the above acute invertebrate toxicity data (including Masid, excluding the two "greater than values), with the geomean approach according to the most recent aquatic widance socument (SANTE-2015 00080, 15 January 2015) a geometric mean value of 0.488 mg a DL cap be calcoated 🔊

2006; M-277036-01-1) In the statement on the exposure of aquatic organisms to 2-chlorophenol (a NOEC of 0.5 mg/L is presented as most sensitive chronic entroined point for Daphnia based of nominal concentrations applied during testing. According to the EFSA Scientific Report (2007) the minimum measured concentration of 0.3 mg/l must be considered as relevant endpoint for the reviewal of approval of fluoxastrobin.

lection of endpoints for risk assessment

Bold values used for the risk assessment

Selection of endpoints for risk assessment

The relevant endpoint from each aquatic stridy was defined according to the current data requirements from the EU Regulation 283/2013 and the FSA Guidance on Thered risk assessment for plant protection products for aquatic organisms in edge-of-field surface waters (2013), and based on recommendations from the relevant standard test guideline e.g. Growth rate (r) is the most suitable endpoint from algae inhibition teets for use in risk assessment, as stated by OECD Guideline 201 and the EFSA guidance document TER and RAC calculations presented in this dossier are thus based on the E_rC₅₀ values. Indeed, processes in ecosystems are dominantly rate driven and therefore, the unit development per time (growth rate) appears more suitable to measure effects in algae. Also, growth rates and their inhibition can easily be compared between species test durations and test conditions, which is not the case for biomass. After numerous discussions, the current test guidelines OECD TG 201, the EU-Method C3, the EC regulation for Classification and Labeling (EC regulation 1272/2008) and the PPR Opinion (EFSA Journal 461, 1-44, 2007) list bowth rate as the most suitable endpoint of the algae inhibition tests

In accordance with Regulation (EC) to 1107/2000 and with the EFSA Guidance on tiered risk assessment for plant protection products for aquatic organisms in edge-of-field surface waters (2013), studies resulting in lower endpoints were used for the risk assessment, including endpoints from estuarine or marine species

Predicted environmental concentrations used in risk assessment

Full details of the predicted environmental concentrations are given in MCP 9.2.5(; 2015; **A**-537**9**7-01**2**).

Table CP 10.2-2: Initial max PECsw values – FOCUS Step 1, 2

Use pattern	Scenario	Fluoxastrobin (E+Z)	HEC 5725 -E-des- chlorophenyl	HEC 5725 -carboxylic acid	2-chloroghenol
		PECsw	PECsw	PEC	PECsw. S
		[µg/L]	[µg/L]	[µg/L]	μg/L)
	Step 1	30.74	20.96	1T.35	13.79
	Step 2		Ö	4	
Cereals,	N-EU Multi	4.69	3303	1.34	P 29.70 V
2 x 87.5 g/ha	S-EU Multi	8.55	£ 5.89	2.61	3.28
	N-EU Single	2.65	₄©″ 1.67	0.82 °C	1.03
	S-EU Single	4.82	3.24	\$ 1.61 ₀	1.99
	Step 1	26.35	7 17.97 × 7	9.73	√ √1.78√°
	Step 2	&			
Cereals,	N-EU Multi	4.02 O	2.60°	Ør.15	1.46
2 x 75 g/ha	S-EU Multi	7.33 🔏	5 0 5 Q	2.24	
	N-EU Single	2.27	7×43 ~ ′	0.70	Ø.88 Ø
	S-EU Single	4 3 %	*	0° ji.388 .€	√ 1.70 √ 1.70 √ 1.70 √ 1.70

Bold values considered in risk assessment

values for Juoxastrobin **Table CP 10.2-3:**

		, W	¥ 20°	F aoxas@ol	oin (Ê4Z)	Ŋ ,	Ò			
Use	Cer	eals (winter), 2 🔊 7.5 g	@xs./ha_	√ Cereя	ls (winter), 2	🤡 75.0 g a	ૐ75.0 g a.s./ha		
pattern		plication	4	applications	Sin Sile ar	plication	Multiple			
	Single	- M'	Tarantiple !		0 ,	~ Y	applications			
	PECsw	TWACsw	PECsw	DWAC	PECsw	TWAC _{sw}	PECsw	TWAC		
FOCUS	Laco/L1	Ö -7 🔊		, 7 9	© μg/L		[µg/L]	sw-7		
scenario		√ [μg/ ½]	(Ing/Ely	[µg/L] *		µg/L]	[#6/11]	[µg/L]		
D1 (ditch) ?	₩0.60 0 ₩	03 67	©"0.5 98	Ø.498 o	0.310	0.396	0.509	0.423		
D1 (stream)	0.498	9.049 _©	0.457	0.113	0.425 €	0.039	0.389	0.090		
D2 (ditch)	0.592	∠ 』0.39≰√`	Ø 636	0.453	@ 0.5010	0.332	0.538	0.380		
D2 (stream)	0.481	0.039	₹0.465 √	£ 206 %	0.440	0.030	0.394	0.172		
D3 (ditch)	0.555	0. ¥16 ≼	0.486	0.116	Ø. 4 76	0.099	0.417	0.100		
D4 (pond)	0. 0 99°	∜9.017 ©	0.025	2 0.023 ✓	70.016	0.015	0.021	0.020		
D4 (stream)	9 ,426	△ 0.00€	19 2399 🔏	0.010	0.365	0.004	0.342	0.008		
D5 (pond)	_ 0.019 _	0.008	~~0.028°	026	0.016	0.015	0.024	0.022		
D5 (stream)	0.442	Ø\Ø02 ू°×	y 0.42 2	0.006	0.379	0.002	0.362	0.005		
D6 (ditch)	0.553	0.086	0.486	© 0.2 9 \$	0.474	0.073	0.417	0.176		
R1 (pond)	0.043	0.040	113 🛰	0.407	0.036	0.034	0.096	0.091		
R1 (stream)	0.365	0.0 3 9	0.908	0.113	0.313	0.033	0.763	0.095		
R3 (stream)	0.515	4 0061	" 0. 7∄ ¥	0.100	0.442	0.051	0.615	0.084		
R4 (stream)	0.449	0.124	0.950	0.271	0.379	0.105	0.801	0.230		

Bold values considered in risk assessment

Italic values considered in risk assessment

Table CP 10.2- 4: Spring cereals: Maximum PEC $_{sw}$ and TWAC $_{sw}$ -7 values for fluoxastrobine at Step 3 $_{\circ}$

								0.	
				Fluoxastrob					
Use	Cer	eals (spring	$($), $2 \times 87.5 g$	a.s./ha	Cerea	ls (spring), 2	\times 75.0 g a	× 75.0 g a.s./ha/	
pattern	Single a	pplication	Multiple a	Multiple applications		oplication		tiple actions	
FOCUS	PECsw	TWACsw	PECsw	TWAC _{sw} -	PECsw	TWAČsw	PEC	TWAC	
FOCUS	[µg/L]	-7	[µg/L]	7	[µg/L]	₹ J- ¾	[µĝ/]Ł]	~ @ -7 ×	
scenario	[µg/L]	[µg/L]	[#6/12]	[μg/L] 💍	,	Jμg/L]		μg/Ll\S	
D1 (ditch)	0.583	0.473	0.810	0.692 🐬	0.497	0.403	∂ .692 ≾	0.590	
D1 (stream)	0.490	0.063	0.424	0.146	0.420゚⊖	[♥] 0.054	€ 0.364°	0.4973	
D3 (ditch)	0.554	0.090	0.485	0.082	0.475°	0.077	0.416	6 ,070 g	
D4 (pond)	0.019	0.017	0.027	6 025	0.016	©0.0150°	0.023	0.022	
D4 (stream)	0.453	0.006	0.404	₹0.012	9 ,388 %	0.005	0.347	0.019	
D5 (pond)	0.019	0.018	0.027	(0.0 225 °	_ ~0.017 ;≪	0 <u>0</u> 015	© 0.023√	0.021	
D5 (stream)	0.465	0.004	0.418	0.605	[₩] 0.399	0 .003 0	0.358	_20.004	
R4 (stream)	0.607	0.187	1.211	10.273	0.50,1	0.158	10023	ØÖ.231∜	

Table CP 10.2-5:

R4 (st	ream) 0.60 7	0.187	1.21	<u> </u>	273 W	0.54,1	0.158	IQ023	©0.23 %		
Bold va	Bold values considered in risk assessment										
Italic va	Italic values considered in refined risk & sessment & & & & & & & & & & & & & & & & & & &										
	R4 (stream) 0.607 0.187 1.218 0.821 0.158 1.023 0.231 0.231										
			Q''	e . Ĉe	*	S' _0"					
		0		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							
Table C	P 10.2- 5: T	WAC 🔊	lues at day 5	Mar fluovo	etrobia .		r oorools I		n 1		
1 able C	F 10.2- 5: 1	WACSSTA	ues at day	Jor Huoxa	ISUI ODIII —	uşe ili wille	r cereais i	OCOS SIE	p 4		
		, Ø	0' 2		Fluoxastr	obin (Ê҈¥Z)		S)			
		7 4					a.s./ha				
			Single ap			10 ⁴ %	Multipre a	pplications			
Buffer		,	WACW-		T a	7,		-7 [μg/L]			
Width	Scenario 5	. 8	y Drift Re	duction %	`Q`_\&\`		Ørift Ro	eduction			
& Type		№ 0%	50%	₹75%, \$		Ø% ≼		75%	90%		
	D1 (dash)	0.079	Ø.079 [©]	0.079	0.979	0.18	0.181	0.181	0.181		
	D1 (duch) D1 (stream)		© 0.04 <u>%</u>	0.049	®.049	0.143	0.113	0.113	0.113		
	D2 (ditch)	×9.077		0.077	0.0770	10 P94	0.194	0.194	0.194		
	DŽ (stream)	0.03	0.070°° 0.035	0.077	0.035	(Q).101	0.101	0.101	0.101		
Ì	D3 (ditch)	0.009	≈ 0.004 ∂	0.002	0.001 0.004	800.0	0.004	0.002	0.001		
20m	D4 (pond)	0.007	%0.00 3 %	0.004	$\bigcirc 0.004$	0.011	0.010	0.010	0.009		
SD &	D4 (stream)	₹ 0.005€	0.005	\$0.000E	0.00(*)	0.010	0.010	0.010	0.010		
RO	D5 (popyd)	0.007	00004	0.002	0.6691	0.011	0.006	0.003	0.001		
KU	D5 (speam)	() (976)()	Ø.000 N	0.000	% .000	0.001	0.001	0.001	0.001		
	D6 (ditch)	0.006 0.010 0.009	0.003	02902	\emptyset 0.001	0.014	0.007	0.003	0.002		
	(pond)	©0.010	0.008	29 .007	^J 0.007	0.025	0.022	0.020	0.019		
	R1 (stream)	× 0.009	Q,009 A	0.009	0.009	0.027	0.027	0.027	0.027		
/ L	R3 (stream)	0, 0 ,15	®.015€	U.JUJO	0.015	0.023	0.023	0.023	0.023		
"	R4 (stream)	Ø29	₹ 0.029 V	6 029	0.029	0.065	0.065	0.065	0.065		

SD and RO denote spray drift and runoff buffer Bold values considered in refined risk assessment

TWAC_{sw} values at day 7 for fluoxastrobin – use in spring cereals FOCUS Step 4 **Table CP 10.2-6:**

					Fluoxastro	obin (E+Z)			. 4	
			Cereals (spring), 2 × 87.5 g a.s./ha _∞							
			Single ap	pplication		1	Multi ple a	pplication		
Buffer Width	Scenario			v-7 [μg/L] eduction			TWACsw Drift Re	-7 [μg/L]		
& Type#		0%	50%	75%	90%	0%	₹ 50%	75%	%90% [∞]	
	D1 (ditch)	0.097	0.097	0.097	0:097	0.234		0.234	0.234	
	D1 (stream)	0.061	0.061	0.061	_(0.061	0.146	0.146	©0.1465	0.1.46	
20.00	D3 (ditch)	0.007	0.003	0.002	$\sqrt[\infty]{0.001}$	0.006	0.003	0.00₹	0.001	
20m	D4 (pond)	0.007	0.005	0.005	0.005	0.013		04 011	0.011	
SD & RO	D4 (stream)	0.005	0.005	0.005	0.005	> 0.012 ©	0.012	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.012	
KO	D5 (pond)	0.007	0.004	06002	0.001	0.040		0.003	0.01 2 ″ 0.001	
	D5 (stream)	0.000	0.000	65000	Z}*0.00 @ √	0.001	0.001 0.063	0.001	« 0.001	
	R4 (stream)	0.045	0.045	0.045	0.045	Ø.063 °C) 0.063 0°	Ø234	0.06 2 .°	

[#] SD and RO denote spray drift and runoff buffer

Bold values considered in refined risk assessmen

y drift and runoff buffer with the refined risk assessment with th **Table CP 10.2-7:**

				<u> </u>	100	·	^x	<u> </u>	
					Fluoxastro	obin (Æ¥Z)		Ĵ	
			y &	Cereal	s (win@r),	2 € 75.0 g	a.s./ha 💍		
	4		Single ap	plication	. L. Y		Multiple a	pplications	}
Buffer	# Scenario	4 .	ON WAS	-7 [μg/L]			TWAC _{sw}	-7 [μg/L]	
Width	Scenario						©Drift Re	eduction	
& Type			50%	₹75%	90%	₹0%	J 50%	75%	90%
	D1 (drech)	0.262	0.062	√ 0.0 6 2	.0 3062	o 0.14€	0.144	0.144	0.144
	D1@stream)	0.039	Ø 0.03 9 ≜	0.039	©0.039 ₀ ,	0.090	0.090	0.090	0.090
	D2/(ditch)	E0.059	0. 0.59 ″	0.059	0.059	0 149	0.149	0.149	0.149
4	S W = (Stream)	0.02 6	0.026	~\0.026 [©]	0.026	9 .076	0.076	0.076	0.076
	D3 (ditch)	0,007	Ø.004 €	0.002	№0.001 €	0.007	0.003	0.002	0.001
20m	D4 (pond)	0.006	0.004	9.0004	©0.003	0.009	0.008	0.008	0.008
SD &	D4 (stream)	£0.004\$	0,0604	∞ 0.004 €	0.00	0.008	0.008	0.008	0.008
RO	D5 (pood)	D*0.0 %	∘0 ,0 003	O 0.0020°	0.0001	0.009	0.005	0.002	0.001
KO	D5 (stream)	Q.Q0 0	~ 0.000	0.000	₹000.	0.000	0.000	0.000	0.000
	D@(ditch)	0.005	9 0.00 4 ×	00001 0000	\emptyset 0.001	0.012	0.006	0.003	0.001
	RG (pond)	Ø0.008Q	0.067	L&9.006 ≈ √	0.006	0.021	0.018	0.017	0.016
	Ř1 (stream)	0.008	% 800 _%	\$\text{0.00\text{\$\text{\$\tilde{Q}}}\text{\$'}	0.008	0.023	0.023	0.023	0.023
4	R3 (stream)	0.012	©0.012	0.012	0.012	0.020	0.020	0.020	0.020
y	R4 (stream)	0 .025 C	0.025	00025	0.025	0.055	0.055	0.055	0.055

SD and RO denote spray drift and imoff before Bold values considered in refund risk assessment

Table CP 10.2-8: TWAC_{sw} values at day 7 for fluoxastrobin – use in spring cereals FOCUS Step 4

			Fluoxastrobin (E+Z) Cereals (spring), 2 × 75.0 g a.s./ha							
		Single application]	Multiple applications C			
Buffer Width	Scenario	TWAC _{sw} -7 [μg/L] Drift Reduction				TWACsw-7 [µg/L] *** **Drift Reduction** **********************************				
& Type#		0%	50%	75%	90%	0%	50%	75%	≫90% ≈	
	D1 (ditch)	0.078	0.078	0.078	0:078	0.182	0.182		9 0.18Q ¹	
	D1 (stream)	0.049	0.049	0.049	_0.049	0.11	0.113 🎣	©0.1135	0.113	
20	D3 (ditch)	0.006	0.003	0.001	$\sqrt[\infty]{0.001}$	0.005	0.002	0.00₹	0.000	
20m	D4 (pond)	0.006	0.004	0.004	0.004	0.910 0	°0.01 0	0009	C0.000 0	
SD &	D4 (stream)	0.004	0.004	0.00	0.004	> 0.010€	0.010	√@.010. ¢	0.0.00	
RO	D5 (pond)	0.006	0.003	06002	©0.001	0.009		0.002	0.0 % 0.001	
	D5 (stream)	0.000	0.000	000	z 0.00	0.000	3 0.000\$	0.000	« 0.000	
	R4 (stream)	0.038	0.038	0.038	0.038	Ø.053 °C	0.053	Ø53	0.05 3 ,°	

ACUTE RISK ASSESSMENT FOR AQUATIC ORGANISMS

Table CP 10.2-9: TERA calculations based on FOCUS Sens 2 (DEC)

GAP 2 2 2 7 Table CP 10.2-9: TERA calculations based on FQCUS Step 2 (PEC values based for cereals on worst-case

Compound	Species 2		lpoint (PECsw,max >	TER _A	Trigger
Cereals (spring/wint	er) & , O , S			£., Ø1		
	Fish acute Oncorpynchus mykiss,	\mathcal{C}_{10}	435	8:55	50.9	100
Fluoxastrobin	Invertebrate, acute Daphnia magna	£0 50	\$\frac{1}{80}	₩8.55	56.1	100
	Thvertestate, asite Gainmarus pulex	EC ₅ O	¥50 ×	8.55	17.5	100
j j	Invertebrate, acute Americanysis bahia	£C ₅₀	O 600#	8.55	7.1	100
HEC 5725-E-des-	Pish, acute Oncorhynchus mykios	LÇX	2 102 000	5.89	> 17 317	100
chlorophenyl	Anvertebrate, acore Daphnia magna	EC ₅₀	> 100 000	5.89	> 16 978	> 100
HEC 5725-carboxylic	Fish, actite Oneorhynchus mykiss	€50	> 95 700	2.61	> 36 667	>100
acid	Inver@brate @ute / Dannia magna 0	EC ₅₀	> 100 000	2.61	> 38 314	100
2 chleropheniki	Fish acute Oncorhy@chus mykiss	LC ₅₀	2600	3.28	793	100
2-chiloropheniol	Invertebrate, acute Daphnia magna	EC ₅₀	7400	3.28	2256	100

Bold values do not meet the trigger

Table CP 10.2-10: RAC_{sw; ac} calculations based on FOCUS Step 2 (PEC values based for cereals on worst-case GAP $2 \times 87.5 \text{ g a.s./ha}$ (acceptability of risk: PEC/RAC < 1)

case GAP 2 × 87.5 g a.s./ha (acceptability of risk: PEC/RAC < 1)						
Compound	Species	Endp [μg/		RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	PEC/RAC
Cereals (Winter/sprin	ng)			<i>k</i>	Ÿ	4 2
	Fish, acute Oncorhynchus mykiss	LC ₅₀	435	4.35	8.55	109 7 &
Fluoxastrobin	Invertebrate, acute Daphnia magna	EC ₅₀	\$8 0	* * * * * * * * * *	8.55 ×	1.78
(E+Z)	Invertebrate, acute Gammarus pulex	EC ₅₀	150	1.5	8.55 Q	\$.70 °
	Invertebrate, acute Americamysis bahia	ECS	60.4	20,604	8\55) 14cH6
HEC 5725-E-des-	Fish, acute Oncorhynchus mykiss	ŶC ₅₀	> 100,000	> 1950	\$ 5.89\ \$	0.01
chlorophenyl	Invertebrate, acute Daphnia magna	EQ50 0	100.000	1000	\$3.89 L	5 0.01
HEC 5725-carboxylic		LC	×95 700	9 57		< 0.003
acid	Invertebrate, acute Daphica magna	PC50 \$	> 1000000 .	> 1000	2.6	< 0.003
2-chlorophenol	Fish, active C Oncorhynchus mykiss	LŒ6	©2600 N	\$\frac{1}{26}\$\$\frac{1}{2}\$\$	9228	0.13
2-Cinorophenor	Invertektate, acyte Daphylia magna	©EC ₅₀ ©	7.700 °	7 4 7	3.28	0.04

All TER values for the metabolites of fluorastrobin meet the trigger for acute exposure. For fluorastrobin the acute triggers were not met for fish and the invertebrates *D. magna*, *G. pulex* and *A. bahia*. Therefore, a refined risk assessment is required. The consideration of the more realistic FOCUS Step 3 surface water concentrations is presented below.

In accordance with the EFSA PPR Panel opinion on lowering the uncertainty factor when data on additional species we available CEFSA Journal (2005) 301, 1-45), as well as the recommendations provided in the new EFSA Guidance Document on Aquatic Ecotoxicology (EFSA Journal 2013;11(7):3290), the geometric of the available acute poxicity data on aquatic invertebrates (EU agreed endpoints) could be calculated and used in the refined risk assessment in combination with the trigger value of 100:

./L)

		♥
	Species > 5	EC ₅₀ /LC ₅₀ (mg a.s.
4	Americannysis Dahia	0.0604
	Gammarus pudex	0.15
	Dapania magna 💙	0.48
	Acanthocyclops Inustus	0.9
	Cloeondipterum	1.0
J Z A	Daptinia gr. galeata	1.3
	Asellus aquaticus	1.3
	Chaoborus obscuripes	>3.2
Ĉ [©]	Simocephalus vetulus	>3.2
<u> </u>	Geometric mean	0.488

It has to be noted that the "greater than" endpoints for *Chaoborus obscuripes* and *Simocephalus vetulus* were not considered suitable for use in the calculation of the geometric mean, since they denot represent true effect values.

The geomean value of 0.488 mg a.s./L can be used for further refinement of the acute risk of Fluoxastrobin to aquatic organisms.

Table CP 10.2-11: TER_A calculations for cereals (winter and spring) calculation based on FOCVS Steps and the refined aquatic invertebrates endpoint (geometric mean)

Species	Endpoint	PFC sw,max	KOCUS		Arigge (V
-	[µg/L]	μ̃g/L]	Scenarjo ,		Grigger
Fluoxastrobin (E+Z), win				0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0	
		9 398 🔊	Dil (ditch)	√727.4 V	100
	.4	©0.457	(stream)	951	100C°
		y 0.636 7	D2 (ditch)	6 84.0	100
		29.465 ×	DP(stream)	©935.5	100
		~~~~0.486°	D3 (dibeh)	8959	<i>ℚ</i> 100
		0% 25	D4@pond)	₹ 400 ×	100
Fish, acute	\$\tag{\text{35}} \tag{\text{35}} \tag{\text{35}}	\$.399 °	10 (stream)	° 109€√	100
Oncorhynchus mykiss	\$\$\tag{2}{50}\$\tag{2}{7}\$\tag{435}{7}\$	, 0.0 <u>2</u> 8	L D5 (pond)	15 536 \$2031	100
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		0.422	D5 (stream)		100
<b>√</b> 1		₩.486 O	D6 (ditch)	895.1	100
		\$ 0.143	R1 (pond)	3850	100
		, <b>6</b> 908 /	RK(stream@	479.1	100
		√√0.731 [™]	(stream)	595.1	100
		0.250	R4 (@ream)	457.9	100
Q ×		0.598 @	Do (ditch)	802.7	100
		O.452	(stream)	1050	100
		) 0. <b>6</b> 36 A	D2 (ditch)	754.7	100
		0.465	D2 (stream)	1032	100
		0.486	D3 (ditch)	987.7	100
, Q 0		¥ 0 ₂ 925	D4 (pond)	19 200	100
Invertebrate, acute		<b>9</b> .399	D4 (stream)	1203	100
Dagania magna		0.028	D5 (pond)	17 143	100
		y 0.422	D5 (stream)	1137	100
)		0.486	D6 (ditch)	987.7	100
		0.113	R1 (pond)	4248	100
		0.908	R1 (stream)	528.6	100
		0.731	R3 (stream)	656.6	100
S S A		0.950	R4 (stream)	505.3	100
Invertebrate, acute Dania magna Invertebrate, acute	**************************************	0.598	D1 (ditch)	816.1	100
		0.457	D1 (stream)	1068	100
Înve <b>p</b> ebrate, acute Geomean, 7 species	$LC_{50}/EC_{50}$ 488	0.636	D2 (ditch)	767.3	100
Scomoun, / species		0.465	D2 (stream)	1050	100
		0.486	D3 (ditch)	1004	100



Species	Endpoint [µg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TERA	Trigger
		0.025	D4 (pond)	19 520	<u>~</u> 1000 €
		0.399	D4 (stream)	<b>3</b> 1223	© 100g
		0.028	D5 (pond)	17 429	100
		0.422	D5 (stream)	1156 💍	\$100 J
		0.486	D6 (ditch)	1004	1000
		0.113	R1 (pond)	4819	100
		<b>9</b> ,908	RIC(stream)	337.4 Q	<b>100</b>
		0.731	Ry (stream)	667%	100
	,	0.950	R4 (stream)	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	100 5
Fluoxastrobin (E+Z), spr	ing cereals, 2 × 87.5 ga.s	s./ha _©			4
	23	0.810	D1 (diteh)	53760	[™] 100√
		0.424	D1 (stream)	4,026	100
		«0.485 »	DS (ditch)	®896.9¢	O100
Fish, acute		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	D4 (poind)	16.611	<a> 100</a>
Oncorhynchus mykiss	LC ₅₀ 435	0∰04 ∕	D4 Stream	©077 °√	100
	LC ₅₀ 435	Ø.027	(pond)	©16 1 %	100
		\$ 0.4 ₁ \$	15. ( ) Q \ &	-	100
•		1.211	R4 (stream)	<b>₹</b> 959.2	100
·// .		\$100	D1 (ditch)	592.6	100
		\$ 0.434	D1 (s@eam)	1132	100
		49485	D& (ditch)	989.7	100
Invertebrate Scute		£0.027	54 (pond)	17 778	100
Daphnia magna S	EC ₅₀ 0 480	0.404	D4 (gream)	1188	100
. Q		0.027 @,	Da (pond)	17 778	100
		\$0.418	(stream)	1148	100
		7 1211	R4 (stream)	396.4	100
		0.810 %	D1 (ditch)	602.5	100
QQ		\$0.424\$	D1 (stream)	1151	100
		9 0 ₄ 85	D3 (ditch)	1006	100
Invertebrate, acute		<b>Q</b> 027	D4 (pond)	18 074	100
Geomean, 7 species	LC ₅₀ \(\mathbb{E}\)C ₅₀ \(\overline{\pi}\) 488\(\overline{\pi}\)	<b>№</b> 0.404	D4 (stream)	1208	100
.4		0.027	D5 (pond)	18 074	100
		0.418	D5 (stream)	1168	100
		1.211	R4 (stream)		100
Invertebrate acute Daphnia magna S		1.211	R4 (stream)	403.0	100

Table CP 10.2-12: TER_A calculations for cereals (winter and spring) calculation based on FOCUS Step 3 and the refined aquatic invertebrates endpoint (geometric mean)

and the refined aquatic invertebrates endpoint (geometric mean)					
Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TER _A	Trigger ®
Fluoxastrobin (E+Z), win			SCHAIR IV	\$*************************************	
Truorustroom (E · 2), win		0.600	D1 (ditch)	725.0	200 B
		0.498	D1 (stream)	873,5%	(70) 13
		0.59%	D2 (duch)	73 V.8	100
		0.39%	D2 (stream)	\$904.4 Q	# 1200 K
			Be (ditch)	- V	
		0.555	. `~~	783. <b>8</b> 22.895	100,0
	<b>4</b>	0.019	D4 (pond)	(P) 42	
Fish, acute		9,426	D4 (stream)	V1021 ·	100
Oncorhynchus mykiss	LC ₅₀ 435 0	0.019	D5 (popd)	22 895	100¢°
		0.442	D5 (stream)	984.2	100
		9.553	De (ditck)	₹786.6 <del>%</del>	<b>∂1</b> 00
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	OR1 (pond)	10,56	© 100
	Q' &	0 3 65 £	R1 Stream	£192 🤝	100
		& .515 C	RO (stream)	[™] 844. [™]	100
		0.449	KA (stream)	968.8	100
9/		0.600	Di ditch)	48 00.0	100
√ n		Ø.498 ○	D1 (stream)	963.9	100
		\$ 0.5 92	OD2 (ditch)	810.8	100
		.Q 3 81	D2 (stream)	997.9	100
		£Ø.555 ₽	(ditch)	864.9	100
		0.00	D4 (pond)	25 263	100
Invertel@ate, acute	Leave Anno	00/26	D4 (stream)	1127	100
Daphriia magna 💍	EC36	Ç0.019°Ç) (pond)	25 263	100
		0.442	D5 (stream)	1086	100
		00553	D6 (ditch)	868.0	100
Q Q		©0.043©	R1 (pond)	11 163	100
		0,365	R1 (stream)	1315	100
Ą		© 515	R3 (stream)	932.0	100
		×0.449	R4 (stream)	1069	100
4 4		0.600	D1 (ditch)	813.3	100
		0.498	D1 (stream)	979.9	100
		0.592	D2 (ditch)	824.3	100
		0.481	D2 (stream)	1015	100
		0.555	D3 (ditch)	879.3	100
Inververorate ⊗eute ♥ Georgian & becies	LCO EC 488	0.019	D4 (pond)	25 684	100
Samuella, Special		0.426	D4 (stream)	1146	100
	<i>y</i>	0.019	D5 (pond)	25 684	100
		0.442	D5 (stream)	1104	100
Invertebrate, acute Daplaria magna Invertebrate acute Georgican, Topecies		0.553	D6 (ditch)	882.5	100
		0.043	R1 (pond)	11349	100



[μg/L] ereals, 1 × 87.5 g a.s	0.365 0.515 0.449 8./ha 0.583 0.490 0.554 0.019 0.453	R1 (stream) R3 (stream) R4 (stream) D1 (ditch) D1 (stream) D4 (poid) D4 (stream) D4 (stream)	1337 947.6 1087 7464 887.8 785.2 22 895 960.3	1005 1005 1005
	0.449 8./ha 0.583 0.490 0.554 0.019 0.453	R3 (stream) R4 (stream) D1 (ditch) D1 (stream) D4 (pord) D4 (stream) D4 (stream)	7464) 887.8 0785.2 22 895	2100 2100 1005
	0.583 0.490 0.554 0.019 0.453	D1 (ditch) D1 (stream) D4 (ditch) D4 (pord) D4 (stream)	746(1) 887.8 5 5785.2 2 895	1005 1005 1005
	0.583 0.490 0.554 0.019 0.453	D1 (stream) D3 (ditch) D4 (psptd) D4 (stream)	887.8 5 0785.2 9 22 895	2100 2100 1005
LC ₅₀ 435	0.490 0.554 0.019 0.453	D1 (stream) D3 (ditch) D4 (psptd) D4 (stream)	887.8 5 0785.2 9 22 895	2100 2100 1005
LC ₅₀ 435	0.019	Dy (ditch) D4 (pond) D4 (stream)	785.2 2 22 895	100
LC ₅₀ 435	0.019	D4 (pspd) D4 (stream)	27 22 895	100
LC ₅₀ 435	0,453	D4 (stream)		100
4550 455	(G) ~		≫60.3 ა.≪	
	Ø .019 👋	1 A. 🔍 1		, J
		Dy (pond)	22 895	100
e .	© 0.46\$	Ø5 (stream)	» 93 <i>9</i> .5	100
	0,607	R4 (stream)	#16.6 _%	20 00
	9.583	Di (diteh)	© 823 3 5	100
	** 0.496V	D1 (Steam)	979.6	§ 100
	0.954 6			100
\$\hat{\chi_{50}} \tag{\chi_{\chi}} 480\tag{\chi}	100.019	, W - (A ·		100
	V,,- U		(0/)	100
4.		* /	AL Y	100
			\\ \'	100
	\$ 0.004 \$63.02	7 n		100
	1 1 490 S			100
	1,40.10			100
	n⁄010 €	Del (nond)		100
C ₅₀ 0 488	\$0.453	(stream)		100
	y 0.019	D5 (pond)	25 684	100
	09465	D5 (stream)	1050	100
	\$0.607\$	R4 (stream)	804.0	100
	\$\frac{1}{5}\tag{0}\tag	0.453 0.019 0.453 0.019 0.465 0.667 0.567 0.490 0.557 0.490 0.557 0.490 0.453 0.019 0.490 0.490 0.453	0.019.	0.054 D2 (ditch) 866.4 0.019 D4 (pond) 25 263 0.483 D4 (stream) 1060 0.019 D5 (pond) 25 263 0.465 D5 (stream) 1032 0.667 R4 (speam) 790.8 0.490 D1 (stream) 995.9 0.54 D3 (stream) 995.9 0.54 D3 (stream) 1077 0.019 D4 (pond) 25 684 0.453 D4 (stream) 1077

Table CP 10.2-13: TER_A calculations for cereals (winter and spring) calculation based on FOCUS Step 3 and the refined aquatic invertebrates endpoint (geometric mean)

and the refined aquatic invertebrates endpoint (geometric mean)						
Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TER _A	Digger	
Fluoxastrobin (E+Z), win	ter cereals, 2 × 75.0 g a.s	s./ha	O	7		
		0.509	D1 (ditch)	854.6	\$100 J	
		0.389	D1 (stream)	1118	100\$	
		0.538	D2 (Qitch)	8008.6	7 13 9 0 1	
		2 394	D2 (stream)	01104	900	
		6 0.417	D3 (ditch)	1063	100	
		0,021	D4 (pond)	20 714.	100	
Figh pouts	\	Ø 342 ×	Da (stream)	\$1272	4 100	
Fish, acute Oncorhynchus mykiss	LC ₅₀ 435	© 0.02\$	D5 (pond)	18 Q 5	100	
		0.362	D5 (stream)	\$\frac{10 \text{ \text{\tin}\text{\tett{\text{\tetx{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\text{\text{\texi}\text{\text{\texi}\text{\texi}\text{\texi{\texi{\texi{\texi}\titt{\texi{\texi{\texi}\titt{\texi{\texi{\texi{\texi}\t	300	
		\$01.417 \$\frac{1}{2}	D6 (ditch)	1042 [©]	0100	
		0.096		1046	100	
		963 ©	R1 (pond)	\$70.1		
		0.615			100	
		90.615	(stream)	1010	100	
		0.8 0 0r	R4 (stream)	543.1	100	
		Ø 509	D'M(ditch)	943.0	100	
Į Ž		0.389 0.584	D2 (Ptch)	1234	100	
)* 0.338 ***********************************	D2 (entch)	892.2	100	
		\$ 03394 \$ 417	D2 (stream)	1218	100	
		₹0.417	D4, (díteň) D4, (bond)	1151	100	
		0.001 0.342 @	%	22 857		
Invertebrate, acute	EC50 (480)	0.342	DØ(stream) ©D5 (pond)	1404 20 000	100	
Dippinia magna		0.024 0.862	D5 (pond) D5 (stream)	1326	100	
		0.417	D6 (ditch)	1151	100	
		0.417	` ´	5000	100	
		0.0363	R1 (pond) R1 (stream)	629.1	100	
		^У 0⁄‰63 ≪ У .615	R3 (stream)	780.5	100	
		0.801	R4 (stream)	599.3	100	
Invertebrate, acute Deplinia magna Invertebrate acute Geomean dispecies		0.509	D1 (ditch)	958.7	100	
		0.389	D1 (atten)	1254	100	
		0.538	D1 (stream) D2 (ditch)	907.1	100	
		0.394	D2 (diten) D2 (stream)	1239	100	
		0.417	D3 (ditch)	1170	100	
Invertebrate acute	© I≈ C ≈0/EC50 488	0.021	D4 (pond)	23 238	100	
Geornean, Ospecies	₩	0.342	D4 (stream)	1427	100	
	"	0.024	D5 (pond)	20 333	100	
S ^o		0.362	D5 (stream)	1348	100	
		0.417	D6 (ditch)	1170	100	
		0.096	R1 (pond)	5083	100	
			(1,0,,,,)			



Species	Endpoint [µg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TERA	Trigge
		0.763	R1 (stream)	639.6	× 100
		0.615	R3 (stream)	793.5	© 100ê
		0.801	R4 (stream)	609.2	1,00
Fluoxastrobin (E+Z), spri	ng cereals, 2 × 75.0g a.s	s./ha		, O	
		0.692	D1 (ditch)	62846	100
		0.364	D1 (stream)	10/95 5) 160
		2 416	D\$ (ditch)	©1046 ♥	\$\tilde{\
Fish, acute	LC ₅₀ 435	0.023	D4 (pond)	Ž 18 9 3	100
Oncorhynchus mykiss	LC30 433	0,347	O D4 (stream)	2 54 💸	⁷ .190
	O	Ø.023	DS (pond)	8 913	100
		0.35	\$5 (stream)	, 12P5	100
		1 023	R4 (stream)	\$25.2 _{\(\infty\)}	200
		0.692	Di (ditch)	© 693 6 5	100
		°> 0.364″	D1 (stream)	1359	§ 100
		0016 6	D3 (ditch)	\$\tilde{154} \tilde{\gamma}	100
Invertebrate, acute	£C ₅₀ 480	100.023	(pond)	© 20 8 %	100
Daphnia magna		\$\ 0.347	D4 (stream)	1383	100
%		0.023	D& pond	20 870	100
		0.3580	D5 (stream)	© 1341	100
		1.023	R4 (s@eam)	469.2	100
Inverteblate, acute		\$\tag{992}	DI (ditch)	705.2	100
		0.364	(stream)	1341	100
		0.498	D3 (ditch)	1173	100
Invertebrate, acute	′LC5 /E Č50 🔊 488 💍	0.9023	De (pond)	21 217	100
Inverteblate, acute Georgian, 7 species	LC ₃ C ₅₀ 488	0.347	D5 (pond)	1406 21 217	100
\$ [*]		, 0.023	D5 (stream)	1363	100
i A		©1 023©	R4 (stream)	477.0	100
	LCanteCso & 488	*			

Table CP 10.2-14: TER_A calculations for cereals (winter and spring) calculation based on FOCUS Step 3 and the refined aquatic invertebrates endpoint (geometric mean)

and the refined aquatic invertebrates endpoint (geometric mean)						
Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TERA	Digger	
Fluoxastrobin (E+Z), win	ter cereals, 1 × 75.0 g a.s	s./ha	Ô	7		
		0.510	D1 (ditch)	852.9	\$100 J	
		0.425	D1 (stream)	1034	100	
		0.501	D2 (Qitch)	8 6 8.3	100	
		2 410	D2 (stream)	01061	200	
		6 0.476	D3 (ditch)	912	100	
		0.016	© D4 (Fond) ©	27 188° ×	190	
Fish, acute		Ø.365 ×	D4 (stream)	\$\frac{1192}{}	100	
Oncorhynchus mykiss	LC ₅₀ 435	© 0.01@	D5 (pond)	27 🗣	106	
		0379	D5 (stream)	%¥148 €	100	
		\$9\ 474 \\	De (diteh)	917	0100	
		0.036	R1 (pond)	125983	2 100	
	Q [*] & Q	QQ13 Ó	R L (stream)	G/390	100	
		90.442	(stream)	9843	100	
	LC ₅₀ 435	0.379	R4 (stream)	13 48	100	
\$/		6510 A	D'M(ditch)	3941.2	100	
		0.425	M (stream) %	1129	100	
		0.501	D2 (Pitch)	958.1	100	
		3 0,410 ©	D2 (stream)	1171	100	
		20.476	D3 (diteh)	1008	100	
l S		0.006	D4, (Jond)	30 000	100	
Invertebrate, acute 🔏		0.365	D40(stream)	1315	100	
Darania magna 🛴	FC 50	Ô 0.01€	©D5 (pond)	30 000	100	
) 0. 3.7 9 ø	D5 (stream)	1266	100	
		0.474	D6 (ditch)	1013	100	
		0.036	R1 (pond)	13 333	100	
		0243	R1 (stream)	1534	100	
		× 9.442	R3 (stream)	1086	100	
		© 0.379	R4 (stream)	1266	100	
		0.510	D1 (ditch)	956.9	100	
		0.425	D1 (stream)	1148	100	
Invertebrate, acute Diffinia magna Invertebrate acute Geomean dispecies		0.501	D2 (ditch)	974.1	100	
		0.410	D2 (stream)	1190	100	
Invertebrate Scute.		0.476	D3 (ditch)	1025	100	
Geomean, Ospecies	L2C30/EC50 488	0.016	D4 (pond)	30 500	100	
		0.365	D4 (stream)	1337	100	
		0.016	D5 (pond)	30 500	100	
		0.379	D5 (stream)	1288	100	
		0.474	D6 (ditch)	1030	100	
		0.036	R1 (pond)	13 556	100	



Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TERA	Trigger
		0.313	R1 (stream)	1559	100
		0.442	R3 (stream)) 1104	© 100g
		0.379	R4 (stream)	1288	100
Fluoxastrobin (E+Z), spri	ing cereals, 1 × 75.0g a.s	./ha		ν, _O ,	
		0.497	D1 (direh)	87 5 ©	~~~ 100°°
		0.420	D1 (steam)	10 036 5	160
		47 5	D\$∕ (ditch)	©915.8 ®	
Fish, acute	LC ₅₀ 435	6 0.016	D4 (poud)	27 B8	100
Oncorhynchus mykiss	LC ₅₀ 435	0.388	D4 (stream)	3 21 ×	190
	Ó	Ø.017	DS (pond)	£25 588	<u>100</u> .
		0.39	\$5 (stream)	, 10 9 0″	106
		0,311	R4 (stream)	\$51.3 W	200 0
		3 0.497	Di (ditch)	J 965 5	© ₁₀₀
		~ 0.426V	D1 (stream)	1.1343	§ 100
		0.475 6	D3 (ditch)	\$\text{\$\text{\$\text{\$011}}\$} \text{\$\text{\$\text{\$\gamma\$}}}	100
Invertebrate, acute	480	₩.016,	DA (pond)	© 30 000	100
Daphnia magna		0.388	D4 (stream)	1237	100
%		0.017	D& pond	28 235	100
*		\$0.399 O [™]	D5 (stream)	5 1203	100
		0.541	R4 (s@eam) 🍫	939.3	100
Inverte trate, acute		**************************************	DL (ditch)	981.9	100
		0.420	(stream)	1162	100
		0.475	D3 (ditch)	1027	100
Invertebrate, acute	LC 50 2 488	0.016	Da (pond)	30 500	100
Geometin, 7 species		0.388	(stream)	1258	100
	LC 55C 50 488	0.01/	D5 (pond)	28 706	100
		09399 %	D5 (stream)	1223	100
		0.31	R4 (stream)	955.0	100
	LCapt Cso & 488				

Table CP 10.2-15: RAC_{sw; ac} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

3 (acceptability of risk: PEC/RAC < 1)					
Species	Endpoint [µg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS Oscenario	PPC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 2 × 87.5 g a.s	s./ha	Ô	y	
			0.598	D1 (diţclo	3 7.14
		Ö	0.45%	D1 (stream)	
			0.436	D2@ditch)	0.115
		, O	9.465	DO (stream)	Ø.11 <i>J</i>
			0.486	D3 (chich)	0.1
	,		. // 6	D# (pond)	0,91
Fish, acute	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		0.399	BA (stream)	3 0.09
Oncorhynchus mykiss	LC ₅₀ 435	4.35	Q 0.028	D5 (pend)	0.Q
			6,422	D5 stream)	Q 10
			©0.48€	6 (ditch)	0.11
		4.35	9 0.33 A	R1 (Sond) «	0.03
	LC ₅₀ 435		0.908	R1 (stream)	0.21
			Q., 721	R3 (stream)	0.17
		,	\$\ \ \(\text{0.280}\)	R4 (stream)	0.22
%		7 0 5 7 7 5 7 7 7 7 9 24.80 9	W.598	(ditch)	0.12
<			\$\tag{9.4\dag{7}} \tag{8}	(stream)	0.10
J. J			0.036	D2 (ditch)	0.13
. Š C		, \$	9.465, U	D2 (stream)	0.10
			0.486	D3 (ditch)	0.10
			9. Ø 25	D4 (pond)	0.01
Invertebrate, acute		(20 .399	D4 (stream)	0.08
Dapania magna 💯	1 1050 G 480	0 4.80° V	© 0.028	D5 (pond)	0.01
		7 & A	0.422	D5 (stream)	0.09
A			0.486	D6 (ditch)	0.10
			0.113	R1 (pond)	0.02
			0.908	R1 (stream)	0.19
		, X	0.731	R3 (stream)	0.15
S Z		Q	0.950	R4 (stream)	0.20
		7	0.598	D1 (ditch)	0.12
			0.457	D1 (stream)	0.09
			0.636	D2 (ditch)	0.13
			0.465	D2 (stream)	0.10
Invertebrate Scute.			0.486	D3 (ditch)	0.10
Invertebrate, acute Daptinia magna Invertebrate acute Geomean, dispecies	LC ₅₀ /EC ₅₀ 488	4.88	0.025	D4 (pond)	0.01
	7		0.399	D4 (stream)	0.08
			0.028	D5 (pond)	0.01
			0.422	D5 (stream)	0.09
			0.486	D6 (ditch)	0.10
			0.113	R1 (pond)	0.02



Species	Endpoint [µg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS scenario	PEC/BAC
			0.908	R1 (stream)	70 .19
			0.731	Q 3 (stream)	© 0.15
			0.950	R4 (stream)	0.19
Fluoxastrobin (E+Z), spri	ing cereals, 2 × 87.5 g a.	.s./ha	A	, Ô	
			0.816	D1 (diteh)	0.195
			0.224	D1 @tream	9340
		a C	Ø.485	DB (ditch)	@.11 @
Fish, acute	LC ₅₀ 435	4 25	0.02	D4 (pond)	0.04
Oncorhynchus mykiss	LC50 433	4.33	0° 9,404 0	D4%stream	, Ø, Ø9
	Ô		0.0270	5 (pond)	△ 0.01 。
			Q 0.418 Q	D5 (stream)	0.16
			#211 °	R4 (stream)	28
	\$\frac{1}{2}\frac{1}{2		×0.810	Ø1 (ditch)	0.17
			0.424	D1 (stream)	
	Q Q		0.485	D (ditch)	0.10
Invertebrate, acute			20.027	D4 (pond)	0.01
Daphnia magna	48U*	4.80	0.494	D4 (stream)	0.08
%			0.027	DS (pond)	0.01
			& 0.418 s	🕅 (stream)	0.09
		5 2	1.201	R4 (stream)	0.25
S, Š			10 .810 2	D1 (ditch)	0.17
			0.424	D1 (stream)	0.09
The state of the s			0.485	D3 (ditch)	0.10
Invertebrate, acute 🐰	VI C 2 2 488		3 .027	D4 (pond)	0.01
Geomean, 7 species ©	DC 100	500	0.404	D4 (stream)	0.08
			0.027	D5 (pond)	0.01
\$ A			0.418	D5 (stream)	0.09
			1.211	R4 (stream)	0.25
Invertebrate, acute Daphnia magna Invertebrate, acute Geomean, 7 species	LCarteCso (2488)				

Table CP 10.2- 16: RAC_{sw; ac} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

3 (acce	eptability of risk: PEC/R	AC < 1)			
Species	Endpoint [μg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS Scenario	PEC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 1 × 87.5 g a.s	s./ha	Ö	Y	
			0.600	D1 (diţclo	7.14 Q
		Ö	0.49\$/	D1 (stream)	0.119
			0.592	D2@ditch)	0.44
		.Ø	Ø.481	DO (stream)	Ø.11
			0.55	D3 (chich)	0.13
	LC ₅₀ 435		_ /	Da (pond)	.0.90
Fish, acute	\ \tag{\psi}	4.35	0.4260	BA (stream)	« 0.10
Oncorhynchus mykiss	LC ₅₀ 435	4.35	Q 0.Q19	D5 (pend)	0.06
			6,442	D5 (stream)	6 10
			©0.553F	6 (ditch)	0.13
			0.033	$R1$ (bond) \angle	0.13
	Q & Q		0.365	R4 (stream)	0.08
			0.515	R3 (stream)	0.12
		Ly m	1 0.2029 S	R4 (stream)	0.12
%			6.600 F	(ditch)	0.13
× 1			0.498	(stream)	0.10
			0.\$92	D2 (ditch)	0.12
			9.481. V	D2 (stream)	0.10
			0.555	D3 (ditch)	0.12
The state of the s			9. Ø 19	D4 (pond)	0.00
Invertebrate acute &			©0.426	D4 (stream)	0.09
Da Pania magna	FC50 480	\$\frac{4.80}{5}\$	0.019	D5 (pond)	0.004
			0.442	D5 (stream)	0.09
. 3			0.553	D6 (ditch)	0.12
		S S	0.043	R1 (pond)	0.01
Ą Č			0.365	R1 (stream)	0.08
		L.	0.515	R3 (stream)	0.11
			0.449	R4 (stream)	0.09
		Ý	0.600	D1 (ditch)	0.12
. *			0.498	D1 (stream)	0.10
			0.592	D2 (ditch)	0.12
			0.481	D2 (stream)	0.10
			0.555	D3 (ditch)	0.11
Invertebrate acute	LC30/EC50 488	4.88	0.019	D4 (pond)	0.00
Syomethin Species	y		0.426	D4 (stream)	0.09
	25 25		0.019	D5 (pond)	0.004
			0.442	D5 (stream)	0.09
Invertebrate, acute Distinia magna Invertebrate acute Geomean, Especies			0.553	D6 (ditch)	0.11
			0.043	R1 (pond)	0.01



Species	Endpoint [μg/L]	RACsw; ac (LC50/100)	PEC _{sw,max} [μg/L]	FOCUS scenario	PEC/BAC
			0.365	R1 (stream)	0 .07 0
			0.515	R3 (stream)	Ø 0.11
			0.449 @	R4 (stream)	0.0
Fluoxastrobin (E+Z), spri	ing cereals, 1 × 87.5 g a	.s./ha		, 0,	
		Ö	0.583	D1 (ditch)	0.13
			0.490	D1 @tream	0.44
		, É	Ø.554	DB (ditch)	@.13 @.
Fish, acute	1.0 425	A 25	0.019	D4 (pond)	0.00
Oncorhynchus mykiss	LC ₅₀ 435	4.35	0° 0°,453 0°	D4 stream	, O, ¥0
			0.0190	5 (pond)	<u>∠</u> 0.00 °
	Ą		Q 0.465	D5 (stream)	0.16
	\$		6607	R4 (stream)	6 14
	\$\frac{1}{2}\frac{1}{2		₹ 0.58 3	Di (ditch)	0.12
			0.490	D1 (speam)	
	Q',		0.554	DS (ditch)	0.12
Invertebrate, acute			0.019	D4 (pond)	0.004
Daphnia magna	£C50 480	4.80	~ 0.4\$3 . Q	D4 (stream)	0.09
%			0.019	D\$ (pond)	0.00
×,1			& 0.465 s	(stream)	0.10
			0.607	R4 (stream)	0.13
			Ø.583 ₩	D1 (ditch)	0.12
			0.490	D1 (stream)	0.10
F F			0.554	D3 (ditch)	0.11
Invertebate, acute «		*	0.019	D4 (pond)	0.004
Geomean, 7 species	LC50 0 400	4.00	0.453	D4 (stream)	0.09
.,			0.019	D5 (pond)	0.00
			0.465	D5 (stream)	0.10
		S S	0.607	R4 (stream)	0.12
Invertebrate, acute Congress, 7 species					

Table CP 10.2-17: RAC_{sw; ac} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

3 (acceptability of risk: PEC/RAC < 1)					
Species	Endpoint [µg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS Oscenario	PEC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 2 × 75.0 g a.s	s./ha	Ô	7	
			0.509	D1 (diţclo	Ø.12 , ©
		Ö	0.38	D1 (stream)	0.09
			0.\$8	D2@ditch)	V 0,442
		.Ø	Ø.394	DO (stream)	0.09
			0.41	D3 (chich)	0.10
				Da (pond)	0.605
Fish, acute	%		0.3420	(stream)	₹ 0.08 1 0.08
Oncorhynchus mykiss	LC ₅₀ 435	4.35	Q 0.024	D5 (pend)	0.01
			6,362	D5 stream)	2008
			©0.4125	P6 (ditch)	0.10
		4.35	0.096	R1 (Sond) «	0.02
	LC ₅₀ 435		0.763	R4 (stream)	0.18
			Q (1.5	R3 (stream)	0.14
		\$ 0°	0.801	R4 (stream)	0.18
*		7 0 5 7 5 7 5 7 5 7 5 7 7 8	9.509.	(ditch)	0.11
√			0.389	(stream)	0.08
		\$ \$ 1	0.938	D2 (ditch)	0.11
[Ø.394 ♥	D2 (stream)	0.08
			0.414	D3 (ditch)	0.09
T F			9.021	D4 (pond)	0.004
Invertebrate, acute 🔏			20 .342	D4 (stream)	0.07
Darania magna 🛴		\$4.80°C	0.024	D5 (pond)	0.01
			0.362	D5 (stream)	0.08
A S			0.417	D6 (ditch)	0.09
			0.096	R1 (pond)	0.02
			0.763	R1 (stream)	0.16
			0.615	R3 (stream)	0.13
		Q ^N	0.801	R4 (stream)	0.17
		y'	0.509	D1 (ditch)	0.10
			0.389	D1 (stream)	0.08
A A			0.538	D2 (ditch)	0.11
			0.394	D2 (stream)	0.08
Invertebrate Scute			0.417	D3 (ditch)	0.09
Invertebrate, acute Daptinia magna Invertebrate acute Geomean, dispecies	LC_{50}/EC_{50} 488	4.88	0.021	D4 (pond)	0.004
			0.342	D4 (stream)	0.07
			0.024	D5 (pond)	0.00
			0.362	D5 (stream)	0.07
			0.417	D6 (ditch)	0.09
			0.096	R1 (pond)	0.02



Species	Endpoint [μg/L]	RACsw; ac (LC50/100)	PEC _{sw,max} [μg/L]	FOCUS scenario	PEC/BAC
			0.763	R1 (stream)	10 .16
			0.615	R3 (stream)	© 0.13
			0.801	R4 (stream)	0.16
Fluoxastrobin (E+Z), spri	ing cereals, 2×75.0 g a	a.s./ha	<i>x</i> ♣	, 0	
			0.69	D1 (ditch)	0.16
			0.864	D1 @tream	0.68
			9 .416	DB (ditch)	Q.10 Q
Fish, acute	1.0 425	A 25	0.02	D4 (pond)	0.04
Oncorhynchus mykiss	LC ₅₀ 435	4.33	O' 9.347 O	D4/stream	, Ø, Ø8
			0.0230	5 (pond)	<u>3</u> 0.01
	A		Q 0.358	D5 (stream)	0.08
			√ √023 °√	R4 (stream)	6 24
			≈ 0.69 2	Ø1 (ditch)	0.14
	\$\tag{\text{2}}\$		0.364	D1 (stream)	4
	Q' Q		0.416	D (ditch)	0.09
Invertebrate, acute			0.023	D4 (pond)	0.005
Daphnia magna	480°	4.80	\$\tag{9.347}	D4 (stream)	0.07
%			0.023	D\$/(pond)	0.005
% 1			& 0.358 s	(stream)	0.07
			1.023	R4 (stream)	0.21
			Ø.692 Ø	D1 (ditch)	0.14
			0.364	D1 (stream)	0.07
F Ş			0.416	D3 (ditch)	0.09
Invertebrate, acute 🐰	11 C-18 C- 2100	*	0.023	D4 (pond)	0.005
Geomean, 7 species	LC 10 C 50 400	\$\frac{4.88}{5}\$	0.347	D4 (stream)	0.07
			0.023	D5 (pond)	0.005
<u> </u>			0.358	D5 (stream)	0.07
			1.023	R4 (stream)	0.21
Invertebrate, acute Connean, 7 species					

Table CP 10.2-18: RAC_{sw; ac} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

3 (acce	ptability of risk: PEC/R	AC < 1)	1 6/		
Species	Endpoint [μg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS Scenario	PPC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 1 × 75.0 g a.s	s./ha	Ô	y	
			0.510	D1 (diţclo	Ø.12 , ©
		Ö	0.425	D1 (stream)	0.10
			0.501	D2@ditch)	042
		,	Ø.410	DO (stream)	0.09
			0.470	D3 (chich)	0.1
	,		_ /	Da (pond)	0.604
Fish, acute	*		0.3650	DA (stream)	₹ 0.08
Oncorhynchus mykiss	LC ₅₀ 435	4.35	Q 0.016	D5 (pend)	0.00
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		6,379	D5 (stream)	6 09
			₩0.474°;	P6 (ditch)	0.11
		4.35	0.036	R1 (pond) «	0.01
	LC ₅₀ 435		0.313	R1 (stream)	0.07
			0.442	R3 (stream)	0.10
		\$ 0°	\$ 0.379 · Q	R4 (stream)	0.09
%			Ø.510.	(ditch)	0.11
			0.425	1 (stream)	0.09
			0.501	D2 (ditch)	0.10
, Š		, Q , Q	9 .410	D2 (stream)	0.09
			\$ 0.476°	D3 (ditch)	0.10
			O 9. Ø 16	D4 (pond)	0.003
Invertebrate, acute	F65 0 480	~4 80~	20 .365	D4 (stream)	0.08
Darania magna		Ö 4.00	© 0.016	D5 (pond)	0.003
\$			0.379	D5 (stream)	0.08
			0.474	D6 (ditch)	0.10
		Ŏ Õ	0.036	R1 (pond)	0.01
			0.313	R1 (stream)	0.07
			0.442	R3 (stream)	0.09
		Q"	0.379	R4 (stream)	0.08
) ^y	0.510	D1 (ditch)	0.10
O .			0.425	D1 (stream)	0.09
			0.501	D2 (ditch)	0.10
			0.410	D2 (stream)	0.08
Invertebrate acute	100/EC 400	1 00	0.476 0.016	D3 (ditch) D4 (pond)	0.10 0.003
Geomean, Species	E 50/EC50 400	4.00	0.016	D4 (pond) D4 (stream)	0.003
	y		0.363	D4 (stream) D5 (pond)	0.007
			0.010	D5 (polid) D5 (stream)	0.003
Invertebrate, acute Desiring magna Invertebrate acute Geomean, procies			0.379	D6 (ditch)	0.08
			0.036	R1 (pond)	0.10
			0.050	rer (pond)	0.01



Species	Endpoint [μg/L]	RAC _{sw; ac} (LC ₅₀ /100)	PEC _{sw,max} [μg/L]	FOCUS scenario	PEC/BAC
			0.313	R1 (stream)	30 .06
			0.442	®3 (stream)	© 0.09
			0.379	R4 (stream)	0.08
Fluoxastrobin (E+Z), spri	ng cereals, 1 × 75.0 g a	.s./ha		, 0,	
		Ö	0.49	D1 (ditch)	0.11
			0.420	D1 @tream	9340
		Ű	Ø.475	DB (ditch)	Ø.11 @
Fish, acute	LC ₅₀ 435	1 25	0.01	D4 (pond)	0.003
Oncorhynchus mykiss	LC ₅₀ 433	4.33	Ø .0 .788 _ @	D4%stream	, 0, 99
	Ô		0.0170	5 (pond)	△0.004。
			Q 0.399 Q	D5 (stream)	© 0.06
			6 511	R4 (stream)	1 2
	### ##################################		©0.497	Ø1 (ditch)	0.10
			0.420	D1 (střeam)	9 0.09
			0.475	D (ditch)	0.10
Invertebrate, acute	FG . 7 180	7 80 K	©0.016	D4 (pond)	0.003
Daphnia magna	**************************************	4.80	√ 0.3§8 Q	D4 (stream)	0.08
\$			30. 017 ₹	DS (pond)	0.004
			© 0.399 s	🕅 (stream)	0.08
Ž,		\$ \$'	0.51	R4 (stream)	0.11
Ţ,			Q.497 @	D1 (ditch)	0.10
			0.420	D1 (stream)	0.09
			0.475	D3 (ditch)	0.10
Invertebrate, acute	LC 5 25 C 50 - 0 488	4.88	0.016	D4 (pond)	0.003
Geometan, 7 species O			© 0.388	D4 (stream)	0.08
	L 2 . 2 . 2 .		§ 0.017	D5 (pond)	0.003
S A			0.399	D5 (stream)	0.08
			0.511	R4 (stream)	0.10
Invertebrate, acute Daphnia magna Invertebrate, acute Geomean, 7 species The trigger is met for all the proposed GAP.	evaluated scaparios	Consequently,	a safe use can b	e assumed a	ccording to

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Table CP 10.2-19: TERLT calculations based on FOCUS Step 2 (PEC values based for cereals on worst-

case GAP 2 x 87 5 g a s /ha)

ca	ise GAP 2 x 87.5 g a.s./ha)	<u>'</u>		<u>, </u>	
Compound	Species	Endpoint [μg/L]	PECsw,max	TERLT	T rig ger
Cereals (Winter/sprin	ng)	Ď	4		
	Fish, chronic Oncorhynchus mykiss	NOEC 28.6	€8.55	3.3	
	Invertebrate, chronic Daphnia magna	NOES 180	\$255 £		105
	Invertebrate, chronic Gammarus pulex	*OEC 31.5*	8.55	3.7	10
Fluoxastrobin (E+Z)	Invertebrate, chronic Americamysis bahja	NOTE VO.61	8.55	0.07	
(E+Z)	Sediment dweller, chronic Chironomus Siparius C	EC1-5 2730	355	2.00	10
	Green alga, chrome Pseudokochneriella subcapitata	E _r C ₅₀	8.55	246	10
	Aquatic plan, chronic	\$\times_{C_{50}} \tag{3880}	J 8.55	¥ 454	10
HEC 5725-E-des- chlorophenyl	Green Alga, chronic Pseudokirchreriell Subcaputata	E. 5.0 \$100 000	©5.89 \$\frac{1}{2}	> 16 978	10
HEC 5725-carboxylic	Sediment dweller, Chronio & Chironomy riparius	EC 3 08 500	2.61	37 739	10
acty	Green Aga, chríonic Pseudokirchneriella	E ₁ C ₀ > 260 000	2.61	> 31 303	10
T T T	Fish Phronic Dimephales provelas	NOEC 4900	3.28	1220	10
2-chlorophenol	Invertebrate shrome Daphnia magna	NOEC 300	3.28	91	10
	Green Siga, chronic Pseudokirchneriellas Subcappata	E, C 70 000	3.28	21 341	10
* Endpoint from study	conducted with EC 100 fo	mulation			
Bold values do not me	conducted with EC 100 for et the trigger				

Table CP 10.2- 20: RAC_{sw, ch} calculations based on FOCUS Step 2 (PEC values based for cereals on worst-case GAP 2 × 87.5 g a.s./ha) (acceptability of risk: PEC/RAC < 1)

case GAP 2 × 87.5 g a.s./ha) (acceptability of risk: PEC/RAC < 1)						
Compound	Species	Endpoint [μg/L]	RAC _{sw, ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	Proc/RAC	
Cereals (Winter/sprin	ng)		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	~~		
	Fish, chronic Oncorhynchus mykiss	NOEC 28.6	2.86	8.55× 2.55×	2.99	
	Invertebrate, chronic Daphnia magna	NOEC 180	\$\tilde{\sqrt{18.0}}	\$.55 \times	0,48	
	Invertebrate, chronic Gammarus pulex	NOE 31.6*	©16 £	858	2.7	
Fluoxastrobin	Invertebrate, chronic Americamysis bahia	SOEC O OS	0.064	8.55 ×	¥140	
(E+Z)	Sediment dweller, chronic Chironomus ripagus	EC75 2130	213,00	\$8.55	0° 4 204	
	Green alga, chronic & Pseudokirchheriella © subcapitata 🍇	ErC 30 2100	210.0 S	\$ \$\frac{1}{2}\$	0.04	
	Aquatic plant, chronic Lewina gibba	E _r C ₅₀ \$880	388	8.65	0.02	
HEC 5725-E-des- chlorophenyl	Green alga©thronie Pseudokirchneriella & subvapitafa	$E_{\rm r}C_{50}$ > 100 000	> 10000	5.89	< 0.0006	
HEC 5725-carboxylic	Sediment Weller Control Chironomyus riparius	EC ₁₅ 98 5 90	985 0	2.61	< 0.0003	
acid S	Gree@alga, @ronic& Pseudokirehneriella & subcapitata	E 50 5 160 000	\$ 16 000	2.61	< 0.0002	
	Fin chronic Pimephales promeles	NOTE 4000	400.0	3.28	0.01	
2-chlorophenol	Invertebrate, chronic Daploia magaa	NOEC 900	30.0	3.28	0.11	
	Green alga enronic Psoudokirskineriekla subsepitatas	70 000	7000	3.28	0.0005	

^{*} Endpoint from study conducted with EC 100 formulation

Results indicated in both letter need further refinement. The consideration of the more realistic FOCUS Step 3 surface water concentrations is presented below.

Table CP 10.2-21: TERLT calculations for cereals (winter and spring) calculation based on FOCUS Step 3

Species	Endpoint [μg/L]	PECsw,max [µg/L]	FOCUS scenario	TER _{LT}	Tri gg er
Fluoxastrobin (E+Z), win		· I	•	ð	
		0.598	D1 (ditch)	48	100
		0.457	D1 (stream)	63	370
		0.636	D2 (ditch)	45/	× 10 ×
		0.46\$	D2 (stream)		10
		9 . 4 86	D3 (ditch)	₹59 Q	arn 6
		9.025		\$\frac{1144}{}	10
Fish, chronic	NOEG 20.6	0.399	D4 (stream)	♥ _ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	S TO
Oncorhynchus mykiss	NOEC 28.6	Ø28 ×	Do (pond)	©1021 ×	¥0
	0	©0.422	(stream)	685	10 <u>0</u> °
		0.486	D6 (ditch)	59	F 10
		© 113 . 5	R(pond)	\$\frac{253}{2}	1 0
		. \$0.908\$	Bel (stream)	310	<u>ش</u> 10
		0.731	R3 (střeam) Ô	2399 ×	J 10
		0 ,950 0	RA (stream)	© 30 _%	10
		0.598	Di (ditoh)	530	10
		O.4 9 7	D1 (stream)	J G 9	10
•		6 36 \$	D2 (ditckt)	50	10
*		0.463	2 (stream) >	[∞] 68	10
		0.486	D3 (ditch)	65	10
		×9.025	DA (pond)	1264	10
Invertebrate Phronic	MODEC 0 21%	Ø 0.39Q,	204 (stream)	79	10
Gammarus puler	STORY STATES	0.628	D5(pond)	1129	10
		0.422	Q\$ (stream)	75	10
		0.486	D6 (ditch)	65	10
\$		0,143	R1 (pond)	280	10
		0.908_\$	R1 (stream)	35	10
, w , Š		0.73%	R3 (stream)	43	10
4		0.950	R4 (stream)	33	10
		< ₹0 .598	D1 (ditch)	1.0	10
		© 0.457	D1 (stream)	1.3	10
		0.636	D2 (ditch)	1.0	10
Q1		0.465	D2 (stream)	1.3	10
4		0.486	D3 (ditch)	1.3	10
		0.025	D4 (pond)	24.4	10
Americanvsis bahia	NOEC 0.61	0.399	D4 (stream)	1.5	10
		0.028	D5 (pond)	21.8	10
		0.422	D5 (stream)	1.4	10
		0.486	D6 (ditch)	1.3	10
Ű		0.113	R1 (pond)	5.4	10
Invertebrate, chronic Americanysis bahia		0.908	R1 (stream)	0.7	10
		0.731	R3 (stream)	0.8	10

Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TER _{LT}	Trigger
		0.950	R4 (stream)	0.6	10
Fluoxastrobin (E+Z), spri	ng cereals, 2 × 87.5 g a	.s./ha	d	Ž,	
		0.810	D1 (ditch)	35	10
		0.424	D1 (stream)	67 °	\$10 g
		0.4850	D3 (dirch)	5%	10,5
Fish, chronic	NOEC 28.6	0.027	D4 (pond)	10059	
Oncorhynchus mykiss	NOEC 28.0	% 404	D4 (stream)	71 8	
		© 0.027	D5 (pood)	1059	10
	(/	0.418	D5 (stream)	86	
		211	RA (stream)	\$ 24	10
		0.810	OD1 (diteh)	36	10%
		0.424	D1 (stream) O	₹ 75	
Invertebrate, chronic Gammarus pulex		0.485	DQ (ditck)	65 8	1 0
· ·	NOEC 31.0	0.02/	OD4 (pond)	1100	© 10
Gammarus pulex		0304	D4 (stream)	278 °≈	10
	NOEC 4 31.6	0.418	D5 (stream)	76	10
		1,211	R4 (stream)	√6 √26	10
9	Y A D	7 211 7 810 S	D1 (ditch)	© 20 © 0.8	10
2	NOEC & 0.61	0 424	OD1 (stream)	1.4	10
Ď.		0.485	D3 (ditch)	1.3	10
Invertebrate, chronic		3 9 .027	DA (pond)	22.6	10
Americamys Pbahig	NOEC 0.61	© 0.4 %	D4 (stream)	1.5	10
		0.527	D5(pond)	22.6	10
		0.418	D\$ (stream)	1.5	10
		1.211	%R4 (stream)	0.5	10
Endpoint from study cond sold values do not meet the	ulted with EC 100 form, trigger	mation of the state of the stat			

Table CP 10.2-22: TER_{LT} calculations for cereals (winter and spring) calculation based on FOCUS Step 3

Species TER	LT calculations for cerea Endpoint [µg/L]	PECsw,max [µg/L]	FOCUS scenario	TER _{LT}	Trigger .
Fluoxastrobin (E+Z), win				*	
	, 3	0.600	D1 (ditch)	△ ~	100
		0.498	D1 (stream)	57	\$\tag{90}
		0.592	D2 (ditch)	48/	
		0.48	D2 (stream)		10
		Q\$55	D3 (ditch)	52 Q	Sin 6
		0.019		\$\frac{150\\$}{}	10
Fish, chronic	NOTE AND	0.426	D4 (stream)	\$ _\\$\text{\$\gamma}\$	
Oncorhynchus mykiss	NOEC 28.6	9 919 ~	Do (pond)	\$505 ×	¥0
	4	©0.442©	(stream)	65%	10 c°
		0,538	D6 (ditch)	₂ 52 ⁴	F HO
		00043	R(pond)	\$665	10
		\$0.36 5 \$	Rel (stream)	780	<u>a</u> 10
		0.515	R3 (střeam) 🖒	236 ×	10
		1 1 1 1 1 1 1 1 1 1	R4 (stream)	© 64 ₆	10
		0.600	(ditoh)	530	10
		O.498	D1 (stream)	\$63	10
8	Y A Q	592 🗬	D2 (ditck)	53	10
		0.48	32 (stream)	[∞] 66	10
		0.555	D3 (ditch)	57	10
		×9:019 S	p) (pond)	1663	10
Invertebrate Phronic	NOTEC 0 31%6*	√ 0.426,	504 (stream)	74	10
Gammarus puler	O A	0,039	D5 (pond)	1663	10
		0.442	D (stream)	71	10
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		$0^{8}0.553^{1}$	D6 (ditch)	57	10
\$°.		0.043	R1 (pond)	735	10
		0.365	R1 (stream)	87	10
		0.51%	R3 (stream)	61	10
4		0,49	R4 (stream)	70	10
\$\frac{1}{2}\$		\$\delta 0.600	D1 (ditch)	1.0	10
		©″ 0.498	D1 (stream)	1.2	10
		0.592	D2 (ditch)	1.0	10
		0.481	D2 (stream)	1.3	10
		0.555	D3 (ditch)	1.1	10
Invertebate change		0.019	D4 (pond)	32.1	10
Americamysi Chahia	NOEC 0.61	0.426	D4 (stream)	1.4	10
		0.019	D5 (pond)	32.1	10
		0.442	D5 (stream)	1.4	10
* O		0.553	D6 (ditch)	1.1	10
Invertebrate, chronic Americanysi bahia		0.043	R1 (pond)	14.2	10
		0.365	R1 (stream)	1.7	10
		0.515	R3 (stream)	1.2	10

Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TER _{LT}	Trigger
		0.449	R4 (stream)	1.4	<b>10</b> 6
Fluoxastrobin (E+Z), spri	ng cereals, 1 × 87.5 g a.	s./ha	Å	Ö,	
		0.583	D1 (ditch)	49	10
		0.490	D1 (stream)	58 ू 🔘 🔻	610 K
		0.5540	D3 (dirch)	52	10,5
Fish, chronic	NOEC 28.6	0.019	D4 (pond)	1505	70
Oncorhynchus mykiss	NOEC 28.0	<b>2</b> € <b>X</b> 53	D4 (stream)	63	
		<b>6</b> 0.019	D5 (popd)	Ĉ 15 <b>05</b> ∕	10
	Co.	0.465	D5 (stream)	62 ×	
	o o	<b>6</b> 607 £	RA (stream)	\$ 47	10
	A	0.58%	D1 (diteh)	, 5⊕ [°]	7 10%
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.490	D1 (stream)	£64	
		0.554	DP (ditck)	₩ 57 ×	<b>1</b> 0
Invertebrate, chronic	NOEC 31.0	~~~~0.01 <b>9</b> ~	OD4 (pond)	166	<b>©</b> 10
Gammarus pulex	Q Si.o	02453	D4 Stream	£70 °√	10
		<b>0</b> .019 <b>0</b>	(pond)	° 166 <b>3</b> €	10
			(stream)	680	10
<u> </u>		0.607	R4 (stream)	<b>3</b> 2	10
<b>&amp;</b> 1		Ø ² .583 🔊	D1 (ditch)	1.0	10
		0.490	OD1 (stream)	<b>∀</b> 1.2	10
		0554	D3 (ditch)	1.1	10
Invertebrate, chronic	NOEC \$\infty\$ 0.61	<b>V</b> .019	D4 (pond)	32.1	10
Americamys Pbahia S		0.453	D4 (stream)	1.3	10
	NOEC & 0.61	0,019	D5(pond)	32.1	10
		0.465	(stream)	1.3	10
Endpoint from study cond		0.607	R4 (stream)	1.0	10
Endpoint from study cond sold values do not neet the	uited with EC 100 form	Mation of the state of the stat			

Table CP 10.2-23: TERLT calculations for cereals (winter and spring) calculation based on FOCUS Step 3

Species	Endpoint [µg/L]	PECsw,max [µg/L]	FOCUS scenario	TER _{LT}	Ţ <b>ŗigg</b> er
Fluoxastrobin (E+Z), win				ð	
( //	, ,	0.509	D1 (ditch)		100
		0.389	D1 (stream)	74	
		0.538	D2 (ditch)	53/5	× 10 ×
		0.39\\	D2 (stream)		10 5
		Q*17	D3 (ditch)	69 Q	610 K
		9.021	B4 (popd)	1362	U 10.
Fish, chronic	NOEG 20 6	0.342	D4 (stream)	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Oncorhynchus mykiss	NOEC 28.6	0924	Do (pond)	A192 A	¥0
	4	©0.362	(stream)	[™] 79√	→ 10 <u>,</u> °
		0,417	D6 (ditch)	× 69 «	
		_0 <b>0</b> 096	R (pond)	\$298 <del>\$</del>	<b>1</b> 0
		, ©0.76 <b>3</b> ©	Al (stream)	3 <i>7</i>	<u>~</u> 10
		0.615	R3 (stream)		ي [*] 10
	O V O	<b>40,8</b> 01	R4 (stream)	0 36	10
		0.509	ØDI (ditoh)	620	10
8		0.389	D1 (stream)	<b>3</b> 81	10
7		Ø:538 &	D2 (ditcki)	<b>59</b>	10
		0.394	32 (stream)	× 80	10
		0.43 ⁴ 7	D3 (ditch)	76	10
		<b>30.</b> 021	DA (pond)	1505	10
Invertebrate Phronic	NOEC 31	× 0.342,	94 (stream)	92	10
Gammarus pulengi Ö		0.024	D5 (pond)	1317	10
		0.362	D5 (stream)	87	10
		0.417	D6 (ditch)	76	10
, D		0.096	R1 (pond)	329	10
Q Z		0.763	R1 (stream)	41	10
		0.6150	R3 (stream)	51	10
		0.801	R4 (stream)	39	10
		\$\sqrt{0.509}	D1 (ditch)	1.2	10
		0.389	D1 (stream)	1.6	10
		0.538	D2 (ditch)	1.1	10
		0.394	D2 (stream)	1.5	10
		0.41/	D3 (ditch)	20.0	10
Invertebrate chronic Gammarus pulers  Invertebrate, chronic Americanysis bahia		0.021	D4 (pond) D4 (stream)	29.0 <b>1.8</b>	10
Americamysi bahia	1.01 0.01	0.342	D4 (stream) D5 (pond)	25.4	10
		0.024	D5 (pond) D5 (stream)	1.7	10
	<b>L</b>	0.302	D6 (ditch)	1.5	10
Ö'		0.717	R1 (pond)	6.4	10
-		0.070	R1 (stream)	0.8	10
		0.703	R3 (stream)	1.0	10
		0.013	No (Sucaiii)	1.0	10

Species	Endpoint [µg/L]	PECsw,max [µg/L]	FOCUS scenario	TER _{LT}	Trigger
		0.801	R4 (stream)	0.8	<b>1</b> 0
Fluoxastrobin (E+Z), spri	ing cereals, 2 × 75.0 g a	a.s./ha	Å	ZQ.	
		0.692	D1 (ditch)	41	10
		0.364	D1 (stream)	79 0	<b>310</b>
		0.4163	D3 (direh)	6%	10,5
Fish, chronic	NOEC 28.6	0.023	D4 (pond)	12243	) KO
Oncorhynchus mykiss	NOEC 28.0	<u></u> €347	D4 (stream)	82	
		0.023	D5 (popod)	2 1245v	10
		0.358	D5 (stream)	80 <	, 10°
	× 0	£023 C	RA (stream)	\$ 28	10
	يگر.	0.692	D1 (diteh)	46	7 10%
	\$ "."	0.364	y D1 (stream)⊙	<b>₹87</b>	
		9.416	D [©] (ditc <del>K</del> )/	Ø 76 Ø	<b>10</b>
Invertebrate, chronic	NOEC 31.6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	OD4 (pond)	13.4	<b>©</b> 10
Gammarus pulex	Q. Q	0347	D4 Stream	<b>3</b> 91 %	10
		70.025	(pond)	1374	10
		0.358	(55 (stream)	88	10
9		1,023	R4 (stream)	<b>3</b> 1	10
₩		° 20.692 5	D1 (ditch)	0.9	10
J		0.364	OD1 (stream)	y * 1.7	10
		<u> </u>	D3 (ditch)	1.5	10
Invertebrate, chronic, Americamys bahig	NOEC \$\infty\$ 0.61	0.347	D4 (pons) D4 (stream)	26.5	10
imericaniya baniq		0.320	D5 (pond)	1.8 26.5	10
	NOEC & 0.61	0.358	D5 (stream)	1.7	10
		1.023	R4 (stream)	0.6	10
Endpoint from study cond	Live Loo form		K4 (Silealli)	0.0	10
Endpoint from study cond sold values do not neet the	uted with EC 100 form	gration of the state of the sta			

Table CP 10.2- 24: TER_{LT} calculations for cereals (winter and spring) calculation based on FOCUS Step 3

Species	LT calculations for cerea Endpoint [µg/L]	PECsw,max [µg/L]	FOCUS scenario	TER _{LT}	Trigger .
Fluoxastrobin (E+Z), win		l .	500111110	<b>*</b>	
(= _),		0.510	D1 (ditch)		100
		0.425	D1 (stream)	67	2970
		0.501	D2 (ditch)	57.	(A)
		0.410	D2 (stream)	<b>10</b> %	10
		9.¥76	Da (ditch)	60 0	arn 6
		20.016		\$\frac{178\}{2}	10
Fish, chronic		0.365	D4 (stream)	\$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Oncorhynchus mykiss	NOEC 28.6		Do (pond)	788	10
		·   (//n % )	(stream)	75%	10 <u>°</u>
		0.474	D6 (ditch)	, 60 «	16
		<b>©</b> 0036 . S	R(pond)	\$\frac{1}{\sqrt{794}}	<b>10</b>
		©0.313©		910	10
		0.442	R3 (Seeam)	\$ \$\frac{1}{2}\tag{5} \tag{8}	10
		<b>1</b>	R4 (stream)	~0 75 c	10
		0.510	ØDI (ditoh)	620	10
		0.425	D1 (ctream)	<i>9</i> 4	10
9		Ø501 ©	D2 (ditck)	63	10
<b>&amp;</b>		0.410	32 (stream)	77	10
		0.476	D3 (ditch)	66	10
Š,		×0.016 ×	DA (pond)	1975	10
Invertebrate Orronic		× 70.365.	304 (stream)	87	10
Gammarus puler	₩OEC 31.6*	0.696	D5 (pond)	1975	10
		0.379	QS (stream)	83	10
		0,474	D6 (ditch)	67	10
		0.036	R1 (pond)	878	10
		0.313	R1 (stream)	101	10
91 S		0.4420	R3 (stream)	71	10
		0.379	R4 (stream)	83	10
		ר.510	D1 (ditch)	1.2	10
		0.425	D1 (stream)	1.4	10
		0.501	D2 (ditch)	1.2	10
¥ (		0.410	D2 (stream)	1.5	10
		0.476	D3 (ditch)	1.3	10
		0.016	D4 (pond)	38.1	10
Invertebrate, chronic	NOTEC 0.61	0.365	D4 (stream)	1.7	10
Americamysis bahia	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.016	D5 (pond)	38.1	10
	<b>X</b>	0.379	D5 (stream)	1.6	10
		0.474	D6 (ditch)	1.3	10
8		0.036	R1 (pond)	16.9	10
Invertebrate, chronic Americanysis bahia		0.313	R1 (stream)	1.9	10
		0.442	R3 (stream)	1.4	10

Species	Endpoint [μg/L]	PEC _{sw,max} [μg/L]	FOCUS scenario	TER _{LT}	Trigger
		0.379	R4 (stream)	1.6	<b>10</b>
Fluoxastrobin (E+Z), spri	ng cereals, 1 × 75.0 g a	.s./ha	Å	ZQ.	
		0.497	D1 (ditch)	58	10
		0.420	D1 (stream)	68 0	\$10 V
		0.475	D3 (direh)	66	~ 10 ° °
Fish, chronic	NOEC 28.6	0.018	D4 (pond)	1788	) <u>f</u> ø
Oncorhynchus mykiss	NOLC 20.0	<b>6</b> 388	D4 (stream)	74 &	
		0.017	D5 (popd)	1682	10
	<b>(</b> 4	0.399	D5 (stream)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	Ő	<b>9</b> ,511 ©	RA (stream)	56	10
		0.497	OD1 (diteh)	66	10
		0.420	D1 (stream)	₹75 \$75	
Invertebrate, chronic	NOEC 31.0	09.475	D9 (ditck)	(*) 67 (*)	010
The state of the s	NOEC \$ 31.6	0500	D4 (pond)	198	© 10
Gammarus pulex		0388	by (pond)	20185 <b>%</b>	10 10
	NOEC 4 31.6	0.399	(pond)	79	10
		0.511	R4 (stream)	%2 %2	10
<u> </u>		a) 497 S	D1 (ditch)	© 1.2	10
&	NOEC & 0.61	0 420	OD1 (stream)	1.5	10
		0.275	D3 (ditch)	1.3	10
Invertebrate, chronic		<b>29</b> .016 <b>3</b>	DA (pond)	38.1	10
Americamys Pbahig	NOEC \$\infty\$ 0.61	0.388	D4 (stream)	1.6	10
		0.017	D5(pond)	35.9	10
		0.399	(stream)	1.5	10
		0.511	R4 (stream)	1.2	10
Endpoint from study cond sold values do not meet the	uted with EC 100 form	mation of the second of the se			

Table CP 10.2-25: RAC sw; ch calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

Step 3 (acceptability of risk: PEC/RAC < 1)						
Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PECsw,max [μg/L]	FOCUS Scenario	PEC/RAC	
Fluoxastrobin (E+Z), wir	iter cereals, 2 × 87.5 g a.	s./ha	**************************************	r Q		
		۵.	0.598	D1 (ditch)	<b>20</b> .21 <b>3</b>	
			0.457	D1 (stream)	0.16	
		<b>√</b>	Q <del>.</del> 636	D2 (ditch)	<b>9.2</b> 2	
		<u> </u>	Ø.465 。	P2 (stream)	ළු 0.16 ල්	
		(C) "	~ *0.486	D3 (Otch)	0.1	
	<b>&amp;</b>	o° £	© 0.025 ©	Depond)	<b>( (0)0</b> 1	
Fish, chronic	NOEC 28.6	\$\frac{1}{2}.86\$\tag{6}\$\frac{1}{2}.\tag{7}\$\frac{1}{2}.\tag{7}\$\frac{1}{2}.\tag{7}\$\frac{1}{2}.\tag{7}\$\frac{1}{2}.\tag{7}\$\tag{6}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\tag{7}\$\t	0.3990	DA (stream)	<u>₄</u> 0.14 。	
Oncorhynchus mykiss	NOLC 28.0	2.80	Q 0.028	D5 (pend)	0.0 <del>6</del>	
			Ø A22	D5 (stream)	<b>1</b> 5	
			£0.486	D6 (ditch)	$\bigcirc_{0.17}$	
	\ \tag{\pi} \tag{\pi} \ \		0.433	R1 (Sond)	© 0.04	
	2 0		Ø908 O	R1 (stream)	0.32	
		F L	20.731	B3 (stream)	0.26	
		y o	~ 0.950 Q	R4 (stream)	0.33	
			598	DV (ditch)	0.19	
<b></b>			& 0.457 S	(stream)	0.14	
			0.66	D2 (ditch)	0.20	
			Q.465 Q	D2 (stream)	0.15	
			0.486	D3 (ditch)	0.15	
TO G			0.025	D4 (pond)	0.01	
Invertebrate, chronic	NOTES ALCO	216 9	0.399	D4 (stream)	0.13	
Ganguarus pulex 🔘	NOTE OILO.	\$3.16	0.028	D5 (pond)	0.01	
		Y &, , ,	0.422	D5 (stream)	0.13	
J.			0.486	D6 (ditch)	0.15	
		Ş Ş	0.113	R1 (pond)	0.04	
		Y &	0.908	R1 (stream)	0.29	
4		/ (V	0.731	R3 (stream)	0.23	
			0.950	R4 (stream)	0.30	
, & 3 ³		Ÿ	0.598	D1 (ditch)	9.80	
			0.457	D1 (stream)	7.49	
			0.636	D2 (ditch)	10.43	
			0.465	D2 (stream)	7.62	
			0.486	D3 (ditch)	7.97	
Inverted rate, Orionic	NOEC 0.61	0.061	0.025	D4 (pond)	0.41	
Amenicany sound	Z ^v		0.399	D4 (stream)	6.54	
			0.028	D5 (pond)	0.46	
			0.422	D5 (stream)	6.92	
Invertebrate, chronic Gangarus pulex  Invertebrate, chronic Americanys is bahia			0.486	D6 (ditch)	7.97	
			0.113	R1 (pond)	1.85	



Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	FOCUS scenario	PECÆAC
			0.908	(stream)	Q.14.89
			0.731	R3 (stream)	11.98
			0.950	R4 (stream)	<b>∄\$</b> 7.57 ⊘
Fluoxastrobin (E+Z), spri	ing cereals, 2 × 87.5 g a.	s./ha 💍			
		No.	0.80	D1 (Htch)	0.28
		a y	0.424	DI (stream)	<b>6</b> 7.15 &
			₹0.48 <b>5</b> )°	D3 (difch)	0.17
Fish, chronic	NOEC 20.6	2 06	0.027	D4 (pond)	Q QQ
Oncorhynchus mykiss	NOEC 28.6		0.404	Da (stream)	0.14
	.4		0.02	D5 (polyd)	\$ 0.01€°
			0,418	D5 (stream)	
			Ø.211.	R4 (stream)	<b>6</b> .42
			0.810	D1 (dileh)	© 0.26
			J 0.924 Ö	D1 (stream)	0.13
			<b>9</b> .485	(ditch)	0.15
Invertebrate, chronic	NOEC 4, 31.67	√ 3 16	© 0.02%	D4 (p@nd)	0.01
Gammarus pulex	NOEC 4 31.6	3.16	0,404	D4 (stream)	0.13
7			0.027	OS (pond)	0.01
			0.498	D5 (stream)	0.13
Q ^y			1.211	R4 (stream)	0.38
			Ø.810	D1 (ditch)	13.28
			0.424	D1 (stream)	6.95
			Q.#85	D3 (ditch)	7.95
Invertebrate, chronic Americamysis bahia	NOTEC & 0.61	©0.061	<b>3</b> 0.027	D4 (pond)	0.44
Amerijeamysis bahia			0.404	D4 (stream)	6.62
<b>2</b> .			0.027	D5 (pond)	0.44
			0.418	D5 (stream)	6.85
		O _x O _x	1.211	R4 (stream)	19.85

* Endpoint from study conducted with EC 100 formulation

Table CP 10.2- 26: RAC sw; ch calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

Step	3 (acceptability of risk:		)	ı	
Species	Endpoint [μg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	FOCUS Oscenario	PÉC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 1 × 87.5 g a.s	s./ha	•	<i>*</i>	
, ,,	, 3		0.600	D1 (ditch)	\$ <b>90</b> .21 <b>3</b>
		Ö	0.498	D1 (stream)	0.17
			Q592	D2 ditch	0.21
		4 O Y	Ø.481 。	p2 (stream)	©0.17 @
			0.55	D3 (Otch)	0.10
	NOEC 28.6	\$\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2	Ø.Ø19 Ø	D2 1) ×	.001
Fish, chronic	Note of the state		0.4260	DA (stream)	0.15 0.04
Oncorhynchus mykiss	NOEC 28.6	2.86	Q 0.Q19	D5 (pend)	0.0
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		0,442	D5 (stream)	<b>6</b> 15
			<b>₹</b> 0.55 <b>3</b>	D6 (ditch)	0.19
			0.043	R1 (gond)	0.02
	Q' 6 2		0.365	R1 (stream)	0.13
			Q0.515	B3 (stream)	0.18
		4 ~	\$\tag{2} 0.24\tag{9} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	R4 (stream)	0.16
%			\$0,600 × C	DV (ditch)	0.19
<b>√</b> 1			% 0.498 s	(stream)	0.16
			0.592	D2 (ditch)	0.19
			_0.481_@	D2 (stream)	0.15
			0.555	D3 (ditch)	0.18
			0.019	D4 (pond)	0.01
Invertebrate, chronic 🔏			0.426	D4 (stream)	0.13
Ganguarus pulex 💍	NOTE TO 1.6.	3.10	0.019	D5 (pond)	0.01
			0.442	D5 (stream)	0.14
			0.553	D6 (ditch)	0.18
			0.043	R1 (pond)	0.01
			0.365	R1 (stream)	0.12
			0.515	R3 (stream)	0.16
			0.449	R4 (stream)	0.14
		7	0.600	D1 (ditch)	9.84
			0.498	D1 (stream)	8.16
<b>"</b> " " "			0.592	D2 (ditch)	9.70
			0.481	D2 (stream)	7.89
			0.555	D3 (ditch)	9.10
Inverteerate, coronic	NGEC 0.61	0.061	0.019	D4 (pond)	0.31
	<b>∜</b> ″		0.426	D4 (stream)	6.98
	, and the second		0.019	D5 (pond)	0.31
Ö'			0.442	D5 (stream)	7.25
			0.553	D6 (ditch)	9.07
Invertebrate, chronic  Gangarus pulex  Invertebrate, chronic  Americanyo de bahira			0.043	R1 (pond)	0.70



Species	Endpoint [μg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	FOCUS scenario	PECÆAC
			0.365	(stream)	5.98
			0.515	R3 (stream)	8,44
			0.449	R4 (stream)	<b>7.3</b> 6 6
Fluoxastrobin (E+Z), spr	ing cereals, 1 × 87.5 g a	s./ha 👸	Ž.		
		A.	0.563	D1 (Htch)	0.26
			0.490	DI (stream)	<b>6</b> .17 &
			₽0.55 <b>&amp;</b> °	D3 (difch)	0.19
Fish, chronic	NOTE 20 (	200	0.049	D4 (pond)	o col
Oncorhynchus mykiss	NOEC 28.6		0.453	Da stream)	0.16
	4		0.433	D5 (pord)	€ 0.01€°
			0,465	D5 (stream)	0,56
			<b>6</b> 07.607	R4 (stream)	<b>6</b> .21
		· 4 .9	0.58	D1 (dileh)	0.18
			J 0.490 Ö	D1 (stream)	0.16
			Ø.554 🖔	(ditch)	0.18
Invertebrate, chronic	NOEC 4, 31.69	10° 45	0.019	D4 (p@nd)	0.01
Gammarus pulex		3.16	0.453	D4 (stream)	0.14
9			0.019	OS (pond)	0.01
			0.465	D5 (stream)	0.15
			0.607	R4 (stream)	0.19
			Ø.583	D1 (ditch)	9.56
			0.490	D1 (stream)	8.03
			O Q.\$54	D3 (ditch)	9.08
Invertebrate, chronic		200 06 1×2	<b>%</b> 0.019	D4 (pond)	0.31
Invertebrate, chronic & Americanysis bahia	INCREC ST U.01	0,001	0.453	D4 (stream)	7.43
ý)	NOTEC 2 0.61		0.019	D5 (pond)	0.31
			0.465	D5 (stream)	7.62
e sõ ^v			0.607	R4 (stream)	9.95

^{*} Endpoint from study conducted with EC 100 formulation

Table CP 10.2- 27: RAC sw; ch calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

	3 (acceptability of risk:	·	<i>)</i>		
Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PECsw,max [µg/L]	FOCUS Scenario	PEC/RAC
Fluoxastrobin (E+Z), win	tor careals 2 × 75 0 g a s		l v	<u> </u>	
Tiuoxasti obiii (E+Z), wiii	ter cereais, 2 ~ 75.0 g a.:	5./ II a	0.509	D1 (ditch)	, 90.18 V
		Ò	0.309	D1 (digat) D1 (stream)	0.16
		T,	0.50	D2 (ditch)	0.19
		. O.)	0.394	p2 (stream)	20.14 Q
			0.40	D3 (Otch)	0.14
		<b>~</b>	Ø Ø Ø21 Ø	Daypond)	0.10
Figh physics			0.3420	~ · · · · · · · · · · · · · · · · · · ·	
Fish, chronic Oncorhynchus mykiss	NOEC 28.6	2.86 D	Q. 0.024	D5 (pend)	0.12 0.00
Oncornymentals myntiss			0.024	D5 (pend) (D5 (stream)	(A)3
			0,362	D6 (dita)	0.15
			0.416	R1 (gond)	
			1963	R1 (stream)	0.27
		Ž Į	9.763 0.615	Rystream)	0.27
		₹. °	\$0.013 \$0.001 @	R4 (stream)	0.22
	NOEC 28.6		70.509 × 7	Da (ditch)	0.16
			© 0389	(stream)	0.12
			0.538	D2 (ditch)	0.12
	4 . Š . Ž . *		0.394 @1	D2 (stream)	0.17
			0.417	D3 (ditch)	0.12
			0.021	D4 (pond)	0.01
Inverteber chronic			342	D4 (stream)	0.11
Ganguarus pulex	NOTE 31.6*	3.16	0.024	D5 (pond)	0.01
			0.362	D5 (stream)	0.11
J			0.417	D6 (ditch)	0.13
			0.096	R1 (pond)	0.03
			0.763	R1 (stream)	0.24
<u> </u>		,	0.615	R3 (stream)	0.19
			0.801	R4 (stream)	0.25
	ANTO	Y	0.509	D1 (ditch)	8.34
		ý [*]	0.389	D1 (stream)	6.38
			0.538	D2 (ditch)	8.82
			0.394	D2 (stream)	6.46
			0.417	D3 (ditch)	6.84
Invertebrate, Orionic	NOEC 0.61	0.061	0.021	D4 (pond)	0.34
Americamysts banve,			0.342	D4 (stream)	5.61
	) )		0.024	D5 (pond)	0.39
			0.362	D5 (stream)	5.93
Invertebrate, chronic Gammarus pulex  Invertebrate, chronic Americany & bahia			0.417	D6 (ditch)	6.84
			0.096	R1 (pond)	1.57
		•	•		



Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	FOCUS scenario	PECÆAC
			0.763	(stream)	2.51
			0.615	R3 (stream)	10.68
			0.801	R4 (stream)	<b>1</b> 3.13 6
Fluoxastrobin (E+Z), spri	ing cereals, 2 × 75.0 g a.	s./ha 💍	Ž.		
		₩.	0,692	D1 (Htch)	0.24
			0.364	D. (stream)	<b>6</b> .13 &
			₹0.41 <b>6</b> 0°	D3 (difch)	0.15
Fish, chronic	NOEC 28.6	200	0.023	D4 (pond)	
Oncorhynchus mykiss	NOEC 28.0		0.347	Da (stream)	0.12
	4		0.02	D5 (polad)	€ 0.01¢°
			0,358	D5 (stream)	0 3
			Ø.023	R4 (stream)	<b>6</b> .36
	64 KY	, \$\frac{1}{2}\qquad \frac{1}{2}\qquad \frac{1}{2}\qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	© 0.69\$	D1 (dikeh)	© 0.22
			S 0.864 O	D1 (stream)	0.12
			Ø.416 🔊	(ditch)	0.13
Invertebrate, chronic	NOEC 4, 31.69		√0.02 <b>%</b>	D4 (p@nd)	0.01
Gammarus pulex		3.16	9347	D4 (stream)	0.11
*/			0.023	(pond)	0.01
			0.358	D5 (stream)	0.11
			1.023	R4 (stream)	0.32
			Ø.692	D1 (ditch)	11.34
			0.364	D1 (stream)	5.97
			Q.#16	D3 (ditch)	6.82
Invertebrate, chronic Americamysis bahia	NOTEC SOLL	©0.061©	0.023	D4 (pond)	0.38
Americamysis bahia	NOTE OF STATE OF STAT		0.347	D4 (stream)	5.69
<b>.</b> \$			0.023	D5 (pond)	0.38
			0.358	D5 (stream)	5.87
			1.023	R4 (stream)	16.77

^{*} Endpoint from study conducted with EC 100 formulation

Table CP 10.2-28: RAC sw; ch calculations for cereals (winter and spring) calculation based on FOCUS Step 3 (acceptability of risk: PEC/RAC < 1)

Step 3 (acceptability of risk: PEC/RAC < 1)						
Species	Endpoint [μg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PECsw,max [µg/L]	FOCUS Scenario	PÉC/RAC	
Fluoxastrobin (E+Z), win	ter cereals, 1 × 75.0 g a.	s./ha		<i>~</i>		
			0.510	D1 (ditch)	. 20.18	
			0.425	D1 (stream)	0.15	
		₩. ₩	Q <b>5</b> 01	D2 ditch	0.18	
		, O	Ø.410 。	D2 (stream)	ල්0.14 <i>ල</i> ්	
	NOEC 28.6		0.476	D3 (Otch)	0.1	
	4	~ ~ ~	Ø Ø Ø 16 Ø	Depond)	, Ø 90 l	
Fish, chronic	NOEC 29.6		0.3650	DA (stream)	<b>△</b> 0.13 °	
Oncorhynchus mykiss	NOEC 28.6	2.86	% 0.Q16 &	D5 (pend)	0.06	
			0(379 ~	D5 (stream)	<b>Q</b> 13	
			<b>₹</b> 0.474	Ø6 (ditch)	0.17	
			0.036	R1 (Sond)	0.01	
	Q' Q Q		Q9313 Q	R1 (stream)	0.11	
			Q0.442	®3 (stream)	0.15	
		4 6	√ 0.3√9 , ¢	R4 (stream)	0.13	
<b>\</b>			0.510	DA (ditch)	0.16	
<b>≪</b> 1			& 0.425 s	(stream)	0.13	
		\$ 2	0.501	D2 (ditch)	0.16	
			_0.410 @	D2 (stream)	0.13	
			0.476	D3 (ditch)	0.15	
The state of the s			0.016	D4 (pond)	0.01	
Invertebrate, chronic 🔏	NOTE ALCO		0.365	D4 (stream)	0.12	
Ganguarus pulex 💍	NOTE TO 1.6.	3.16	0.016	D5 (pond)	0.01	
		7 4, 1	0.379	D5 (stream)	0.12	
			0.474	D6 (ditch)	0.15	
			0.036	R1 (pond)	0.01	
			0.313	R1 (stream)	0.10	
		4 V	0.442	R3 (stream)	0.14	
			0.379	R4 (stream)	0.12	
, 4 J		Y	0.510	D1 (ditch)	8.36	
			0.425	D1 (stream)	6.97	
&			0.501	D2 (ditch)	8.21	
			0.410	D2 (stream)	6.72	
			0.476	D3 (ditch)	7.80	
Americanvar hahia	NOEC 0.61	0.061	0.016	D4 (pond)	0.26	
S O S			0.365	D4 (stream)	5.98	
			0.016	D5 (pond)	0.26	
Č ^o			0.379	D5 (stream)	6.21	
Invertebrate, chronic  Gannarus pulex  Invertebrate, chronic  Americamy of bahia			0.474	D6 (ditch)	7.77	
			0.036	R1 (pond)	0.59	



Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	PEC _{sw,max} [μg/L]	FOCUS scenario	PEC/RAC
			0.313	(stream)	5.13
			0.442	R3 (stream)	7,25
			0.379	R4 (stream)	621 Ø
Fluoxastrobin (E+Z), spri	ing cereals, 1 × 75.0 g a.	s./ha 🧞	Ž,		
		V	0.457	D1 (Htch)	0.49
		a.y	0.420	DI (stream)	<b>6</b> .15 &
			20.475°	D3 (difch)	0.17
Fish, chronic			> 0,016	D4 (pond)	200
Oncorhynchus mykiss	NOEC 28.6	2,86	0.388	Da stream	0.14
			0.388	D5 (pord)	€ 0.01¢°
			0,399	D5 (stream)	0.4
			Ø.511	R4 (stream)	20.18
		. \$ .\$	0.49	D1 (dileh)	0.16
			J 0,920 E	D1 (stream)	0.13
			<b>9</b> .475	(ditch)	0.15
Invertebrate, chronic	NOEC ( 31.6)		© 0.01%	D4 (p@nd)	0.01
Gammarus pulex	NOEC 4, 31.67	\$ 3.1 <b>6</b>	9388	D4 (stream)	0.12
\$			0.017	(pond)	0.01
*			0.399	D5 (stream)	0.13
			0.511	R4 (stream)	0.16
			@.0.497	D1 (ditch)	8.15
			0.420	D1 (stream)	6.89
, o &			Q. <b>4</b> 75	D3 (ditch)	7.79
Invertebrate chronic &			0.016	D4 (pond)	0.26
Invertebrate, chronic Americamysis bahia	NOWC © 0.61	0.06	0.388	D4 (stream)	6.36
	\$ \$ . \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		0.017	D5 (pond)	0.28
			0.399	D5 (stream)	6.54
	NOTE OF STATE OF STAT		0.511	R4 (stream)	8.38

* Endpoint from study conducted with EC 100 formulation

Most of the TERs meet the required trigger of 10 indicating a safe use of the product. However, the Most of the TERs meet the required trigger of 10 indicating a safe use of the product. However, the risk assessment for *Gammarus pulex* and *Americamysis bahia* need further refinement for some scenarios. Table CP 10.2, 29 summarizes the assessments which need further consideration

Table CP 10.2- 29: Summary of the scenarios that did not pass the TERLT/RACLT calculations of fluoxastrobin based on FOCUS Step 3 following application to cereals*

		Fluoxastrobin (E+Z)							
		Invertebrate, chronic: Americamysis bahta					D'		
	2 x 87.5 g	2 x 87.5 g a.s. /ha 1 x 87.5		g a.s. /ha	2 x 75.	0 g a.s. /ha	1 x 75.0	g/a.s./h@	
Scenario	Winter cereals	Spring cereals	Winter cereals	Spring cereals	Winter cereals	Spring cereals	Winter C	Spring	
D1 (ditch)	×	×	×	×	Ø ×	@ <b>*</b>	* "	Y × B	
D1 (stream)	×	×	×	×	×	₽×	v j		
D2 (ditch)	×	-	×	, V	×	Ş -	0 × Q	<u> </u>	
D2 (stream)	×	-	×		×	<u> </u>	/ <b>x</b>	- 4	
D3 (ditch)	×	×	×	× °	***	~ × ~	%\× . ≪		
D4 (pond)			<b>\$</b>		4 ) /			,	
D4 (stream)	×	×	×	XX	Č × ®		), <b>X</b> /	A× L°	
D5 (pond)			× -			1 5			
D5 (stream)	×	×	%× ~	Y X		~ ×~	2 * *		
D6 (ditch)	×	- 4	X		XXX		<b>~</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u> </u>	
R1 (pond)	×	- 4	0	% - K	i X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		<b>9</b> -	
R1 (stream)	×	<u>-</u> Q	& C	) - D	S.		Öx 🔊	-	
R3 (stream)	×	~ - ~	×	Ô	X × A	<u>, -</u> (	××	-	
R4 (stream)	×	V XW		& ×	, ×4,	×	×	×	

^{*} Refinement for fish chronic Oncord nchy mykis and Invertebrate chronic (Gunmarys, pulex) passes the risk assessment based on FOCUS Step 3 with all scenarios and all intended applications

Kesults indicated with x need further refinement

For fluoxastrobin and aquatic invertebrates, a refinement option based on the FOCUS Step 3 -TWA_{sw} (7 days) values is presented below Justification for the use of the 7d PEC_{sw,twa} is provided in Document MCA8, Point 8.2.54 (M-535147-01-1)

[×] Scenario not passed

Table CP 10.2-30: TER_{LT} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days)

Species Fluoxastrobin (E+Z), win	Endpoint [μg/L] iter cereals, 2 × 87.5 g a	TWAsw [μg/L] s./ha 0.498 0.11 0.453	D1 (ditos) D1 (stream) D2 (artch)	1.2 5	Designation of the control of the co
Fluoxastrobin (E+Z), win		0.498 0.11	D1 (ditch) D1 (stream)	1.2	
Fluoxastrobin (E+Z), win	iter cereals, 2 × 87.5 g a	0.498	D1 (stream)	5.4	100
		0.113	D1 (stream)	5.4	100
				53	100
		0,453	D2 £Xtetah)		<b>*</b>
		- <del> </del>		₩.3 Ĉ	
		<b>9</b> .206	Da (stream)	3.0	
		© 0.116	D3 (ditch)	\$ 53°	
Invertebrate, chronic	NOEC 0.61		D4 (stream)	<b>∂</b> 61 ×	√ \(\( \frac{1}{10} \)
Americamysis bahia			D\$ (stream)	7 102 _C	10
		0.200	D6 (ditch)	3.0	1♥ ¹₩
		0,07	R L (pond)	\$ 5.4 \$	0 10
		©.113 V			- 10
		0.100	R3 (stream)	2.3 ×	<b>V</b>
		0071	R4 Stream	<u> </u>	10
Fluoxastrobin (E+Z), spri	ing conscals, 2 × 87.5 g a.	.s./hat			1.0
		0.6%	DI (ayten)	0.9	10
*/		7 VI.146	DEUSTICAMO	6.8	10
Invertebrate, chronic	NOEC 0.61	\$30.090 C	D4 (cayon) (	<b>6.8</b> 50.8	10
Americanysis band		0.012	D4 (supeam)	122	10
		( 272 S	Dat (strong)	2.2	10
Invertebrate, chronic Americamysis bahia.  Bold values do not meet the					

TERLT calculations for cereals (winter and spring) calculation based on FOCUS Step **Table CP 10.2-31:** 

3-1	WAsw (7 days)				`(
Species	Endpoint [μg/L]	7-day TWA _{sw} [µg/L]	FOCUS scenario	TERLT	<b>O</b> pigger
Fluoxastrobin (E+Z), win	ter cereals, 1 × 87.5 g a.s	s./ha	•	<i>*</i>	, , , ,
	, 3	0.467	D1 (ditck)	1.3	, ©10 J
		0.049	D1 (stream)	12.7	100
		0,394	D2 (artch)	√¥.5 Ŝ	
		₫ <b>®</b> .039	D2 (stream)	15.6 P	010
		Ø 0.116	D3 (ditch)	\$ 53°	
Invertebrate, chronic <i>Americamysis bahia</i>	NOEC 0.61	0,005	D4 (stream)	22 %	
Americamysis banta	Ŏ	Ø.002 ×	D\$ (stream)	305	<u>4</u> 10 .
		© 0.08©	QD6 (ditch)	7.9	10
		0039	R1 (stream)	₹¥5.6 _{€ 1}	<b>200</b>
		<b>20</b> .061	R3 (stream)	<b>₽</b> 10.0♥	010
	~~ '0	~~~ 0.124V	R4 (stream)	49	<b>2</b> 10
Fluoxastrobin (E+Z), spri	ing cereals, 1 × \$7.5 g a&	s./ha 🔊 🛮 👌			
		₹.473 £	(ditch)	0 1.3	10
		√ 0.0 <b>63</b>	∜D1 (stream) 🍳	9.7	10
Invertebrate, chronic %	NOBC 9.61	0:554	D3 ditch	<b>Şİ.1</b>	10
Americamysis bahia		\$6.006 O	DA (stream)	<b>6</b> 102	10
Ø,	NOBC 9.61 S	L≪" 0 0m/44°	D5 (smeam) &	153	10
		_ <b>QQ</b> 87	R4 (stream)	3.3	10
Bold values do not meet the					

**Table CP 10.2-32:** TER_{LT} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days)

Species Fluoxastrobin (E+Z), win	Endpoint [μg/L] nter cereals, 2 × 75.0 g a	7-day TWAsw [μg/L]	FOCUS scenario	TERLT	Prig
<u> </u>			scenario		Uniσ
Fluoxastrobin (E+Z), win	nter cereals, 2 × 75.0 g a	1.0 7	4	CILICI	
· · · · · · · · · · · · · · · · · · ·		.s./ha			' ^
		0.423	D1 (ditch)	1.4	, Ø1
		0.09	D1 (stream)	6.8	10
		0.380	D2 (artch)	¥.6	
		<b>%</b> 172	D2 (stream)	© 3.5 _c	
		0.100	D3 (ditch)	\$\tag{60}	<u>ئ</u> 1
Invertebrate, chronic	NOEC 0.61 %		D4 (stream)	<b>₽</b> 76 ₹	Ť
Americamysis bahia		Ø.005 ×	D\$ (stream)	\$\frac{122}{2}	] _4 I
		0.170	QD6 (ditch)	3.9	1
		0091	R l (pond)	<b>6.7</b>	
		<b>40</b> .095 <b>*</b>	RJ (stream)	6.4	01
		0.084	R3 (stream)	<b>7.9</b>	<b>§</b> 1
FI (F: 7)		0030	R4 Stream	2.7	1
Fluoxastrobin (E+Z), spr	ring corseals, 2×75.0 g å.	s./ha			1
		0.590	DI (aytch)	1.0 \$5.4	1
· · · · · · · · · · · · · · · · · · ·		W.113	Drustreamy	5.4 5 7.9	1
Americanvsis hahis	NOEC 0.61	20.017	OM (comm)	61	1
	4 . 5 . 5	0.040 40004	D5((stream)	153	1
		£ 0 231	R4 (stream)	2.6	1
Invertebrate, chronic Americamysis bahia.  Bold values do not meet the					

Table CP 10.2-33: TER_{LT} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days)

3-1	WAsw (7 days)				
Species	Endpoint [μg/L]	7-day TWA _{sw} [µg/L]	FOCUS scenario	TERLT	Digger
Fluoxastrobin (E+Z), win	ter cereals, 1 × 75.0 g a.s		Ü	<u> </u>	
Tuorusti oom (E · 2), wiii	/ / / / / / / / / / / / / / / / / / /	0.396	D1 (ditch)	1.5	
		0.03	D1 (stream)	15.8	100
		0,332	D2 (Brtch)	<b>J.8</b>	
		« <b>©</b> .030	D2 (stream)	20.3	
		Ø 0.099	D3 (ditch)	\$\tag{60}	
Invertebrate, chronic <i>Americamysis bahia</i>	NOEC 0.61	0,004	D4 (stream)	<b>3</b> 53 ×	, jø
Americamysis bania	Ö	Ø.002 ×	D\$ (stream)	305	<u>4</u> 10 .
		© 0.07 <b>©</b>	D6 (ditch)	8.9	10%
		0,033	R1 (střeam)	¥8.5 _≪	_ <b></b> \$\dot{\dot{\dot{\dot{\dot{\dot{\dot{
		<b>40</b> .051	R3 (stream)	12.05	010
		°√√0.10\$√	R4 (stream)	<b>59</b>	<b>2</b> 10
Fluoxastrobin (E+Z), spr	ing cereals, 1 × 🐠 5.0 g 🕸			0 4	,
		₹.403 ₹	(ditch)	0 1.5	10
		√ 0.054	D1 (stream)	11.3	10
Invertebrate, chronic	NOEC 9.61	0:077	Da ditch	<b>\$7.9</b>	10
Americamysis bahia	NOBC 6.61	\$\text{0.005} \tilde{\O}'	DA (stream)	<b>5</b> 122	10
		\$\int 0.0 <b>\text{83}'</b>	D5 (soveam) &	203	10
		Q58	R4((stream)	3.9	10
Invertebrate, chronic Americamysis bahia  Sold values do not meet the					

Table CP 10.2- 34: RAC_{sw; ch} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days) (acceptability of risk: PEC/RAC < 1)

Step	3 -TWAsw (7 days) (acc		sk: PEC/RAC < 1	1)	
Species	Endpoint [μg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	7-day TWAsw [μg/L]	FOCUS Oscenario	PPC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 2 × 87.5 g a.			<i>*</i>	
,,,			0.498	D1 (ditch)	\$3.16 ×
		Ğ	0.1	D1 (stream)	1.85
			0.953	D2 (ditch)	7.43
		, O	0.206	P2 (stream)	3.38
			0.116	D3 (chich)	3.38
Invertebrate, chronic	NOEC 0.61 🖔	φας1 Å	Ø <u>Q.</u> Ø10 _Ø	D4%stream	Ø,¥6
Americamysis bahia	NOEC 0.61		0.006	(stream)	<u></u>
	NOEC 0.61 4		Q 0.205	D6 (duch)	© 3.36 ×
			Q Q 07 V	R*(pond)	<b>1</b> 575
			ر ن 0.113 م	(stream)	01.85
			0.400	R3 (stream)	<b>2</b> 1.64
	Q' Q	D Ĉ	<b>2</b> 9271	R4 (stream)	4.44
Fluoxastrobin (E+Z), spri	ing cereals, 2 87.5 g a.s	s./hao 🛴			
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	4 6	√ 0. <b>69</b> 2	D1 (ditch)	11.34
%			0.146	DK (stream)	2.39
Invertebrate, chronic	NOTE OF LOS		& 0.090 ° .	3 (ditch)	1.48
Americamysis bahia		\$ 0.0019	0.672	D4 (stream)	0.20
			Q.005 @	D5 (stream)	0.08
			0.273	R4 (stream)	4.48
T Ş					
*	, I A S	*	, Q		
			, O		
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L E					
		<b>V</b>			
		, Y			
		v			
Q ` 4 \					
	<b>∜</b> ′ '≫				
Invertebrate, chronic Americamysis bahia					
Ö					

Table CP 10.2-35: RAC_{sw; ch} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days) (acceptability of risk: PEC/RAC < 1)

Step 3-TWASW (7 days) (acceptability of risk: PEC/RAC < 1)	Step	3 -TWAsw (7 days) (acc	eptability of ri	sk: PEC/RAC < 1	.)	
Comparison   Com	Species		(NOEC/10)		FOCUS Scenario	PEC/RAC
D1 (ditch)   0.66   0.04   D1 (stream)   0.86   0.094   D2 (ditch)   0.64   0.039   D2 (stream)   0.64   0.039   D3 (ditch)   1.96   0.002   D3 (stream)   0.08   0.002   D3 (stream)   0.03   0.002   D3 (stream)   0.03   0.003   0.002   D3 (stream)   0.03   0.003   0.003   D6 (ditch)   1.44   0.039   R1 (stream)   0.004   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0.005   0	Fluoxastrobin (E+Z), win	ter cereals, 1 × 87.5 g a.:		<u> </u>	<u>}</u>	, ,
1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45	(= -),			0.467	D1 (ditch)	. Ø.66 ×
Invertebrate, chronic Americamysis bahia  NOEC  0.61  0.061  0.061  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086  0.086			Ö	0.049		
Invertebrate, chronic Americamysis bahia  NOEC  0.61  0.061  0.061  0.002  0.002  0.0039  0.002  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.0039  0.003				0.594	D2 (ditch)	6.46
Americamysis bahia  NOEC 0.61 0.001 0.005 0 D4(stream) 0.008  0.002 0.086 D6 (Glch) 1.41  0.039 R1(stream) 664			Ű	0.039		
Americamysis bahia  NOEC 0.61 0.001 0.005 0 D4(stream) 0.008  0.002 0.086 D6 (Glch) 1.41  0.039 R1(stream) 664				0.16	D3 (dich)	1.96
1.44   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45   1.45		NOEC 0.61 ₍₆	0,061	Ø Q.005 Ø	D4%stream	1 19,198
1.4	Americamysis banta	Ö		0.0020	(stream)	0.03
1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00   1.00				Q 0.086 Q	D6 (duch)	© 1.41°
Control   Cont				Ø Ø Ø 9 × O	R1 (stream)	64
Fluoxastrobin (E+Z), spring cereals; 1 × 87.5 g sp./ha  Invertebrate, chronic Americamysis bahia  NOBC  0.61  0.006  0.006  0.006  0.006  0.006  0.007  0.007  0.007  0.007  0.007  0.007  0.007  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.008  0.00				<b>₹</b> 0.061	(stream)	01.00
Fluoxastrobin (E+Z), spring cereals, 1 × \$7.5 g a/s, ha				0.424	R4 (stream)	2.03
Invertebrate, chronic Americamysis bahia  NOEC 0.61	Fluoxastrobin (E+Z), spri	ing cereals, 1 × \$7.5 g a	s./ha 💸 🔏			
Invertebrate, chronic Americamysis bahia  NOEC 0.61			TO L	(0.473)	D1 (ditch)	7.75
Invertebrate, chronic Americamysis bahia  NOEC 6.61    MoEC   MOE			4 0	√ 0.0 <b>63</b> €	D1 (stream)	1.03
Americamysis bahia    10	Invertebrate, chronic %		\$061 <i>\$</i>	554	DS (ditch)	9.08
10.004 1 DS (stream) 0.07	Americamysis bahia			& 0.006 ° ,	(stream)	0.10
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			\$ \$\display \text{'}	0.004	D5 (stream)	0.07
				Q.187 @	R4 (stream)	3.07

Table CP 10.2- 36: RAC_{sw; ch} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days) (acceptability of risk: PEC/RAC < 1)

Step	3 -TWAsw (7 days) (acc		isk: PEC/RAC < 1	)	
Species	Endpoint [μg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	7-day TWAsw [μg/L]	FOCUS Scenario	PÉC/RAC
Fluoxastrobin (E+Z), win	ter cereals, 2 × 75.0 g a.			7	
1 monustroom (2 · 2), ((iii			0.423	D1 (ditch)	26.93 × 1
		Ğ	0.090	D1 (stream)	1.48
			0380	D2 (ditch)	<b>623</b> h
		, Ü	Ø.172 。	p2 (stream)	2.82
			0.100	D3 (chich)	2.82
Invertebrate, chronic	//.		© <u>8008</u> ©	D4 stream	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Americamysis bahia	NOEC 0.61	09061	0.005	(stream)	₹ 0.08
	4		0.005	D6 (duch)	2.89
			0091	RX (pond)	49
			0.095	(stream)	01.56
			0.084	K	
		93061 5	Ø230 O	R4 (stream)	3.77
Fluoxastrobin (E+Z), spri	ing cerseals, 2 75.0 g a.	s./hao			
· · · · · · · · · · · · · · · · · · ·		4 ~	0.590	D1 (ditch)	9.67
<b>\</b>			0113	D¶(stream)	1.85
Invertebrate, chronic,			% 0.077 °	3 (ditch)	1.26
Americamysis bahia	NOTEC 25 0.61	0.061	0.000	D4 (stream)	0.16
			Q.004 @	D5 (stream)	0.07
			0.234	R4 (stream)	3.79
			Õ W		
, Q 4		1			
		\$ \$			
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&					
Invertebrate, chronic, Americamysis bahia,	<b>)</b> "				
Ö'					
-					

**Table CP 10.2-37:** RAC_{sw; ch} calculations for cereals (winter and spring) calculation based on FOCUS Step 3 -TWAsw (7 days) (acceptability of risk: PEC/RAC < 1)

Sic	3 -TWAsw (7 days) (acc	eptability of fi	SK: PEC/RAC <	1)	
Species	Endpoint [µg/L]	RAC _{sw; ch} (NOEC/10) (E _r C ₅₀ /10)	7-day TWAsw [μg/L]	FOCUS Oscenario	PÉC/RAC
Fluoxastrobin (E+Z), wir	nter cereals, 1 × 75.0 g a.	s./ha	•	<i>*</i>	
			0.396	D1 (ditch)	<b>36.49</b>
		Ö	0.029	D1 (stream)	0.64
			Q\$\frac{1}{2}2	D2 (ditch)	5.44
		4 O Y	- A	p2 (stream)	( 0.49 )
			0.09	D3 (datch)	1.62
Invertebrate, chronic <i>Americamysis bahia</i>	NOEC 0.61	0,061 0,061 3,/ha	Ø 9.004 Ø	D4 stream)	<b>. </b>
Americamysis bania			0.0020	(stream)	△ 0.03
	4		Q 0.073	D6 (duch)	1.20
			0.033	R1 (stream)	(C)
			×0.051	(stream)	0.84
			0.403	R4 (stream)	2 1.72
Fluoxastrobin (E+Z), spr	ing cereals, 1 × \$\overline{0}\$5.0 g at	s./ha 🔊 👌			, ,
			0.403	1 (ditch)	6.61
			\$\ 0.054 \ \	D1 (stream)	0.89
Invertebrate, chronic			√0,077 ~Ç	DS (ditch)	1.26
Americamysis bahia 🔏 🖟	NOEC 0.61		% 0.005° .	(stream)	0.08
Ţ			0.003	D5 (stream)	0.05
			Q.158 Q	R4 (stream)	2.59
able CP 10 38 sommased on FOCUS Step eeded.	ing cereals, 1 × 05.0 g at NOEC 0.61 At NOEC	Which and no risk assessment	ot meet the requent. Consequent	ired trigger o	of 10 when finement is

Table CP 10.2-38: Scenarios that did not pass the TERLT/RACLT calculations of fluoxastrobin based on FOCUS Step 3 -TWAsw (7 days) following application to cereals

Scenario						strobin (E			
Scenario   Winter   Spring   Winter   Cereals   Cereal				Inverteb	orate, chro		# 10	Ò'	
Cereals   Cere		2 x 87.5 g	g a.s. /ha	1 x 87.5	g a.s. /ha	2 x 75.	0 g a.s. /ha	1 x 75.0	g%a.s./Ma
D1 (ditch)	Scenario							cereal	
D2 (ditch)	D1 (ditch)		1			S		<b>X</b>	//35 // //35
D2 (ditch)	` '	×	×		×	×		<i>w</i> .~	? <u>~</u>
D2 (stream)  D3 (ditch)  X  X  X  X  X  X  X  X  X  X  X  X  X	` '	×	-	×	<i>•</i>	×	Ç -	~ × ~	,0°- %
D4 (pond) D4 (stream) D5 (pond) D5 (stream) D6 (ditch)  R1 (pond)  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -		×	-			×	6- 6		- 4
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D5 (stream)  D6 (ditch)  R1 (pond)  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -  X  -						0 Q	1 5	0	Š Ž
R1 (pond) ×	D5 (stream)			\$ .^		JÖ,		& 4,	
R1 (stream)	D6 (ditch)	×	- (	) ×.	\$ <del>-</del>	°∞′× √		V ×.S	O -
R1 (stream)  R3 (stream)  R4 (stream)  Scenario not passed Scenario not relevant for the crop  Results indicated with a need further refinement A refined risk assessment based on FOCUS Step 4-TWAsw (7 days) calculations is presented below.	R1 (pond)	×	- 40		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	) * O			<b>©</b> -
R4 (stream)  X  X  X  X  X  X  X  X  X  X  X  X  X	R1 (stream)	×	Q"	à Ò	- °	4 · ·	0 -0		-
R4 (stream)  × Scenario not passed - Scenario not relevant for the crop.  Results indicated with a need further refinement of refined risk assessment based on FOCUS Step 4-TWAsw (7 days) calculations is presented below.	R3 (stream)	×	@- \°	J. O	Ē,	© × Z	Y D	<b>9 &amp;</b>	-
× Scenario not passed - Scenario not relevant for the crop.  Results indicated with a need further refinement of refined risk assessment based on FOCUS Step 4-TWAsw (7 days) calculations is presented below.	R4 (stream)	×	() × ₍₎	<b>X</b>	, ×	× × (°	° Ø× 💯	<b>P</b>	×
Results indicated with a need further refinement. A refined risk assessment based on FOCUS Step 4-TWAsw (7 days) calculations is presented below.	× Scenario not pass	ed 🔊			O O	. *		, Q	

Table CP 10.2- 39: TERLT calculations for invertebrates (long-term) based on FOCUS Step 4 -TWAsw (7 days) including mitigation measures

(7	days) including mitigat	ion measures	Γ	1	
Species	Endpoint [μg/L]	7-day TWA _{sw} [μg/L]	FOCUS scenario	TERLT	Telgger
Fluoxastrobin (E+Z), win	ter cereals, 2 × 87.5 g a.	s./ha	10	L	× , , , , , ,
20 m buffer zone, 90% drij					
		0.184	D1 (daich)	3.4	<b>10</b>
		0,113	D1 (Stream)	<b>√</b> 3.4 ≪	
		4 <b>®</b> .194	(ditch)	, O 3.1 P	P0 0
		Ø 0.101	D2 (stream)	(G) ⁽¹⁾	6 10 O
Invertebrates, chronic	NOTE OF A	0,001	D3 (ditch)/0	<b>610</b>	
Americamysis bahia	NOEC 0.61	Ø.002 ×	D6 (dita)	305	<u>4</u> 10
	<u>, 4</u>	© 0.01®	R1 (pond)	320	( 10 )
		0.027	R L (stream)	<b>22</b> .6	10
		<b>40.023</b>	R3 (stream)	Ŵ 26. <b>5</b> Ş	$\mathbb{Q}_0$
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	R4 (stream)	.93	<b>2</b> 10
Fluoxastrobin (E+Z), spri	ing cereals, 2 × 87.5 g a	s./ha 🔊 👌			7
20 m buffer zone, 90% drij	ft reduction 👋 🦷 🧖				
		\$\ 0.2 24	D1 (witch)	<i>≥</i> 3.6	10
Invertebrates, chronic %	NOEC 0.61	QJ46 _	D'A (stream)	4.2	10
Americamysis bahia	NOEC 0.61	\$0.004\ ⁰	D3 (ditch)	610	10
The state of the s		0.062	R4 (Stream)	9.8	10
Fluoxastrobin (E+2), win	ter cereals, 1 ×87.5 g.a.	s./ha 🦃 🧔			
20 m buffer zone, 90% drij	ft reduction 🗸 📌	47 2			
To State of the st		0.00	D1 (ditch)	7.7	10
		0.077	102 (ditch)	7.9	10
Invertebrates, chronic Americamysis bahi.	NO C 0.61	0.001V	©D3 (ditch)	610	10
Americanysis bands	\$. \$. \$ \) 0. 00 01 /	D6 (ditch)	610	10
		0.029	R4 (stream)	21.0	10
Fluoxastrobin (E+Z), spri					
20 m buffer zone, 90% drij	ft Ceduction 7				
	NOEC OF	√ 9.097	D1 (ditch)	6.3	10
Invertebrates, chronic	NOEC ~ OA	0.061	D1 (stream)	10.0	10
Americamysis bahid	NOEC 064	y 0.001	D3 (ditch)	610	10
y		0.045	R4 (stream)	13.6	10
Fluoxastrobin (E+Z) win		s./ha			
20 m buffer one, 90% drij	feduction &				
20 m ought gare, with a		0.144	D1 (ditch)	4.2	10
J Z A		0.090	D1 (stream)	6.8	10
Anvertebrates, chronic	Ÿ	0.149	D2 (ditch)	4.1	10
Amenisamysis bahia	NOEC 0.61	0.076	D2 (stream)	8.0	10
Ö		0.001	D3 (ditch)	610	10
		0.001	D6 (ditch)	610	10
		0.016	R1 (pond)	38.1	10



Species	Endpoint	7-day TWA _{sw}	FOCUS scenario	TER _{LT}	Trigger
•	[µg/L]	[µg/L]			
		0.023	R1 (stream)	> 26.5	2 00
		0.020	R3 (stream)	30.5	10.5
		0.055	R4 (stream)	11.1	* 200°
Fluoxastrobin (E+Z), spri	ng cereals, 2 × 75.0 g a.	s./ha			
20 m buffer zone, 90% drij	ft reduction	N.			
		9 482	DP (ditch)	3.4	
Invertebrates, chronic	NOEC 0.61	0.113	D1 (stream)	[∀] 54√	10
Americamysis bahia	la l	0.001	D3/(ditch)	§\$10	J HOC
	Õ	Ø53 🔊	Rd (stream)	\$\text{11.5}	10
Fluoxastrobin (E+Z), win	ter cereals, 1 × 75.0 g a.	s./pa			
20 m buffer zone, 90% drij	ft reduction 🛴 🖔 🧥			&	
	NOEC Q 0,61	0.062	JP (diteb)	Ø 9.8	1 00
T (1) 1 :		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	D2 (di)ch)	103	Ø 10
Invertebrates, chronic <i>Americamysis bahia</i>	NOECQ 9.61	02901	D3 ditch	∂ 810 %	10
Americaniysis bania		3 .001 0	₽6 (ditch)	© 61 %	10
		0.025	R4 (stream)	24.4	10
Fluoxastrobin (E+Z), spri	ng cerea®, 1 × 75.0 g a.	Ç/ha		L.S	
20 m buffer zone, 90% drij	A reduction			S.	
		0.0787	D1 (thitch)	7.8	10
Invertebrates, chrome	(NOEC) 1001	0.001	D3 (ditch)	610	10
Americaniysis ounia		~ 038 S	RA (stream)	16.1	10
Americamysis bania Fluoxastrobin (E+Z), spring a month of the second of	triager of the state of the sta				

Table CP 10.2- 40: RAC_{sw; ch} calculations for invertebrates (long-term) based on FOCUS Step 4 TWAsw (7 days) including mitigation measures (acceptability of risk: PEC/RA© <
1)

1)	/	I	ı	I	
g .	Endpoint	RACsw; ch	7-day	ÊOCUS	
Species	[µg/L]	(NOEC/10)	TWA _{sw}	Scenario	PEC/RA©
		$(E_rC_{50}/10)$	[µg/L]	-0	
Fluoxastrobin (E+Z), win			<u> </u>	* <u>°O</u>	
20 m buffer zone, 90% drij	ft reduction	<u> </u>	, v		
		%. V	0.18Q	D1 (ditch)	2.9
			0413	D1 (Stream)	() . ()
			0.194	DŽ (ditch)	3.18
	l de		0.1 0	D2 (stream) ×	1.66
Invertebrates, chronic	NOEC 0.61	2 F 061 &	6 0001	D3 (ditch)	0.02
Americamysis bahia	NOEC 0.61	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Q0.002	Dő (ditch)	© 0.03 %
	2",~		> 0. 91	O'R1 (gond)	0.20
			@9027 <u>%</u>	Rlastream	Q .44
			0.023	K (stream)	ۇي 0.38 مىلىنى ئېرىپى مارىيىيى مارىيىيى مارىيىيى مارىيىيى مارىيىيى ئېرىكىيى مارىيىيى مارىيىيى مارىيىيى مارىيىي
			D 0.063	R4 (stream) %	1.07
Fluoxastrobin (E+Z), spri	ng cer@als, 2 🚧 87.5 g 🛣	s./ha 💆 🧷		7 % W	
20 m buffer zone, 90% drij	ft reduction S	£		i O'	
			0.234	D1 (ditch)	3.84
Invertebrates, chronic	NOTE \$ 0.610		_€ 0.146 €	Di stream)	2.39
Americamysis bahiq	NOTEC \$ 0.610	20.061	0.00	3 (ditch)	0.02
			0,062	R4 (stream)	1.02
Fluoxastrobin (F)Z), win	ter cekeals. 1 × 87.5 g/a.	s./hay		<u> </u>	L
20 m buffer zone, 90% drij					
			0.079	D1 (ditch)	1.30
			9 .077	D2 (ditch)	1.26
Invertebrates, chromis	NOEC 2 001		0.035	D2 (stream)	0.57
Americamysis balla	NOEC 001	0.9261	0.001	D3 (ditch)	0.02
			0.001	D6 (ditch)	0.02
e jõ			0.029	R4 (stream)	0.48
Fluoxastrobin (E+Z), spri	ng cercals, 1 ×87.5 gas	k/ha 👵	1 3.027	it. (su cum)	J. 10
20 m buffer zone, 90% drij		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
			0.097	D1 (ditch)	1.59
Invertebrates, chronic		, Y	0.061	D1 (stream)	1.00
Americamysis bahia	NOKO "Ď.61 "Ď	0.061	0.001	D3 (ditch)	0.02
A A			0.001	R4 (stream)	0.02
		/1	0.043	K4 (Sucam)	0.74
Fluoxastrobin (E-Z), win		s./na			
20 m buffer zon 90% drij	t reduction		0.144	D1 (1): 1)	225
	"		0.144	D1 (ditch)	2.36
Inverte rates, chronic	b "		0.090	D1 (stream)	1.48
Americamysis bahia	NOEC 0.61	0.061	0.149	D2 (ditch)	2.44
			0.076	D2 (stream)	1.25
			0.001	D3 (ditch)	0.02



Species	Endpoint [μg/L]	RACsw; ch (NOEC/10) (ErC50/10)	7-day TWA _{sw} [µg/L]	FOCUS scenario	PEC/RAC
			0.001	Do (ditch)	Ø.02
			0.016	R1 (pond)	[™] 0.26♥
			0.023	R1 (stream)	9.38
			0.020	R3 (stream)	ר.33
		T,	0.05	R4 (stream)	Q [#] 0.90 [©]
Fluoxastrobin (E+Z), spr	ring cereals, 2 × 75.0 g a	.s./ha 📡			
20 m buffer zone, 90% dr	ift reduction		Q' &°		
			≫ 0.18 °	D1 (ditch)	, © 2.98 [©]
Invertebrates, chronic	NOEC 0.61	\$\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	0.°M3 ≪	D1 (stream)	1.85
Americamysis bahia	NOEC 0.01	W.001	Ø.001 6	D9 (ditch)	₹9.02 <u>~</u> °
			0.053	X4 (stream)	® 0.8 ₽ ″
Fluoxastrobin (E+Z), wii	nter cereals, 1 🎢 5.0 g 🦡	28./ha 0 . 5			
20 m buffer zone, 90% dr	ift reduction 🖇 📡				%
			0.062	D1 (důch)	Ų 1.02
T (1 (1 :			0.959	D2@ditch)	0.97
Invertebrates, chronic Americamysis bahia	NOEC 0.61	0.061	Ø.001	D3 (ditco)	0.02
11mer teamysis banta		T T	0.007	D6 (datch)	0.02
•			0.025	R4(xtream)	0.41
Fluoxastrobin (E+Z), spr	ring cereals, 1× 75.0 g a	.s./kg		\$ \frac{1}{2}	
20 m buffer zone, 90% dr	.0 .	J J	7,	4	
			g 978 ~	D1 (ditch)	1.28
Invertebrates, Aronic Americamys bahia	NOEC 0.61	0.061	\$0.001 [*]	D3 (ditch)	0.02
Americaniya bango			O 0,0\$%	R4 (stream)	0.62

Bold values do not meet the trigget

Concerning two applications in winter and spring cereals at rates of 2×87.5 g a.s./ha and 2×75 g a.s./ha, safe use without any refinement was identified for the scenarios D4 (pond), D4 (stream), D5 (pond) and D5 (stream). Concerning one application in winter cereals at rates of 1×87.5 g a.s./ha and 1×75 g a.s./ha, safe use without any refinement was identified for the scenarios D1 (stream), D2 (stream), D4 (pond), D4 (stream), D5 (pond), D3 (stream), R1 (pond), R1 (stream) and R3 (stream). Concerning one application in spring cereals at a fate of 1×87.5 g a.s./ha, safe use without any refinement was identified for the scenarios D4 (pond), D4 (stream), D5 (pond) and D5 (stream).

Concerning one application in spring cereals at a rate of 1 × 75 g a.s./ha, safe use without any refinement was identified for the scenarios D (stream), D4 (pond), D4 (stream), D5 (pond) and D5 (stream).

Concerning two applications in winter cereals at a rate of 2 × 87.5 g a.s./ha, safe use was identified for the scenarios D3 (ditch), D6 (ditch), C1 (pond), R1 (stream) and R3 (stream) when mitigation measures of 20 meters buffer one + 90% drift reduction are used. Concerning two applications in winter cereals at a rate of 2 75 g a.s./ha, safe use was identified for the scenarios D3 (ditch), D6 (ditch), R1 (pond), R1 (stream), R3 (stream) and R4 (stream) when mitigation measures of 20 meters buffer zone + 90% drift reduction are used. Concerning two applications in spring cereals at a rate of 2 × 87.5 g a.s./ha, safe use was identified for the scenario D3 (ditch) when mitigation measures of 20 meters buffer zone + 90% drift reduction are used. Concerning one application in winter cereals at a rate of 1 × 87.5 g a.s./ha, safe use was identified for the scenarios D3 (ditch), D6 (ditch) and R4 (stream) when mitigation measures of 20 meters buffer zone + 90% drift reduction are used.



Concerning one application in spring cereals at a rate of 1 × 87.5 g a.s./ha, safe use was identified for the scenarios D1 (stream), D3 (ditch) and R4 (stream) when mitigation measures of 20 meters buffer zone + 90% drift reduction are used. Concerning two applications in spring cereals at a rate of 2 × 75 g a.s./ha, safe use was identified for the scenarios D3 (ditch) and R4 (stream) when mitigation measures of 20 meters buffer zone + 90% drift reduction are used. Concerning one application in winter cereals at a rate of 1 × 75 g a.s./ha, safe use was identified for the scenarios D2 (ditch), D3 (ditch), D6 (ditch), and R4 (stream) when mitigation measures of 20 meters buffer zone + 96% drift reduction are used. Concerning one application in spring cereals at a rate of 1 × 75 g a.s./ha safe use was identified for the scenarios D3 (ditch) and R4 (stream) when mitigation measures of 20 meters buffer zone 90% drift reduction are used.

Conclusion

For the representative uses considered for renewal of approval of Fluoxastrobin, acceptable risk can be considered for most scenarios, taking varying intigation measures into account.

CP 10.2.1 Acute toxicity to fish, aquatic invertebrates, or effects on aquatic algae and macrophytes

Report: KCP 10.2.1/01 ,; 2010; M-385971 , 0.2.1/01

Title: Acute toxicity of bixaren+fftoxastrobin+prothiocopazole IC 190440+50+100) G to

fish (Oncorhynchas mykiss) under static conditions

Report No.: EBDRP\$85
Document No.: M-38\$971-01-

Guideline(s): OECD Guideline 26, Fish Acute Toxicity Test (July, 1992); USEPA Pesticide

Assessment Guidelines Subdivision E, FFRA 72-1, Acore toxicity test for freshwater (ish, October 1982; USEPA OCSPP 830.1079 Fish Acute Toxicity Test, Freshwater

and Marine, A

Guideline deviation(s) none GLP/GEP: Q

Objecti∛e:

The aim of this study was no determine the soute toxicity of Bixafen + Fluoxastrobin + Prothioconazole EC 196 to Rathbow fout (*Oncorhonchus mykiss*), expressed as 96 h-LC₅₀.

Material and methods: %

Test tend Bixafen + Fluoxostrobin + Prothioconazole EC 190 (40+50+100 g/L); Short code: BIX+FXA+PTZ EC 90 (40+50+100) G Batch No.: 2010-000848, Tox No.: 08908-00; Specification No.: 102000023924 NN; Master recipe 15: 0106974-001; Analysed content of active ingredients: 3.90 % w/w (41.5 g/L) bixafen (BYF 00587), 4.86 % w/w (51.7 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothoconazole (JAU 6476); Density: 1.064 g/mL(20 °C).

Rainbow treat (*Oucorhynchus mykiss*) Fere exposed for 96 hours under static conditions to nominal concentrations of 0.750 1.50, 300, 6.00 and 12.0 mg test item./L against a control. At the beginning of the test the mean body length and the mean body weight of the tested rainbow trout were 4.4 cm and 1.3 g respectively. The biomass loading for this test was 0.33 g fish / L test medium.

Ten fish were used in each test concentration. The aquaria used were made of glass with a capacity of 40-litres and a dimension of 36 cm length, 32 cm width and 38 cm height. The water temperature during the 96-hour exposure ranged from 11.3 to 12.4°C in all aquaria over the whole test period. Dissolved oxygen concentrations ranged from 90 to 101% oxygen saturation. The pH values ranged

from 6.9 to 7.5. Bixafen was analyzed in all test levels after 0 h, on day 2 and on day 4 of the exposure period to confirm nominal concentrations. During the test, fish were observed for mortalities and gens of intoxication four hours after application and then once daily (day 1-4).

Dates of experimental work: March 29, 2010 to May 18, 2010

Findings:

Validity criteria:

The test conditions met all validity criteria, given by the mentioned galdelines:

- < 5% mortality within the 48-hour settling-in period;
- \leq 10% mortality in the control (or one fish if less than ten are used dissolved oxygen saturation \geq 60% throughout the test; pH variation ≤ 1.0 units.

Analytical findings:

The analytical determination of bixafen in water by HPLC-MS/MS and HPLC - UV) revealed mean measured values of 80% to 105 % of pointing over the whole testing period of 45 hours. Therefore all results are given as nominal values.

As the toxicity has to be attributed to the vested formulation as a whore, all results submitted by this report are related to nominal test concernations of the formulated product

Biological results:

In the controls no mortalities or sub-lethan findings were observed.

The lowest concentration causing 100% mortality (96h) was 6.00 mg test oftem/L. The highest concentration which did not result in any mortality within the exposure period (NOLEC) was 1.50 mg test item /L. The no-observed-effect concentration (NOEC) after 96 hours was 1.50 mg test item /L. After 96 h of exposure towards the nominal concernation of 3.00 mg form./L the fish showed the following behavioural symptoms:

- showed abored respiration
- displayed entranced mucous excretions remained for unusually long periods at the water surface were dead
- were dead

Cumulative mortably was observed as following

Cumulative mortality of the rainbow trout exposed to Bixafen + Fluoxastrobin + Prodniocomzole EQ 190

Exposure time	4 1	P Q	, ©24 I	h	481	1	72 1	1	96 1	h
Test item	no. of		No. of	76 €\$	no. of	%	no. of	%	no. of	%
[mg/L]	dead	dead (🕽 dead 🌂	dead	dead	dead	dead	dead	dead	dead
control		00	dead *	QÖ	0	0	0	0	0	0
0.750	D 0 A		₹ 0 @	* O	0	0	0	0	0	0
1.50	((8	√ 0 √ 0	0	0	0	0	0	0	0
3.00	#\display 0	0 8	0	0	0	0	3	30	5	50
6.00	D 0 1	90	10	100	10	100	10	100	10	100
12.0	10\$	\100 001.	10	100	10	100	10	100	10	100



Conclusion:

Based on nominal concentrations the following endpoints were determined:

LC₅₀ (96 h): 3.02 mg test item/L (95% C.I.: 2.70 - 3-37 mg/ \mathbb{Q})

100 % mortality: 6.00 mg test item/L NOEC (96 h): 1.50 mg test item /L NOLEC: 1.50 mg test item /L

,; 2010**√M**-385961-01**√** KCP 10.2.1/02 Report:

KCP 10.2.1/02 (Compared to the control of the contr Title:

the waterflea Daphnia magna in a static laboratory lest system

Report No.: EBDRP184 Document No.: M-385961-01-1

OECD Guideline 202, Daphnia/sp. Guideline(s):

Directive 92/69/EEC

Guideline deviation(s): none **GLP/GEP:** yes

Objective:

The study was performed, to detect possible effects of Bixafen Fluoxastrobin + Prothioconazole EC 190 on mobility of Daphnia magner caused by 48 hours of exposure for a static laboratory test system, expressed as EC₅₀ for immobilisation.

Material and methods:

Test item: Bixafen + Fluoxastrobin Prothioconazole & C 190 (40050+100) G; Short code: BIX+FXA+PTZŒC 190 (40+50+100) G; Batch IDC 2010-900848, Analysis ref. code: TOX08908-00; BCS-Specification Nov. 102000023024-NN, Analysed content of active ingredients: 3.90 % w/w (41.5 g/L) bixafen (BYF 60587), 4.86% w/w (51, 7/g/L) Duoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothioconazole (JAV 6476), Density: 1,064 g/ml.

Seven groups of daphrids (1 instars, < 24tr old), each group comprising 30 daphnids (6 replicates per test concentration. I daphinds per replicate), were exposed in a static test system for 48 hours to nominal concentrations of 0 (partreated control), 0.625, 1.25, 2.50, 5.00, 10.0 and 20.0 mg form./L without feeding, Each ressel glass beakers 100 mL) semed as one replicate was filled with 50 mL of the test solution (10 ml test solution per daphnich). After 24 and 48 hours, behaviour of the water fleas was visually evaluated by courting mobile daphnids. Additionally all visible features of the test item in water as well as possible signs on subletical affected daphnids had to be recorded. The content of bixafen in exposure media was measured for verification of the test item concentrations.

The water temperature ranged from 200°C to 20.6°C. The pH varied between 7.8 and 7.9. Oxygen concentration varied between \$79 and 9.11 mg/L. The photoperiod was 16 hours of light and 8 hours dark with a maximum intensity of 1200 luxQ

Dates of experimental work: April 19,2010 to May 18, 2010

Validity criteria:

Validity ofteria	Recommended	Obtained
Control mortality	10.0%	0.0%

The study meets the proposed validity criteria, thus the test is valid.

Analytical findings:

The accompanying chemical analysis of bixafen in the freshly prepared test solutions at test initiation ranged between 97% and 105% (mean: 101%) of the corresponding nominal concentrations. The corresponding concentrations of the aged test solutions at the end of the 48 hours exposure period ranged between 98% and 106% (mean: 102%) of nominal, demonstrating stability in the test system. No contaminations of bixafen were detected in samples from untreated water control.

concentrations) is presented in the As the toxicity has to be attributed to the tested formulation as a whole all results submitted report are related to nominal test concentrations of the formulated product.

Biological findings:

The toxicity of the test item to Daphnia magna Wased on nomina table below.

Table CP 10.2.1-2:

						e e
Table CP 10.2.1- 2: Imr	nobility data of D	aplania magna	at 24 and	48 h expo	sure period C	3
nominal	exposed	immobilise	d daphnids	4		K
test concentration	daphnids	24%h, %	**\sqrt{48}	haj j		
(mg form. / L)	(=100%) © n	~ %\$	Nn ~	0 %,5		<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>
control	30 0	0.0		0,00		0
0.625	30 _@	0.0 g		0 ,0		C
1.25	30 ~0	0.0	₽	Ø0.0 _₺	O* (0
2.50	30 % 15	500	⊘ 20 ⁴	√ 66.7 _√		
5.00	. © 30 □ 1g	3.3	29 🐧	96,T		
10.0	304 30	200.00°	36	_₡ 100.0 ⁵		
20.0	30	100.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~) 100. %		

Observations:

effects of behaviour occurred in unreated control within 48 hours of 24-h EC₅₀ = 3.04 mg form/L (95% confidence limits 2.25 – 4
48-h EC₅₀ = 2.08 mg form/L (95% confidence limits 1.62 – 2.68 mg form/L) No immobility or other

Based on nominal concentrations of Bixaten + Pluoxastrobin + Prothioconazole EC 190, the acute

confidence limits 2.25 - 4.10 mg form./L)



CP 10.2.2 Additional long-term and chronic toxicity studies on fish, aquatic invertebrates and sediment dwelling organisms

,; 2010; M-387053-01-1 Report: KCP 10.2.2/01

Pseudokirchneriella subcapitata growth inhibition test with bixafen + fluexastro M-387053-01-1
OECD Guideline 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test
(March 23, 2006)
none
yes Title:

Report No.: Document No.:

Guideline(s):

Guideline deviation(s): **GLP/GEP:**

Objective:

The aim of the study was to determine the influence of Bixafen Fluexastrolon + Prothioconazole C 190 on exponentially growing *Pseudokirchneftella sybcapitata* expressed as NOEC, LOEC and EC_x for growth rate of algal biomass (cells per volume).

Material and methods:

Test tem: Bixafen + Fluoxa robin + Prothiocorazole EC BIX+FXA+PTZ EC 190 (40-30+100) G; Ratch ID.: 2010-000848, Too No.: 08908-90; Specification No.: 102000023924-NN; Analysed content of agrive ingredients: 3.90% w/w (41.5\2/L) bixafen (BYF 00587), 4.86 % w/w (\$\hat{M}.7 g/L) fluoxastrobin (HEC 5725 E-HSO) 5.59 % w/w (102.0 g/L) prothioconazole (JAU 6476); Density 1.064 mL?

Pseudokirchneriella subcapitata (freshwater microalgae, formerly known as Selenastrum capricornutum) with an initial coll density of 10 000 cells and in the test medium were exposed in a chronic multigeneration test for 3 days under static exposure conditions to nominal concentrations of 0.0960, 0.307 0.980 3.13 and 100 mg formulation on to a control. Three replicate vessels per test level and 6 replicate vessels per control with 150 ml test medium per replicate were

The pH values range from 9.9 to 8.5 in the controls and the incubation temperature ranged from 21.3°C to 22.1°C (measured in an additional incubated glass vessel) over the whole period of testing at a continuous illumination of 8130 lux

Morphological examinations of cells using a microscope were made over the exposure period on each study day. Quantitative amounts of bixasten were measured in all treatment groups and in the control on day 0 and day 3 of the exposure period

Dates of experimental work: Max 14, 2010 to Low 05, 2010 Findings:

Validity criteria

Biomass increased in the control by more than 16-fold within the evaluation period. Mean percent coefficient of variation of sectional growth rates from day 0-1, day 1-2, and day 2-3 in the control did not exceed 35% Percent coefficient of variation of the average growth rate in each control replicate did not exceed %. Test conditions met all validity criteria, given by the mentioned guideline(s).

Analytica Cfindings:

The analytical findings of bixafen in the treatment levels found on day 0 were 98 % to 103 % of nominal (average 100 %). On day 3 analytical findings of 97 % to 104 % of nominal (average 99 %) were found. Given that the toxicity cannot be attributed to any of the a.s. compounds but to the formulation as a whole, all results are based on nominal test concentrations of the formulation.

Biological findings: The static 72 hour algae growth inhibition test provided the following effects: Table CP 10.2.2-1: Effects of the static 72 hour algae growth inhibition test nominal concentration and the static 72 hour algae growth inhibition test provided the following effects: Table CP 10.2.2-1: Effects of the static 72 hour algae growth inhibition test provided the following effects:	Biological findings:			
Table CP 10.2.2-1: Effects of the static 72 hour algae growth inhibition test nominal concentration after 72 h grain and specific growth protein growth and growth grain after 72 h growth gro	The static 72 hour alg	ae growth inhibitior	n test provided the f	following effects:
nominal concentration real number (0-72h)-average specific growth after 72 h after 72 h after 72 h specific growth after 72 h af	Table CP 10.2.2- 1:	Effects of the static	72 hour algae growth	n inhibition test
Ing form.ii. (means) per mL rates [days*]	nominal concentration	cell number after 72 h	(0-72h)-average specific growth	inhibition of average specific growth rate
Control 872 000	[mg ioiiii./L]	(means) per mL	rates [days-1]	
0.0960 871 000 1.489 0.4 0.080 880 000 1.489 1.45 3.13 269 000 46097 360 10.0 37 000 0.434 370.9 Observations: No morphological change in algae was observed in any test concentration. Conclusion: The (0 - 72h)-E,C ₅₀ for Bixafen+ Fluorestroop + Profitices flavored form./L (95 % CI: 5.41 - 6.36 mg form./L) and the (0 - 72h) - NOP.C is 0.380 mg form./L. CP 10.2.3 Further testing on a quartic organisms No further testing of the formulation is a affable of required.	control	872 000	1.489	
0.500 1.472 1.4 1.	0.0960 0.307	871 000	1.489	1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
3.13 269 000 4057 444 10.0 37 000 0.434 7 70.9 test initiation with 10,000 cells ml. Observations: No morphological change in algae was observed in any test concentration. Conclusion: The (0 - 72h)-E _t C ₅₀ for Bixafen + Fluorestroom + Profinices azole BC 190 is 5.86 mg form/L (95 % CI: 5.41 - 6.36 mg form/L) and the (0 - 72h) - NOISC is 0.080 mg form/L. CP 10.2.3 Further testing on a quartic organisms No further testing of the formulation is a fallable of required.	0.307	830 000	1.478	
test initiation with 10,000 cells/mL Observations: No morphological change in algae was observed in any test concentration. Conclusion: The (0 - 72h)-E.Cso for Bixafen,+ Fluorastrobar + Promiscorazole CC 190 is 5.86 mg form/L (95 % CI: 5.41 - 6.36 mg form/L) and the (0 - 72h) - NOE/C is 0.980 mg form/L. CP 10.2.3 Further testing on aquatic organisms No further testing of the formulation is a sallable of required.	3.13	269 000	2097	26.4 V Q Q
test initiation with 10,000 cells/mL Observations: No morphological change in algae was observed in any test concentration. Conclusion: The (0 - 72h)-E.C.50 for Bixafen, + Fluorastrolan + Profilioconazole EC 190 is 5.86 mg form/L (95 % CI: 5.41 - 6.36 mg form/L) and the (0 - 72h) - NOESC is 0.080 mg/form/L. CP 10.2.3 Further testing on aquatic organism. No further testing of the formulation is an affable of required.	10.0	37 000	€ 0.434°°	\$\tag{0.9} \tag{0} \tag{0} \tag{0}
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Conclusion: The (0 - 72h)-E,C ₅₀ for Bixafen, + Fluoristropin + Prothioconazolet EC 190 is 5.86 mg form./L (95 % CI: 5.41 - 6.36 mg form./L) and the (0 - 72h) - NOEC is 0.980 mg form./L. CP 10.2.3 Further testing on aquatic organisms No further testing of the formulation is a callable or required.	No morphological cha	nge in algae was	served in any test e	oncentration, 7 5 5
The (0 - 72h)-E ₂ C ₅₀ for Bixafen, + Fluovastroloff + Prothiocomazole EC 190 is 5.86 mg form/L (95 % Cl: 5.41 - 6.36 mg form/L) and the (0 - 72h) - NOEC is 0.980 mg form/L. CP 10.2.3 Further testing on aquatic organism Prothiocomazole EC 190 is 5.86 mg form/L. No further testing of the formulation is a fillable or required.	Conclusion:			
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CP 10.3 Effects on arthropods

CP 10.3.1 Effects on bees

The risk assessment has been performed according to the existing guidance in force at the time of the preparation and submission of this dossier namely the EU Guidance Document on Terrestrial Ecotoxicology (SANCO/ 10329/2002 rev 2) and EPPO Standard PP 3/10 (3) Environmental Risk Assessment Scheme for Plant Protection Products - Chapter 10: honey bees.

Commission Regulations (EU) 283/2013 and 284/2013 require where bees are likely to be exposed testing by both acute (oral and contact) and chronic toxicity, including subjected effects to be conducted. Consequently in addition to the standard toxicity studies performed with adult bees (OECD 213 and 214) the following additional studies are also provided:

- Acute oral and contact toxicity of the active substance Quoxastrobin and the representative formulation Bixafen + Fluoxastrobin + Profiniceonazole FC 190.
- Acute contact toxicity of fluoxastrobin to adult bumble bees under laboratory conditions
- Chronic 10 day toxicity test with of Fluorastrobin FS 480 on adult Gees under laboratory conditions,
- Colony feeding study with Fluexastrobin FS 480 according to al. 1992 (using a realistic worse case spray solution concentration and covering exposure for effects on brood (eggs, young and old larvae) and beir development, nurse becon-going behaviour in brood care and colony strength)
- Semi-field brood feeding study with Fluorastrobin EC 100 following OECD guidance document 75 (using a more fealistic spray scenario only flowering *Placelia tanacetifolia* at the maximum application rate for the approval renewal of fluorastrobin and covering exposure for effects on bood (eggs) and their development and colony parameters).

Details of the honey bee testing with flux astrobin and ecotosecological are presented together with the ecotoxicological endpoints in MCA. Section 8, Point 8.3.1, as well as within the EFSA Scientific Report (2007) 102. Furthermore, contact laboratory toxicity data for bumble bees indicated that non-Apis bees are not more sensitive than honey bees and consequently the risk assessment for honey bees is considered to protective to other bees.

The tests conducted with the formulation Bixafer + Flooxastrobin + Prothioconazole EC 190 are presented in this MCD document.

A summany of the critical endpoints for fluorastrobin, the formulated products Fluorastrobin EC 100, Fluorastrobin FS 480 and Bixafen + Fluorastrobin + Prothioconazole EC 190 are provided in the following tables. Endpoints show in both are considered relevant for risk assessment.

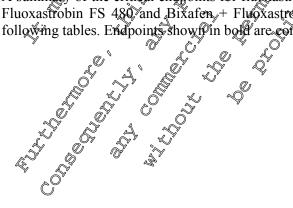


Table CP 10.3.1-1: Critical endpoints for fluoxastrobin – acute toxicity to adult bees

Test substance	Test species		Endpoint	Reference
	Honey Bee (oral 48 h)	LD ₅₀	> 129.1 μg a.s./bee	2014; M 303276
Fluoxastrobin	Honey Bee (contact 48 h)	LD ₅₀	> 100 μg a.s./bee	01-1 K&A 8.3-1.1.2 X&CA 8.31.1.2
	Bumble bee (contact 48 h) (Bombus terrestris)	LD ₅₀	> 100 μg a Subumble bee	M-: 2437, 07-1 KQA 8.30.1.2
Bixafen + Fluoxastrobin +	Honey Bee (oral 48 h)	ÖLD50	> 210.4 µg prod./bec	20106-M-369-81-
Prothioconazole EC 190	Honey Bee (contact 48 h		200 jug proje/bee	01-1

a.s. = active substance; prod. = product

Bold: values used m risk assessment

Table CP 10.3.1-2: Critical endpoints for fluoxastropin - chronic toxicity to adult bee

Test substance	Test species	Endpoint & Reference
Fluoxastrobin FS 480	Honey be Laboratory chronic oral (10 d) (adults)	LO ₅₀ > 3333 mg ωs./kg ω ;; LØD ₅₀ > 735 μg a.s./bee/day 2015; M-534974- NOE ω 4667 mg a.s./kg 01-1 NOEDD 39.2 μg a.s./bee/day κ KCA 8.3.1.2

a.s. = active substance

Table CP 10.3.1-3: Critical endpoints for fluoxastrobin toxicaty to bee brood

Test substance	Test species Endpoint C	Reference
8	No advers © effect Con brood	
Fluoxastropin	Bee brood tegaing test (development and prortainty after	2013;
FS 480	et ala legating winey be colonies sugar	M-476181-01-1
	sÿrap at 0375 g a.s./L.	KCA 8.3.1.3
	No adverse effects on brood development, mortality, foraging activity, behaviour, colony	2015 M
Fluoxastrobin	Semi-field broof study activity, behaviour, colony	2015; M- 515147-01-1
EC 100	Condition and strength after	KCA 8.3.1.3
4	application of 150 g a.s./ha onto	KCA 6.3.1.3
	flowering Phacelia tanacetifolia.	

a.s. = active substance

Risk assessment for bees

The risk assessment for bees is base on the maximum application rate of 2 × 87.5 g fluoxastrobin/ha in cereals.

Hazard Quotients

The risk assessment is based on Hazard Quotient approach (Q_H) by calculating the ratio between the application rate (expressed in g a.s./ha or in g total substance/ha) and the laboratory contact and oral LD (expressed in μg as bee or in μg total substance/bee).

 Q_H values can be calculated using data from the studies performed with the active substance and with the formulation. Q_H values higher than 50 indicate the need of higher tiered activities to clarify the actual risk to honey bees.

 $Q_{HO} = \frac{\text{max. appl. rate}}{\text{LD}_{50} \text{ oral}} = \frac{1}{1}$ [g a.s./ha or g total substance/ha] Hazard Quotient, oral: [µg a.s./bee or µg total substance/bee]

 $Q_{HC} = \frac{\text{max. appl. rate}}{\text{LD}_{50} \text{ contact}} = \frac{[\text{g a.s./ha or g total substance/ha}]}{[\text{µg a.s./bee or µg total substance/ha}]}$ Hazard Quotient, contact: [µg a.s./bee or µg total substance/bee]

The maximum label rate of Bixafen + Fluoxastrobin + Prothioconagole EC 190 (40 + 50 + 100) 1.75 L (1750 mL) product/ha in cereals (BBCH 30 69). With the content of bixafen Tuoxastrobins and prothioconazole within the formulation being 40 g bix@fen/L . 50 g fluorastrobio/L and 100 g prothioconazole/L, respectively, this accounts to a maximum application rate of 87 g g fluoxastrobin/ha in cereals. Considering a density of 1.06 g/mL of Boxafen Fluoxastrobin + Prothioconazole EC 190, 1750 mL product/haccorresponds to 1862/g product/haccorresponds

Table CP 10.3.1-4: Hazard quotients for bees - oral exposure

Crop LDs rate quotient of [µg/bee] [g/ha]	Trigger
Bixafen + Fluoxastrobin + Prothioconazofe Cereals 210,00 (862*) < 88	50
Fluoxastrobin Cereals > 129.1 87.5 Q < 0.7	50

^{*} based on a product density & 1.064\(\text{Q}/\text{mL} \)

The hazard quotients for oral exposure are below the validated trigger value for higher tier testing (i.e. $Q_{HO} < 50$).

Table CP 10.3.1 : Hazard quotients for bees contact exposure

				Crop	ED ₅₀ Jμg/bees	Application Pate [g/ha]	Hazard quotient Qно	Trigger
Bixaf	P	190 🖖	nioconazole \$	Cereals	\$200 △	1862*	< 9.3	50
	Flajoxas	strobin		Co reals	> 1000	87.5	< 0.9	50

^{*} based on a product departy of 1064 gmL

The hazard quotients for contact exposure are below the validated trigger value for higher tier testing (i.e. QHC 50).

Further considerations for the risk assessment

In addition to acute laboratory studies with adult honey bees, fluoxastrobin was further subjected to topical acute bumble bee testing ($\frac{1}{2}$; 2014; M-512437-01-1; in CA 8.3.1. 2). The study resulted in an LD₅₀ of > 100 µg a.s./bumble bee and did not reveal sensitivity differences between honey are and bumble bee foragers.

Moreover, fluoxastrobin was further subjected to chronic aboratory testing with adult honey bees (2015; M-534974-01-1; in CA 8.3.1.2).

This chronic study was designed as a dose-response test by exposing adult honey bees for 10 consecutive days to nominal concentration of 208, 417, 833, 2667 and 3333 mg fluoxastrobin/kg feeding solution, respectively. The actual test was conducted by dising the formulated product Fluoxastrobin FS 480. After exposing honey bees for ten consecutive days exclusively to sugar solution containing fluoxastrobin, the 10 day LCG (Lethal Concentration) was determined to be > 3333 mg fluoxastrobin/kg, which corresponds to a LDD₅₀ Lethal Dietary Dose) of 73.3 μg a.s./bee/day. The respective NOEC (No Observed Effect Concentration) for mortality was determined to be 1667 mg fluoxastrobin/kg, which corresponds to the NOEDD (No Observed Effect Pietary Dose) of 39.2 μg a.s./bee/day.

In order to reveal whether fluoxastrobits poses a risk to immature honey to life stages, a bee brood feeding study (\$\sum_{\text{eq}}\) 13; M-476 1-014, in QA 8.3.1.3) has been conducted by following the provisions/method of \$\sum_{\text{eq}}\) (OEPP/EPPO

Bulletin 22:613-616 (1992), which require, antengst other parameters to "...use formulated products only... products are fed at a concentration recommended for high-volume use...". The honey bee brood feeding test is a worst-case screening test, by feeding the honey bees directly in the hive with a treated sugar solution which contains the test substance at a concentration typically present in the spray tank (and as such as a very high concentration and by investigating the development of eggs, young and old law as by employing digital photo imaging technology.

This particular study was conducted with Flioxastrobin & 480. The administration of fluoxastrobin at a concentration of \$\omega\$75 g a.s to honeybee colonies was feeding of a litre spiked sucrose solution has neither resulted in adverse effects on prood development. Worker or pupal mortality compared to the control regarding brood development, the brood termination rates of the test item treatment were overall on a low level with 7.1, \$\omega\$1 and \$\omega\$1.3% for eggs, young larvae and old larvae, respectively, which were not statistically significant different to the control with brood termination rates of 9.6, 24.4 and 3.3% for eggs, young larvae and old larvae, respectively at the end of the brood observation period.

In order to clarify whether fluorastrobin poses a risk to honey bee brood and colony development in particular as well as on honey bees in general under realistic worst-case conditions, a higher tier semi-field honey bee brood study (according to the provisions of the OECD Guidance Document 75) was conducted under forced/confined exposure conditions using the formulation Fluoxastrobin EC 100, by application of 150 g a.s./ha under tunnel conditions to the full flowering and highly bee attractive surrogate crop *Phacetia tangeetifolia* (1997); 2015; M-515147-01-1; in CA 8.3.1.3).

The study included three treatment groups: Control (tap water), Test item (150 g a.s./ha and Reference item (300 g fenoxycart ha) with all applications being carried out with a spray volume of 400 L water/ha. For all treatment groups, four replicates (tunnels) were set up. The application of all treatments was conducted turing daily bee flight activity at the time of full flowering of the crop. Thereafter the bees were kept for 7 days within the tunnels (confined exposure phase) and were then relocated out of the tunnels and transferred to a monitoring site without flowering crops and intensive agricultural area for further monitoring (day 8 to day 28 after treatment). Daily, throughout the confined exposure phase, mortality of worker bees, larvae and pupae was assessed along with assessments of foraging activity and behaviour. Daily mortality assessments were continued along



with behaviour around the hive during the post-exposure observation period (day 8 to day 28 after treatment). Colony assessments (food stores, brood areas, colony strength) were made before confinement, after confinement and at the end of the study. Detailed brood assessments proof termination rate, brood index and brood compensation index) by employing digital photo maging technology, investigating the fate of more than 200 individually marked cells was performed on 5 occasions throughout the study, covering an entire brood cycle of honey bees.

The application of fluoxastrobin at the rate of 150 g a.s./ha under turnel conditions to the full flowering and highly bee attractive surrogate crop Phacelia tanacetifolia did not cause any adverse effects on mortality, flight intensity (except for a short ferm reduction in flight activity on the day of application), brood development (brood termination rate: 35.5% brood index 3.2, compensation index: 3.9 in test item compared to the control with brood termination rate: 300%, brood index: 3.20 compensation index: 4.0), as well as on colony strength and condition. Neither brood termination rate nor brood or compensation index were significantly different in the testoitem as compared to the control, indicating that these indices performed comparable to the control, including compensations of previous brood losses.

All in all, it can be concluded from the acute and chronic laboratory studies in adult honey bees as well ret al and OECD Guidance Document 757 investigating as from the bee brood feeding study & side-effects on immature honey bec'ffe stages, that fluoxastrobii is of low general in insignoxicity to honey bees.

Synopsis

Fluoxastrobin is of low acute toxicity to honey bees, with LD5 (oral and contact) above the highest tested dose lovels tested dose levels.

The calculated Hazard Quotients for fluoxastrobin are below the validated trigger value which would indicate the need for refined risk assessment; to adverse effects on honey bee mortality are to be expected at the maximum envisaged application rate. This conclusion is confirmed by the results of the bee brood feeding study as well as by the results of the bee brood semi-field study, which covered the maximum application rate of 150 g a.s./ha.

The acute laboratory study conducted with burnole been revealed no sensitivity differences between honey bee and bumble bee foragers.

It can be concluded from the soute and chronic laboratory studies in adult honey bees as well as from the bee brood feeding study et al and bee brood semi field study (OECD 75), investigating side-effects on impature honey the life tages that fluoxastrobin is of low general intrinsic toxicity to honey bees.

Regarding potential side effects of fluoxastrobin on immerure honey bee life stages, the conducted bee et al., 1922) found no statistically significant differences between test brood feedin study item and control in brood termination rates of oggs, young and old larvae at 0.375 g a.s./L. Overall the study revealed no adverse effects on the survival of adult bees and pupae. Thus, when considering the severity of the exposure situation in this worst-case screening test in combination with the absence of effects on the overall development of bee brood, it can be concluded even on the basis of this worstcase screening study that the use of fluoxastrobin does not pose an unacceptable risk for adult honey bees, immature honey bee life stages and honey bee colonies.

In order to clarify whether the conclusions on the basis of lower tiered honey bee studies are correct, fluoxastrokin was subjected to confined semi-field testing (according to the provisions of OECD Guidance Document No. 75) by applying the two rates of 150 g a.s./ha to full-flowering Phacelia during honey bees actively foraging on the crop. This study design is from an apidological and apicratural foint of view more realistic than an in-hive feeding of the test compound via a treated sugar solution, which contains the test substance at a concentration typically present in the spray tank (and as such at a very high concentration). The results of this higher tier semi-field study confirmed the conclusions made above on the basis of the outcome of the lower-tiered studies, as no adverse direct or delayed effects on mortality of worker bees or pupae, foraging activity, behaviour, colony strength and colony development as well as the development of bee brood were observed, even under



aggravated, forced exposure conditions and by digitally following-up in a very detailed manner the fate of individually marked brood cells (digital photographic assessment) from egg stage witil emergence.

Conclusions

Overall, it can be concluded that fluoxastrobin, when applied in cereals at the maximum application rate of 87.5 g a.s./ha, as foreseen for the use of Bixafen + Fluoxastrobin Prothioconazole 190 does not pose an unacceptable risk to honey bees and honey bee colonies

CP 10.3.1.1 Acute toxicity to bees

CP 10.3.1.1.1 Acute oral toxicity to bees

Report: KCP 10.3.1.1.1/01 ,; 200; M-369681-01-1

Title: Effects of bixafen fluoxastrobin prothioconazone EC Q0 (40450+100) G (acure

contact and oral @n honey bees (Apis mellifera ...) in the laboratory

Report No.: 55601035

Document No.: M-369681-00-1

Guideline(s): OECD Guideline 213/214 for the Testing of Chemicals on Honeybee, Acute

Oral/Contact Toxicity Text, adopted on Ist September 998

Guideline deviation(s): none get yes

Objective:

The aim of this study was to determine possible effects of Bleafen + Fluorastrobin + Prothioconazole EC 190 on the boney bee, Anis mellifera L, in an acute contact test under laboratory conditions. Mortality of the bees was used as the toxic endpoint. Soblethal effects, such as changes in behaviour, were also assessed.

Material and methods

Test item: Bixafer + Fluoxastrobin © Prothocontzole EC 190 (40+50+100) G; Short code: BIX+FXA+PTZ FC 190 (40+50+100) G; Batch ID. 2010 000848, Sample Description: TOX08908-00; Specification No 10200002392 -NN Material No. 79969775; Analysed content of active ingredients: 390 % w/w (40.50 g/L) bixafen (45 F 00587), 4.86 % w/w (51.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 w/w 102.0 g/L) prothiocontzole (JAU 6476); Density: 1.064 g/mL.

Test units were stainless steed cages of 10 cm x \$ 5 cm x 5.5 cm (length x width x height). Under laboratory conditions Apis mellifer a (50 worker bees per dose: 10 bees per replicate, 5 replicates per test item dose level, controls and reference icm doses) were exposed for 48 hours to a single dose of 200.0 µg product per bee for topical application (contact) and with a single dose of 210.4 µg product per bee for feeding (oral value based on the actual intake of the test item).

For the contact test a single 5 µL droplet Bixafen + Fluoxastrobin + Prothioconazole EC 190, dissolved in tap water with 0.5. Adhasit, was placed on the dorsal bee thorax, likewise for the toxic reference (dimedioate) and the control (tap water). For the oral test aqueous stock solutions of the test item and reference item were prepared and mixed with ready-to-use sugar syrup (30 % saccharose, 31 % glucose, 36 % froctose) at a concentration of 50 % (w/w). For the control, tap water and sugar syrup was used at the same ratio (1 + 1). The treated food was offered in syringes, which were weighed before and after introduction into the cages. After a maximum of 3 hours 50 minutes, the uptake was complete (duration of uptake was 3 hours 50 minutes for the test item treatments) and the syringes containing the treated food were removed, weighed and replaced by ones containing fresh, untreated food.



Findings:

Validity Criteria Contact Test Control Mortality Control Mortality Vater/sugar control Contact Test Water/sugar co	Bayer crops	2010-01-12
he number of dead bees was determined after 4 hours (first day); 24 and 48 hours. Behavioural binormalities (vomiting, apathy, intensive cleaning) were assessed after 4 hours (first day), 24 and 48 hours. Temperature during the test was 23 -25 °C; relative humidity was 30 – 63 %. Bees were kept in arkness (except during observation). Pates of work: April 19, 2012 to April 22, 2010 indings: Alidity Criteria		e e e e e e e e e e e e e e e e e e e
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Water/Sugar control Contact Vest LD ₅₀ of Reference Item (24 h) Paral Test Apral Test Apral Test Paral Test Apral Test		CO ₂ /water control
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	LD ₅₀ of Reference Item (24 h)	
2 2 0 0 0 0 0 0 0 0	Pa	
	~~	0(10 - 0,35 рg ass bee 0.16 μg a.s./bee

The contact and oral test is considered valid as the control mortal by in each case was <00% and the LD₅₀ values obtained with the reference item (dimethoate) were within the required anges

Biological results

Contact test: , C

At the end of the confact to reity test (48 hours exter application), there was 14.0 % mortality at 200.0 μg product bee. No mortality occurred in the control (water + β5 % Adhäsit). A few bees were behaving abnormal during the first shours following the treatment (uncoordinated movements and apathy) and one bee had moving coordination problems during the 48-hours assessment.

Oral test:

In the oral toxicity test the maximum nominal test evel & Bixafen + Fluoxastrobin + Prothioconazole EC 190 (40€50+100) G (200 μg product/bee) corresponded to an actual intake of 210.4 μg product/beg. This dose level led 40 mortality after 48 hours. No mortality occurred in the control (50 % sugar solution). During the 4 dours assessment 20 out of the 50 bees showed uncoordinated movements or were apathetic. No further behavioural impairments occurred 24 and 48 hours following the application.

1.1-1. Toxicis to honey bees, laboratory tests

Pest iteen &	Bixafen + Fluoxastrobin	+ Prothioconazole EC 190			
Test Spect C	Apis mellifera				
Application rate µg product/toe	200.0	210.4			
Exposure	contact	Oral			
	(solution in Adhäsit (0.5 %)/water)	(sugar solution)			
LOξο μg product/bee	> 200.0	> 210.4			

The contact and oral LD₅₀ (24 h) values of the reference item (dimethoate) were calculated to be 0.26 and 0.16 µg a.s./bee, respectively.



Conclusion:

The toxicity of Bixafen + Fluoxastrobin + Prothioconazole EC 190 was tested in both, an acute contact and an oral toxicity test on honey bees. The LD₅₀ (48 h) was > 200.0 μg product/bee in the contactor toxicity test. The LD₅₀ (48 h) was $> 210.4 \mu g$ product/bee in the oral toxicity test.

CP 10.3.1.1.2 Acute contact toxicity to bees

Report:

Title:

Report No.: Document No.:

OECD Guideline 213/214 for the Testing of Hemicals on Honeybee Acute Oral/Contact Toxicity Test adopted on 21st September 1998. Guideline(s):

Guideline deviation(s): none **GLP/GEP:** yes

Additionally, an acute contact toxicity study was conducted on bumble bees with thoxastrobin; the corresponding summary is provided in Document MCA. Section 8.3.1. 2014; M-512437-01-1).

Chronic toxicity to bees **CP 10.3.1.2**

A 10 day chronic fall too city study was conducted with flux astrobin; the corresponding summary is provided in Document MCA, Section 8.3.1 2015; X1-534974-01-1).

Effects on honey bee development and other honey bee life stages

A hone bee brood feeding study according to the method at et al. 1998 (2013; M-\$96181-61-1) has been conducted with Fluoxastrobin FS 480 and is included in Document MCA Section 8.3.1.

A semi-field honey bee brood study (according to DECD 75) (; 2015; M-515147-01-1) has been conducted with the Fuoxastrobia EC 100 and is included in Document MCA, Section 8.3.1.3.

Sub-lethal effects

There is no particular study design / jest guideline to assess "sub-lethal effects" in honey bees. However, in each laboratory study as well as in any higher-tier study, sub-lethal effects, if occurring, are described and reported.

Cage and tunnel tests

Based on the findings presented above, a study with the formulated product is not required.

Field tests with honeybees

Based on the findings presented above, a study with the formulated product is not required.

CP 10.3.2 Effects on non-target arthropods other than bees

Toxicity tests on non-target arthropods were conducted with Bixafen + Fluoxastrobin + Prothioconazole EC 190 on the sensitive standard species Typhlodromus ppri, Aphidius rhopedsynthio Coccinella septempunctata and Chrysoperla carnea. A summary of the results is provided in the table below. Prothioconazole EC 190 on the sensitive standard species Typhlodromus pyri, Aphidius rhopatosiphi, Coccinella septempunctata and Chrysoperla carnea. A summary of the results State of the state A the state of the



Table CP 10.3.2-1: BIX + FXA + PTZ EC 190: Ecotoxicological endpoints for arthropods other than bees

Test species, Dossier-File-No., Reference Tested Formulation, Study Type, Exposure Aphidius rhopalosiphi M-370506-01-1 Rep. no: CW10/013 Tested Formulation, Study Type, Exposure Extended lab., exposure on potted barley plants Extended lab., exposure on potted barley plants Corr. Effect on Mortality [%] Reproduction [%]	
Aphidius rhopalosiphi M-370506-01-1 Rep. no: CW10/013 BIX+FXA+PTZ EC 190 Extended lab., exposure on potted barley plants LR ₅₀ >2500 mL product/ha, ER ₅₀ >2500 mL product/ha Corr. Effect on	
M-370506-01-1 Extended lab., exposure on Rep. no: CW10/013 Extended lab., exposure on potted barley plants ER50 > 2500 mL product/fla Corr. Effect on	
Rep. no: CW10/013 potted barley plants Corr. Æ Effect on	
, 2010a Mortality [%] Reproduction [%]	Řepelleňcy rel
	to control [%]
KCP 10.3.2.2 250 mL product/ha 0 0 -19.7 ^A	8.2 B n@ign.
445 mL product/ha 6.7 6.7 10.9 10.9	§27.9 Bn.sign
790 mL product/ha 0 5 -375 -2	-31. On n.sign
1400 mL product/ha 10.0 ° -1.7^ \$	-15.2 ^B n.sign.
2500 mL product/ha	© 29.6 r@ign.
Typhlodromus pyri BIX+FXA+PTZ EC 190 LPR50 2668 mL produc@na	
M-389537-01-1 Extended lab., exposure on ER ₅₀ 2000 fol proof ha	. 4
Rep. no: CW10/014 detached maize leaves Cor Mortality [% Effect on Repro-	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
Rep. no: CW10/014 detached maize leaves Corp. Morganty % Effect on Reproduction 2010b 375 mL product/ha 3.4 28.5 655 mL product/ha 21.8 203	
KCP 10.3.2.2 655 mL product/ha 7 14.9 0.3	
1150 mL product/ta 21.8 2 20.3	0
2000 mL@roducthia \$\frac{1}{2} \frac{26.40}{2} \frac{40}{2} \frac{40}{	, Ö
3500 mt product/ha 70 70 70 n.a	<u></u>
Coccinella septempunctata M-370455-01-1 BIX+FXA+PTZ EC 490 LR ₅₀ 2867 mJc produc Pha, no effect on Extended lab., exposure on Extended lab., exposure on Extended lab.	reproduction
M-370455-01-1 Rep. no: CW10/015 Rep. no: CW10/015 Control Cont	. II.4.1.i
Rep. no: CW10/015 detrached maize Teaves Corr. Mortality, [%] Eggs/Female/Day 1040	
Control - 100 KCP 10.3.2.2 350 mL product/hav 3.4 3.4 3.8	85.8 83.4
600 mL product/ha	88.3
100 100 100 100 100 100 100 100 100 100	86.7
1750 pc product/ha 27 27.6 14.7	81.7
3000 mL product/ha \$ 21.7 \$ 21.7	87.6
	87.0
Chrysoperla carned BIX+FXX+PTZEC 1905 LR ₅₀ 1107 mL product/ha, M-384778-01-1 Extended lab., exposure on no effect on reproduction at 1150 mL production at 1150 mL	vroduct/ha
Rep. no: CW10/016 detached maize leaves Corr. Mortality [%] Eggs/Female/Day	/ Hatching [%]
	81.8
Control 29.8	79.5
product ha 34.2 20.0	78.6
1150 mL product/ha 34.2 35.4	82.6
200 mL product/kg 54.7 n.a.	n.a.
3500 mL productiva 81.6 n.a.	n.a.
Chrysoperla camea BIX+FXA+PAZ EC 190	
M-389548-01-1 Aged residue pray	
Rep. no: CW 10/026 deposits on maize plants, 2	
Rep. no: CW 0/026 deposits on maize plants, 2 appl. of 1.75 L product/ha KCP 10.3.2.2 spray interval of 1.4 dry Corr. Mortality [%] Eggs/Female/Day	
KCP 10.3.2.2 (spray interval of 14 d) Corr. Mortality [%] Eggs/Female/Day	Hatching [%]
Residues aged for Q. 7.7 27.2	81.4
Residues gred for U4 d: -2.9° 33.3	75.4
Residue aged for 28 d: -2.8° n.a.	n.a.

A: A negative alue indicates higher reproduction rate in the treatment than in the control.

The extended laboratory data clearly indicate that C. carnea was the most sensitive non-target arthropod species tested with Bixafen + Fluoxastrobin + Prothioconazole EC 190 (LR₅₀ 1107 mL product/ha).

B: A negative value indicate a higher percentage of wasps found on plants in the treatment than in the control.

C: A negative value indicates a lower mortality in the treatment than in the control.

n.a.: Not assessed.
sign.: statistically significant at 5%-level.
n.sten.: not statistically significant.

Risk assessment

Since extended laboratory studies are for 4 non-target arthropod species available no tier 1 laboratory studies were conducted. Therefore, the tier 1 risk assessment has been skipped and a tier assessment based on the extended lab data is provided below.

Potential exposure

The exposure scenario is based on the intended use in cereals with an application rate of prod./ha, at a minimum interval of 14 days. The exposure assessment for 2 x 1750 me, prod. ha cover also as worst case scenario the use rate of 2 x 1500 mL prod./ha.

According to ESCORT2 and the Terrestrial Guidance Document the exposure is calculated as:

In-field:

Application rate * MAEO

Application rate *

Off-field: Application rate * MAF, * (drift factor)

Application rate: 2 x 1750 mL/ha (cereals)

<u>Drift factor</u> = 2.38% (field crops, 1 m distance, 2 applications 2 nd percentile ESCORT2)

MAF (multiple application factor) = 1 Pror cereals (default value for 2 applications; ESCORT)

VDF (vegetation distribution factor) 10 (default value of recommended by the Terrestrial Guidance Document, to take into account the 3-dimensional structure of the offerield regetation; in can only be applied in the context of 2D test_system.

Correction factor = 5 (default value for tier 2 risk ssessment accord the Terrestrial Guidance Document)

Table CP 10.3.2-2: Exposure calculation for in field assessment

Crop / no. of applications	≈(r*ppi. i(a)tc		in-field PEC hax.
			្ហ [mL/ha្]
(ereals > / %	(1750 ×)	M.7 5	© 29¶\$

Table CP 10.3.2-3: Corrected exposure for off-tiche risk assessment

Crop	Appl. rate [mL/ha] &	MAG	Drift % 	For a A a @ .	Correction factor	off-field PEC _{max} . [mL/ha]	Remark
Cereals	1750 💍	1.7 <u>4</u>	2.38		5 💍	354.0	in case of 3-D study
	8	Q"	Ţ				design
Cereals	1,560	3.7	2 938	~~ 10~ ·	5	35.4	in case of 2-D study
	4	· () }				design

Tier 2 in field risk assessment

Table CP 10.3.2- 4: In-field risk assessment based on study results from extended laboratory studies

Crop	Test Species	in-field Placmax., [mL/ha]	A R ₅₀ ; ER ₅₀ [mL/ha]	Trigger	Refinement required?
	A. Aropalosiphi	2975 Q	> 2500	Effects are < 50%	yes
Cereals	Typyri S	<u></u> \$2975 ₹	>2000	Effects are < 50%	yes
Cerears	E. septempunctata	2975	2867	Effects are < 50%	yes
	C. comea	₹ 2975	1107	Effects are < 50%	yes

The higher tier in-field risk assessment for A. rhopalosiphi, T. pyri, C. septempunctata and C. carnea indicates that initial effects in the in-field area cannot be excluded. Therefore, further refinement is needed.

Refined in-field risk assessment

The results of the tier 2 risk assessment based on the extended laboratory studies indicate that initial effects on non-target arthropod species with sensitivity similar A. rhopalosiphi, T. pyri, C. septempunctata and C. carnea cannot be excluded. According to the Terrestrial Guidance Document the potential for recovery needs to be demonstrated. For this purpose an orged residue study with Chrysoperla carnea (Example 1), 2010; M-389548-01-1) was conducted as this species has been identified as most sensitive species compared to the other tested non-target arthropods (Arthropodosiphi, T. pyri, C. septempunctata). The results of the aged residue study indicated that under the more realistic exposure conditions (treatment of whole plants, application of 2 1750 ml prod/ha with a 14-day interval) no relevant adverse effects or mortality or reproduction are observed. Since Carnea is the most sensitive species from the tested non-target arthropod species this covers also a rhopalosiphi, T. pyri, and C. septempunctata.

The data indicate that that no unacceptable adverse effects on non-target arthropods are expected in the in-field area from the applications of BIN + FXA + FIZ EC 190 according to the proposed use pattern.

Tier 2 off-field risk assessment

Table CP 10.3.2-5: Off-field risk assessment based on study result from extended laboratory studies

Crop	Test Species	off-field PEC gax.,	LRso; ERSo	Trigger	Refinement required?
	_	¶mL/haf ^y	mL/ha		Ψ & & <u> </u>
	A. rhopalosiphi	354* \$\$	> 2500	Effects are < 50%	no
Cereals	T. pyri	35.4		Effects are ≤50%	
Celeais	C. septempunctata		\$2867 \$-	Effects are ₹50%	no no
	C. carnea 🐇 ,	35.46	119	Effects are < 50%	no no

^{*} Off-field PEC for 3D Quidy design

For T. pyri, A. rhapalosiphi, C. septempunciata, and C. carfiea no effects > 50% neither on mortality nor on reproduction were observed in extended laboratory studies on natural substrate at exposure rates relevant for the off-crop risk assessment (see Table CP 10.3.2-19). Therefore, it can be concluded that no unacceptable risks for no letarget arthropods in the off-field area is to be expected from the use of the product according to the proposed use patterns.



CP 10.3.2.1 Standard laboratory testing for non-target arthropods

No tier 1 standard laboratory studies were performed. Extended laboratory studies are reported below.

Extended laboratory testing, aged residue studies with non-target **CP 10.3.2.2** arthropods

Report:

Title:

Report No.: Document No.:

KCP 10.3.2.2/01

Toxicity to the parasitoid wasp Ashidius rhopalosophi (DESTEPHANI BEREZ)

(Hymenoptera: Braconidae) using an extended aboratory test on barley; Bixaten + Fluoxastrobin + Prothioconazole EC 190 (40 + 50 + 300 g/L)

CW10/013

M-370506-01-1

ET AL. (2006),

ET AL. (2007)

none

yes Guideline(s):

Guideline deviation(s): **GLP/GEP:**

Objective:

The objective of this extended laboratory study was to investigate the orthal and subtethal toxicity of Bixafen + Fluoxastrobin + Prothisconagola ECA 00 and the orthal and subtethal toxicity of Bixafen + Fluoxastrobin + Prothroconazole EC/190 on the parasitord was Aphidius rhopalosiphi when exposed on a plant surface.

Material and methods:

Test item: Bixafet + Enoxastrobin Prothioconazole & 190 (40+50+100 g/L); Short code: BIX+FXA+PTZ C 190 (40+50+100) G; Batch ID. 2010 000848, Sample Description: TOX 08908-00; Specification No. 902000023924-NN; Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BYF 00587), 4.86, % w/w (51.74 g/L) Dioxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothioconazole (JAW 64767; Density: 1.064 g/WL(20°C).

The test item was applied on Parley seedlings at rates of 250, 443, 790, 1400 and 2500 mL product/ha and the effects on the parasitoid wasp Aphidix rhopdosipht were compared to those of a deionised water treated control. A toxic reference (active substance: domethoate) applied at 7.2 mL product/ha (3 g a.s./ha) was included to indicate the relative susceptibility of the test organisms and the test system. Mortality of temales (6 replicates with 5 wasps per group) was assessed 2, 24 and 48 hours after exposure. Repellency of the test item was assessed during the initial 3 hours after the release of the females. Five separate observations were made at 30 minutes intervals starting 15 minutes after the introduction of all wasps. From the water control and all test item rates 15 impartially chosen females per treatment were each transferred to revlinder containing untreated barley seedling infested with Rhopalosiphum padi for period of 24 hours. The number of mummies was assessed 11 days later. The climatic test conditions string the study were 18.0 - 21.5 °C temperature and 60 - 90% relative humidity (with short decrease < 24h down to 53 %). The light / dark cycle was 16:8 h with a light intensity range of 425 – 1714 Lux in the mortality phase, 856 – 3420 Lux in the parasitation phase and 7370 - 16940 Lyx in the reproduction phase of the study.

Dates of experimental work: March 15, 2010 to March 29, 2010

Findings:

Validity criteria:

+ wilding willow.			0
	Validity criteria		Finding 🧳 🐠
Mortality in water control	≤ 10%		0% Ø b
Corrected mortality reference item	≥ 50%		86.7% 📡
Mean reproduction per female in water control	≥ 5	4	2200
No more than 2 wasps producing zero reproduction	. < 2	J>	
in water control			

No more than 2 wasps producing zero reproduction in water control			luction	\$ ≤ 2		*		
No more than 2 wasps producing zero reproduction in water control The results of this study can be considered as valid. Biological findings: Mortality, reproduction and repellency in each treatment are summarized below.								
Biological findir	<u>ıgs:</u>		Q0" "	, ,		Q'_\0"	,	Ŵ
Mortality, reprod	duction and rep	pellency in	each treatm	ent are stu	mmarized be	M ow. 5		ď
			0" 4				, 4	e °
Table CP 10.3.2.2)_ 1. Fffects of	RIY+FY A +	PT FEIO	© Manhidi	us rhopalosin	hi [©]		Õ
		4	, '\	_ %	/		<u>,</u> , , , , , ,	<u> </u>
Test in		S AX	cafen ≯Fluox		ProtProconstz		⊕ + 50 € 10	00 g/L)
Test org		ÖŸ	<u> </u>		phidius rhopa		, <u> </u>	
Exposur	re on:		"O"		Barley@eedl			
	,	Morto	lity after 48 l		Reprod	Paction		ellency
	4	* **	~~ °	P-		Redorel. to		Red. rel. to
Treatment	T. Drod /ho	11	Con	Value(*)	Rate	Control	% Wasps	Control
Treatment	mL Prod. ha	Uncorr.	Corr	Vanue(")	(mumnies per female)	~ [%]© ~ [%]©	on plant	[%] P-Value(#)
Control	0	0.0			© 22.0	r-v _{anuc(π)}	46.7	Γ-Value(π)
Test item	\$\frac{1}{2}\frac{1}{5}\text{0} & \text{0}	nto	- 000	£.000	0 26.3	*\\\219.7	50.5	-8.2
1050 110111	√0° √1.		0.05	a.sign.	— ~ <i>((-)</i>)	7-19.7 0.836 n.sign.	30.3	0.263 n.sign.
Test item	\$ 4450°	6.7	% .7 %	Ø.98 %	Ø9.6		59.7	-27.9
. (* W		n sign.		0.378 n.sign.		0.093 n.sign.
Test item O	\$790 LO	0.0	0.00	2 000	302	-37.3	61.3	-31.4
Ò		, Q		n.sign.	√ √ / /	0.427 n.sign.		0.086 n.sign.
Test item	1400	10.00	10.0	0.59\$	24.6	-11.7	53.8	-15.2
	, Ø , Ø		(O)	n.‰gn. ⋄	O	0.585 n.sign.		0.248 n.sign.
Test item	2500	9:0 (1)		&J.000 🔬	⁹ 25.7	-17.0	32.8	29.6
7.0	3 - 4			On.sign.		0.645 n.sign.	50.0	0.174 n.sign.
Reference item	7,3	86.7	\$6.7		n.a.		58.8	-26.1

LR₅₀: > 2500 not product ha

Conclusion:

The LR₅₀ was estimated to be > 2500 mL product/ha. The ER₅₀ was estimated to be >2500 mL product/bay No scatistically significant repellent effect of the test item was observed. The figure obtained fulfil the validity criteria of the extended laboratory method (MEAD-BRIGGS ET

ER₅₀: > 2500 mL product/ha * Fisher's Exact test (one-sided), p-values are additional decording to Bonferroni-Holm

[#] Wilcoxofotest (one-sided) p-values are adjusted according to Bonferroni-Holm

n.a. not assessed n.sign not significant sign. Significand



KCP 10.3.2.2/02 s; 2010; M-389537-01-1 Report:

Toxicity to the predatory mite Typhlodromus pyri SCHEUTEN (Acari, Phytoseiidae) Title:

using an extended laboratory test on zea mays; Bixafen + Fluoxastrobin +

Prothioconazole EC 190 (40+50+100 g/L)

Report No.: CW10/014 Document No.: M-389537-01-1

ET AL. (2000) modified: Use of natural substrate (detached maize leaves) plass plate;
ET AL. (2001)
Iral substrate (detached maize leaves) instead of glass plate Guideline(s):

instead of glass plate;

Use of natural substrate (detached maize leaves) Guideline deviation(s):

GLP/GEP:

Objective:

The objective of this study was to investigate the detached leav Fluoxastrobin + Prothioconazole EC 1990 appled Typhlodromus pyri.

Material and methods:

Test tem: Bixafen + Fluoxastrobin + Prothiocona ele E 190 (40+50+100 g/L); Short code: BIX+FXA+PTZ EC 190 (40+50+100) G; Batch ID 2010 000848; Sample Description: TOX08908-00; Specification No.: 102000 23924-NN analysed content of active regredients: 3.90 % w/w (41.50 g/L) bixafen (BYF 00587), 4.86 % w/w 51.71 g/L) flűoxastróbin (HEC 5/25 E/SO), 9.59 % w/w (102.0 g/L) prothioconazole (JAU 6476) Density: 1.064 g/mJ.

The test item was applied onto detached leaves of Lea mays at rates of 375, 655, 1150, 2000 and 3500 mL product/ha and the effects on the presentory thite Typhlodromus peri were compared to those of a deionised water treated control x toxic reference (active substance: dimethoate) applied at 96.5 mL product/ha (40 gca.s./ha) was included to indicate the relative susceptibility of the test organisms and the test system. Mortality of 000 miles (5 ceplicates with 00 individuals per test group) was assessed 1, 4, 7, 10, 12 and 14 days after exposure by counting the number of Hving and dead mites. The number of escaped mites was calculated as the difference from the total number exposed. The reproduction rate of surviving miter was then evaluated from day 7 unfolday. A after treatment by counting the total number of offspring (eggs and large) produced &

The experiment was performed at a temperature range of 24.0 - 25.0 °C temperature and a relative humidity range of 60 70% (with very short deviations 2 h down to 59.8%). The light / dark cycle was 16:8 h with a light intensity range of 596 – 1394 Lux

Dates of experimental

Findings:

Validity criteria: 🐧

Validity correria V	Recommended	Obtained
MortEscrate on the sortrol group on day 7	≤ 20%	13.0%
Average con mortality in the reference item	≥ 50%	100%
Average number of eggs/female calculated as sum of 4 assessment dates – from day 70n) in the control group	≥ 4	4.3

The results of this study can be considered as valid.

Biological findings:

At the test rates of 375, 655, 1150, 2000 and 3500 mL product/ha a corrected mortality of 3.24. 14.9%, 21.8%, 26.4% and 70.1% has been observed, respectively.

At 375, 655, 1150 and 2000 mL product/ha the reproduction was reduced by 2\$\sqrt{9}\%, 0.3\%, 43.7%, respectively.

The mortality / escaping rate in the control exposure units up to day 7 after treatment was 13.0 mean corrected mortality of the mites and the mean reproduction rate of the surviving females to the test item and the toxic reference is given below:

Effects of Bixafen + Fluoxastrobin + Prothiocomazole EC 190 m Typhtodromis **Table CP 10.3.2.2-2**

			<i>y</i>			
Test	item	Bixafen + Flooxastrobin + Prothiocorazole Q 190040+50+100 g/				
Test or	rganism	. Tophlodřomus prvi				
Expos	ure on:	Defached maize beaves				
		Mortality after T days [9%] [98] 88 80 Reptoduction	, .r.			
		Red. related				
Treatment	mL product/ha	Uncorr P-Value(*) (egg Sper Control	Value (#)			
			3			
Control	0					
Test item	375	46.0 3.44 n. mgn. 3.1 228.5	0.180 n.sign.			
Test item	655		0.215 n.sign.			
Test item	1150	@ 32.60	0.230 n.sign.			
Test item	2000	36.0 26.4 <0.001 sign. Q 2.4 Q 3.7	0.238 n.sign.			
Test item	3500	♥4.0 ♥ 76				
Reference item	96.5	100.00 100.0 n.a.				

LR₅₀: 2668 mL product/ha; 95 Confidence Liverval: (2634 - 3679) calculated with Probit analysis

ER50: >2000 mL product/ha

a sign. not significant

Conclusion:

The LR5 was calculate was estimated to be >2000 mL product ha.

The figures obtained fulfil the validity criteria of the laborator method for

2010; M-370455-01-1 Report:

Title: Toxicity to the lactorist beetle Cocinella septempunctata L. (Coleoptera,

Coccined dae) ising an extended laboratory test on Zea mays; Bixafen +

Fluoxastrobin + Prothoconazole EC 190 (40 + 50 + 100 g/L)

Report No .:

Document No.:

Guideline(s): ET AL (2000) modified

ET AL 2001)

Jse of natural sub@rate (maize leaves) instead of glass plate Guideline deviat

Objective:

The objective of this laboratory study was to investigate the lethal and sublethal toxicity of Bixafen + Fluoxastrobin + Prothioconazole EC 190 to the ladybird beetle Coccinella septempunctata when exposed to treated leaf surfaces.

^{*} Fisher's Exact test (one-sided), p-values are adjusted according to Bonferroni-Holm # Wilcoxon test (one-sided), p-values are adjusted according to Bonferrons-Holm.

Material and methods:

Test item: Bixafen + Fluoxastrobin + Prothioconazole EC 190 (40+50+100 g/L); Short code: BIX+FXA+PTZ EC 190 (40+50+100) G; Batch ID.: 2010-000848, Sample Description: TO \$\infty 8908 \infty 00; Specification No.: 102000023924-NN; Master recipe ID: 0106974-001; Analysed content of active ingredients: 3.90 % w/w bixafen (BYF 00587) (equivalent to 41.50 g/L), 486 % w/w fluoxastrobin (HEC 5725 E-ISO) (equivalent to 51.71 g/L), 9.59 % w/w prothioconazole (JAU 6476) (equivalent to 102.0 g/L); Density: 1.064 g/mL(20°C).

The test item was applied to detached leaves of Zea mays at rates of \$50, 600, 1025, 1750 and \$500 mL product/ha and the effects on the ladybird beetle Coccinella septempunctate were compared to those of a deionised water treated control. A toxic reference (active substance; dimethoate) applied a 26.5 mL product/ha (11 g a.s./ha) was include@to indicate the relative susceptibility of the dest organisms and the test system. The preimaginal mortality of 40 larvae was assessed ill the latch of the imagines (up to 16 days). The fertility and recurrently of the surviving hatched adults were then evaluated over the period of 17 days.

°Cstemperature and 660 - 8025% The climatic test conditions during the study were 23 relative humidity. The light / dark cycle was 16:8 h with a light intensity range of 1741 -6366 Link.

Dates of experimental work: March 25,2010 to May 05, 2010

Findings:

Validity criteria:

<u> </u>	
Validity criteria	Kecommended & Obtained
Mortality in water control **	27.5%
Corrected mortality reference item?	40% (100%)
Mean number of fertil eggs per female and day in water control	10.1

The results of this study can be considered as

Biological fundings

Mortality and reproduction in sich of the treatment sire survinarized below.

Effects of the test item on Coccinetta septempunctata

Test item Bixaten + Fluoxastrobin + Prothioconazole EC 190 (40 + 50 + 100 g/L)						
Test of	Test of anism C Coccinella septempunctata					
Expos	ure on.		De De	tached maize lea		
4	·		Mortality [%]		Reprod	luction
					Fertile eggs	Fertility
					per female and	[hatching
Treatment	mL productona	9ncorp (Corr.	P-Value(*)	day	rate in %]
Control	0 0	ړ © 27 <i>,5</i> ° ړ	,O`		10.1	85.8
Test item	.© 350 €	× 20.0 Q	3.4	1.000 n.sign.	6.8	83.4
Test item 0	750 00 S	×30.0 @,	3.4	1.000 n.sign.	9.6	88.3
Test item	≈ 1025 6	∠ 27. 5 ©	0.0	1.000 n.sign.	9.8	86.7
Test it@n	<i>⋒</i> ¥ 175 ©	47.5	27.6	0.211 n.sign.	14.7	81.7
Test item	> 3 <u>0</u> 00 ≪	65.0	51.7	0.004 sign.	21.7	87.6
Reference	26.5	100.0	100.0		n.a.	n.a.
item ©	"U"					

LR₅₀: 2867 mL product/ha; 95 % Confidence Interval: (2036 - 6769) (calculated with Probit analysis)

^{*} Fishe Exact test (one-sided), p-values are adjusted according to Bonferroni-Holm

n.a. not assessed

n.sign. not significant

sign. Significant



Conclusion:

The LR₅₀ was estimated to be 2867 mL product/ha. No adverse effect on reproduction was observed up to and including 3000 mL product/ha.

The figures obtained fulfil the validity criteria of the laboratory method using glass plates.

Report:

Title:

Report No.: Document No.:

Guideline(s):

Guideline deviation(s): **GLP/GEP:**

KCP 10.3.2.2/04

Toxicity to the green lacewing Chrysoperla carneg Steph. (Neuropera, Chrysopidae) using an extended laboratory test in Zea mays; Bixafen + Fluoxastrobio-Prothioconazole EC 190 (40 + 30 + 100 g/L)

CW10/016

M-384778-01-1

ET AL. (2000) modified ET AL. (2001) none

yes

Indend laboratory study was to investigate the Jethaland in the prothioconazole EC 190 football in the prothioconazole EC Objective:

The purpose of this extendend laberatory study was to investigate the Jethal and subjethal roxicity of Bixafen + Fluorastrobin + Prothiconagola Ecology Study was to investigate the Jethal and subjethal roxicity of Bixafen + Fluorastrobin + Prothiconagola Ecology Study was to investigate the Jethal and subjethal roxicity of Bixafen + Fluorastrobin + Prothiconagola Ecology Study was to investigate the Jethal and subjethal roxicity of Bixafen + Fluorastrobin + Prothiconagola Ecology Study S Bixafen + Fluoxastrobin + Prothioconagole E@190 to the green lacewing Chrysoperla carnea when exposed to treated leaf surfaces

Material and methods:

Test tem: Bixafen + Fluoxastrobin + Prothiocopazole EC 190 (46+50+190 g/L); Short code: BIX+FXA+PTZ EC 49+50+100 G Batch ID.: 2910-009848, Sample Description: TOX 08908-00; Specification No.: 020000239 4-NN; Material No.: 79969775, Analysed content of active ingredients: 3.90 w/w (41.50-g/L) bixafen (BYF 00587), 4.86 % w/w (51.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9 5 % w/w (102,0 g/L) prothic onazore (JAC 6476), Density: 1.064 g/cm³.

The test item was applied to detached leaves of Zea mays at Cates of 375, 655, 1150, 2000 and 3500 mL productha and the effects on the green lacewing Chrysoperla carnea were compared to those of a deionised water treated control. A toric reference factive substance: dimethoate) applied at 38.6 mL product/ha (16 g a.s/ha) was included to widicate the relative sasceptibility of the test organisms and the test system.

The preimaginal coortality of 40 larvae was assessed till the natch of the imagines (up to 22 days). The fertility and focundity of the surviving hatched adults were then evaluated over the period of one

The climatic test conditions during the study were 24.0 - 25.5 °C temperature and 65 - 76% relative humidity with a short decline 2 h to 57 %. The light / dark cycle was 16:8 h with a light intensity range of 1998 - 3894 Lux during the mortality phase and 2498 - 2732 Lux during the reproduction phase,

Dates of experimental work: April 15, 2010 to May 19, 2010

Findings:

Validity criteria:

Validity criteria	Recommended	Obtained N
Mortality in water control	≤ 20%	5.0%
Corrected mortality reference item	≥ 50%	86.8%
Mean number of eggs per female and day in water control	≥ 15	268
Mean Hatching Rate of the eggs (fertility) in water control	©≥ 70% °	81.8%

The mean number of eggs/female/day was above the lower limit. Given as validity criterion for the glass plate method (mean number of eggs/female/day: ≥ 15, mean natching rate; ≥ 70%) according (b) the historical database of the ring testing group FOGT, H. et al., 2000. Therefore the results of this study can be considered as valid. ed below.

Biological findings:

Mortality and reproduction in each of the treatments at

Effects of the test item on Chrysoperla carned Table CP 10.3.2.2- 4:

Test item Bixacen + Flooxastropin + Prothioconazole C 19040 + 50 + 100 g/L)					+ 100 g/L)	
Test or	ganism 🌋					
Exposi	ure on:		∯ ∂De	tached maize/lea	vę\$?	
	, Ø	7. 0	Mortality [%]			luction
	. * *	4			E ggs per	Fertility
					female and	[hatching
Treatment	mL product/ha	Dicorr. O	Scorr. Z	P-Value(9)	∜ day	rate in %]
Control	\$ 0 \$	5.0×			2 9.8	81.8
Test item	© 3 7.5 \	√y 15.0 ^	y 1,0,35 ~	0.1324n.sign.	19.5	79.5
Test item 🦠		£7.5 €0	34.2	0.001 sign.	20.0	78.6
Test item	₽ ₹50 < €	37.5	34.2	@.001 sign.	35.4	82.6
Test item?	2000	95.0	94.7	⊘<0.000⁄∂sign.	n.a.	n.a.
Test item	3500 g	S 825 (8 47.6	√ <0,001 sign.	n.a.	n.a.
Reference item	35 © 2	8 7.5, 6	\$\frac{1}{8}6.8\frac{1}{8}	Š	n.a.	n.a.

LR₅₀: 1107 mL product/ha/calculated with Probit analysis (95 % confidence interval could not be determined) * Fisher's Exact test (one-seed), parallues are adjusted according to Expressioni-Holm

n.a. not assessed

n.sign. not significant sign. significant

the test item on the reproductive performance at the rates of 375, 655 There were no adverse effects of and \$150 mL product/ha

Conclusion:

The LR₅₀ was estimated to be 1107 moroduct/ha. The figures obtained fulfil the validity criteria of the laboratory method using grass plates. No adverse effect on reproduction was observed up to and including 1150 mL product/har.



KCP 10.3.2.2/05 H; 2010; M-389548-01-1 Report:

Toxicity to the green lacewing Chrysoperla carnea STEPH. (Neuroptera, Chrysopidae) Title:

using an extended laboratory test (under semi-field conditions aged residues on Zea mays); Bixafen + Fluoxastrobin + Prothioconazole EC 190 (40 + 50 + 100 g/I

Report No.: CW10/026 M-389548-01-1 Document No.:

Guideline(s): ET AL. (2000) modified,

Guideline deviation(s): none **GLP/GEP:** yes

Objective:

The objective of this extended laboratory study was to investigate the ethal and subjethal toxicity of Bixafen + Fluoxastrobin + Prothioconazole EC 190 to the grown lacewing Chrysoperla cornea when exposed to aged residues of the test item on maize.

Material and methods:

Material and methods:

Test tem: Bixafen + Fluoxastrobin Prothoconozole 196 (40+30+100 g/L) Short code: BIX+FXA+PTZ EC 190 (40+50+100) G; Batch ID. 2010 000848, Sarople Description: TOX08908-00; Specification No.: 102000023924-NN; Wasterrecipe VD: 0106974-01; Apralysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen &BYF 00587 4.86 Q w/w (51.7 c/g/L) Thuoxastrobin (HEC 5725 E-ISO), 9.59 % w/w(102,0/g/L) prothioconazor (JAIO 6476), Density: 1.064 g/mL.

The test item was applied twice with 1.750 product/ha/jn 400 1/2 water/ha on potted maize plants with an application interval of 14 days. The control was treated with deign sed water in the same way as the test item. The toxic reference dimethoate was applied at 0,9386 L product/ha 16 g a.s./ha) in 400 L water/ha on the day of the second application on potted maize plants as well. For the further exposure dates it was applied directly on the maize feaves with 0.0386 L product/ha in 200 L water/ha). It was included to indicate the rolative susceptibility of the fest organisms and the fest system.

Aging of the sprey residues of the test item on the potted maize mants took place under natural semifield conditions with rain protection turing the whole study. Larvae of the green lacewing (Chrysoperla carnea) were exposed to these residues on the treated teaf surfaces.

Three bioassays were conducted. In the first one, the exposure started at day 0 after the last application and was evaluated up to 10 days. In the second one exposure started on day 14 after the last application and was assessed up to 19 daw and in the third bioassay, the exposure started 28 days after the last application and was assessed up to 200 days. In all bioassays, the preimaginal mortality of 40 larvae was assessed till the hatch of the imagines. The fertility and fecundity of the surviving hatched adults were then evaluated over the period of one week in the bioassay started on the day of the second

application and in the biography started 1 Qdays fater.

In the outgoor area the temperature ranged from 8.5 to 35 °C and the relative humidity from 22 to 100% during the aging time of the maize plants.

In the laboratory phase the temperature was $25 \neq 2$ °C, and the relative humidity was 60 - 90%. The Dates of experimental work: May 1852010 to July 19, 2010 light dark cycle was 16% h and the light intensity range during the mortality phase was 1438 – 2590 Lux. During the perroduction phase, we light intensity was 1893 - 3506 Lux.

Findings:

Validity criteria:

				0. 9
			Obtained	
Validity criteria	Recommended		Start of bioassay	
		0 DAAa	™ DAAª	28 DA Xª
Mortality in water control	≤ 20%	2.5%	🗐 15.0% 💍	* 1 0.0 % (
Corrected mortality reference item	≥ 50%	69.2%	97.1%	~\$5.0% ~~
Mean number of eggs per female and day	≥ 15	29.0	32 1	n.ac
in water control	≥13 *	29.00	32.1	
Mean hatching rate of the eggs (fertility)	> 7090	70.20/-	8,00,0/	n.a
in water control	≥ /030	120370	° 04.270	Oñ.a. 🐠

n.a. not assessed

The results of this study can be considered as valid

Biological findings:

In the first bioassay (0 DAA), the premaginal mortality in the control group was 2.5 % and in the test item group the corrected mortality was 7.7% which was not statistically significant different compared to the control. In the reference item group the corrected mortality was 69.2 %.

In the second bioassay (14 DAA), the preimaginal mortality in the control every was 15.0 %. No corrected mortality (-2.9 %) resulted in the test item group. In the reference item group the corrected mortality was 97.1 %.

In the control group of the third bioassay (28 DAA) the preimaginal mortality was 10.0 %. No corrected mortality (-2,8%) resulted in the test item group. In the reference item group the corrected mortality was 75.0 %

The results are shown in the following table.

Effects of Bixaren + Flyoxastrobin + Prothioconazole EC 190 on Chrysoperla carnea

Test item: Bixafen + Fluoxastropin + Pothioconazole EC 190 (40 + 50 + 100 g/L)					
Application rate:		2 x 1.75% product/ha			
Test organism:		Chresoperla arnea			
Exposure on:	Dicied spray depo	sits on maize leaves (from trea	ted maize plants)		
Start of bioassay:	0.9 AA 1 Y	14 DAA <u>a</u>	28 DAAª		
		Preimaginal Mortality (%)			
Control:	2,50	O 15.0	10.0		
Test item:		¥ % 12.5	7.5		
Reference_item:		97.5	77.5		
<i>®</i> ′	, & Cor	rected Preimaginal Mortality ((%)		
Test item:		9 -2.9	-2.8		
	value Ø.179 flot	(p-value 0.741, not	(p-value 0.784, not		
^	significant D	significant ^b)	significant ^b)		
Reference item:	69.2	97.1	75.0		
		Reproduction			
	Nu	mber of eggs per female and d	ay		
Control:	Ö 29.0	32.1	n.a.		
Test iten.	<u>3</u> 27.7	33.3	n.a.		
Control:	Fertility (hatching rate in %)				
Cantrol:	79.3	84.2	n.a.		
Test item	81.4	75.4	n.a.		

n.a. not assessed

a Days after the second application

^a Days after the second application

b Fisher's Exact test, one-sided, p-values adjusted according to Bonferroni-Holm

Conclusion:

In this study 7.7% corrected preimaginal mortality of the test item was found in the first bioassay started on the day of the second application. A second bioassay was started 14 days after the last application which showed no corrected mortality (-2.9%). A third bioassay was initiated 28 days after the last application and showed no corrected mortality (-2.8%) as well.

application which showed no corrected mortality (-2.9%). A third bioassay was initiated 28 farys after the last application and showed no corrected mortality (-2.8%) as well.

There were no adverse effects of the test item on the reproductive performance in the first and second bioassay (0 and 14 DAA). For the third bioassay (28 DAA) the reproductive was not assessed as both earlier bioassays indicated no adverse effect on reproduction.

CP 10.3.2.3 Semi-field studies with non-target arthropods.

CP 10.3.2.4 Field studies with non-target arthropods.

CP 10.3.3 Other routes of exposure for non-target arthropods.

The exposure of non-target arthropods assessed in subspect P 10.3.2 is spinishered the main route of exposure for non-target arthropods. There were no adverse effects of the test item on the reproductive performance in the first and second

s of exposition against a contract of the cont

CP 10.4 Effects on non-target soil meso- and macrofauna

The risk assessment procedure follows the requirements as given in the EU Regulation 1107 the Guidance Document on Terrestrial Ecotoxicology.

Predicted environmental concentrations used in risk assessment

Predicted environmental concentrations of the active substance and the metabolites in soil values were calculated and reported in MCP 9.1.3. The relevant Place values considered for calculations are summarised in the table below. Maximum values are used for risk assessments

Table CP 10.4-1: Maximum PEC_{soil} values

Compound	° Cervals, 2% 87.5 g fluox (S) (80% interception) PEC soil	robin/ha 🎺
O	(80% inverception)	
	PEC _{soil}	
		. ~ ~ ~ ~ ~ ~
Bixafen + Fluoxastrobin + Prothioconazo EC 190	0 4 6 00993 ^A	
Fluoxastrobin (E+Z)		
HEC 5725-E-des-chlorophenyl		
HEC 5725-carboxylic and	0.006 S	
2-chloropheno	\$\tag{\text{0.005}}\$	<u>,</u>

Bold values: worst case considered in rist assessment

CP 10.4.1

Table CP 10.4.1 Enapoints used in kisk assessment

Test substance T	est species	¥ - ©	Endpoint &	Reference
D. (6)	Earthworm,	NOEC		;; 2010; M-376161-
Prothioconazole EC re	eproduction	NOE	56 mg prod./kg dws 28 ^A mg/prod./kg dws	01-1
190	Y Q %			KCP 10.4.1.1
Fluoxastrobin EC	Eart Form, &	NOE S	1000 g a.s./ha 4.32 ^B mg a.s./kg dws 2.16 ^{A,B} mg a.s./kg dws	; 2001; M-057395- 01-1
HEC 5725 E-des- chlorophenyl	Earth Frm, Eproquetion	MOEC W	≥ 1000 mg p.m. /kg dws	2002; M-058532- 01-1
	arthworm, Q	NO EC	90 mg p.m. /kg dws	; 2015; M-536000-01-1 KCA 8.4.1
2-chlorophonol	Troduction	NOEC	≥ 0.216 [°] mg a.s./kg dws	EFSA Scientific Report 102 (2007)

dws = dry wight soil; a.s. active substance; p.m. = pure metabolite

Endpoint corrected by a factor of 2 due to high organic matter content of test soil and log Pow of >2

Based on formulation density of 10064 g/nd, and 2 applications at 14 d interval (to degradation between the 2 applications and 80% interception: worst case

Including consideration of accumulation for flue xastroom after long-term use considering a soil mixing depth of 20 cm

The endpoint of 1.53 mg so kg dws listed in the EFSA Scientific Report 102 (2007) is based on the standard conversion. In the actual study the test material had been sprayed onto the soil, the recalculated endpoint according to the actual test conditions is calculated based on the actually applied test rate of 1090 g a.s./ha, test sessel surface of 198 cm² and test substrate of 500 g dws per test vessel

for the metabolite 2-chlorophenol, in the absence of earthworm reproduction data the conservative assumption has been made that the metabolite is 10 times more toxic than the parent a.s. (EFSA conclusion 102 (2007))

Bold values: endpoints used for risk assessment

Risk assessment for earthworms

Based on the endpoints in the table above the TER values are calculated using the following equations

 $TER_{LT} = NOEC / PEC_{soil}$

The risk is considered acceptable if the TER_{LT} is >5.

For lipophilic substances (log Pow > 2) all results from the laboratory studies are confected by a factor 2 even when the organic matter is less than 10%.

This was applied to fluoxastrobin ($logP_{ow} = 2.86$, refer to Section 2.0f the ACA document, CA 2.7)

Table CP 10.4.1-2: TER calculations for earthworms

Compound	Species	Endpoint [mg/kg]	PECsol,max [nrg/kg]	TER,	Trigger
	Q' & C	Coreals 🔊 🧳			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Bixafen + Fluoxastrobin + Prothioconazole EC 190	Earthworm, reproduction	NOEC 28	0.993	28.20	5
Fluoxastrobin (E+Z) ^A	Carthword, reproduction	© OECr ≥ 2.16	\$\int 0.047\$\int \)	3 46	5
HEC 5725-E-des-chloopheny	Earthworm, reproduction	NOEC \$\frac{1000}{0}	8 011 3	©) ≥ 90909	5
HEC 5725-carboxylic acid	`≽Earthworm, ∧ У reprøduction		Ø 0.0 90	15000	5
2-chlorophenor	Earthworks,	ØEC ≥ 0.21®	% .005	≥ 43.2	5

a conducted with the formulation Fluox Strobin EC 100

All TER values calculated with the worst case PEC_{soff, max} values exceed the trigger value of 5 indicating that no unacceptable adverse effects on earthworms are to be expected from the intended use of the product.

CP 10.4.1.1 Earthworms sub lethal effects

Terrestrial Risk Assessment

No study on the chronic toxicity of 2-chlorophenol to earthworms is available, but some information can be taken from the chronic earthworm study with the Fluoxastrobin EC 100 formulation presented in Annex II. In this study the application of 1.0 kg a.s./ha fluoxastrobin had no influence on mortality, weight development, and reproduction of earthworms after 56 days. The NOEC (28 days) based on mortality and weight of adult earthworms is 1.0 kg a.s/ha. Additionally it is a NOEC and not an LC₅₀. Assuming that 2-chrorophenol is formed and reaches its maximum between about 15 to 23 days (see Document MCA7, Point 7.1.2), the effects of this metabolite on mortality and weight of adult earthworms can be considered to be covered up to an application of 1.0 kg fluoxastrobin/ha. Since this application rate is more than 28 times higher than the actual highest use rate (cereals (80% interception): 35 g fluoxastrobin/ha) it can be assumed that higher amounts of the metabolite were present in the study than would occur under practical field conditions.

for the metabolite 2-chroropherol, in the absence of Carthworn reproduction data the conservative assumption has been made that the metabolite 15/10 times more toxic than the parent a.s. (EFSA conclusion 102 (2007))



Additionally, for the purpose of the earthworm risk assessment the conservative assumption has been made that the metabolite is 10 times more toxic than the parent a.s. (EFSA conclusion 102 (2007))

Report: KCP 10.4.1.1/01 ,; 2010; M-376161-01-1

Title: Bixafen + fluoxastrobin + prothioconazole EC 190 (040+050+100) G: Subjethal

toxicity to the earthworm Eisenia fetida in artificial soil with 5 % peat 🔘

Report No.: 10 10 48 027 S Document No.: M-376161-01-1

Guideline(s): OECD Guideline 222:, Earthworm Reproduction Rest (Eisenia fedda / Ebenia andrei)

(April 2004); ISO 11268-2: 1998(£): "Soil quality - Effects of pollutants on

earthworms (Eisenia fetida) — Part 2: Determination of effects on reptoduction, July

1998.

Guideline deviation(s): none GLP/GEP: yes

Objective:

The purpose of this study was to determine the sublethal effects of Bixafer + Fluoxastrobin + Prothioconazole EC 190 on reproduction, mortality and growth of the earth orm *Estenia fetida* by dermal and alimentary uptake using an artificial soil in a laboratory test. The test was performed according to the recommendations of the OECD Guideline 222 (2004) and the International Standard ISO 11268-2 (1998).

Material and methods: 💩

Test item: Bixafen + Fluoxastrobin + Profinioconazole EC 190 (040+050+00) G; Short code: BIX+FXA+PTZ EC 190 (40+50+100) G; Batch D.: 2010-000848, Sample Description: TOX08908-00; Specification No. 102000023924-NN, Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BYD 00580), 4.86 % w/w (51.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothoconazole (JAU 6476); Density: 1064 g/mL (20°C). Water solubility: dispersible.

10 Adult Eisenia fettua anatrei (about 3 months old) per replicate (8 control replicates and 4 replicates per treatment level) were exposed to an untreated control and 10-48-32-56-100 mg test item/kg soil dry weight (d.w.) containing 74.% quartz sand, 20.9 kaolin clay, 5% sphagnum peat and 0.3% $CaCO_3$, at 18.5-21.5°C and a photoperiod: light, dark = 16 k. 8 h (620 lx). During the test, the adult earthworms were fed with air-dried and finely ground horse manure. Mortality and biomass change were determined after 4 weeks and reproduction was determined after 8 weeks.

Toxic standard: 5 and 10 we Nutdazim 50 FLOW/kg will dry weight; control: deionised water, solvent control: none.

Dates of work: Mar 29, 2010 to May 24, 2010

Findings:

Validity criteoa:

Validity criteria	f .	Obtained
Adult mortality after 4 weeks	≤ 10 %	0 %
Number of juyerile per replicate	≥ 30	102, 69, 72, 84, 110, 89, 92, 103
Coefficient of variation of reproduction	≤ 30 %	16.3 %

All validity criteria were met. Therefore this study is valid.

Reference test:

In the most recent study (BioChem project No. TER-R 09 10 48 001, dated July 17, 2009) the reference item Nutdazim 50 FLOW (Carbendazim, SC 500) was tested at concentrations of 5 and 10 mg product/kg soil dry weight. The number of juveniles was reduced by 65 and 92 % (mean number of juveniles = 51 and 11) after 8 weeks of test duration when compared to control (mean number of juveniles = 143). Therefore, the observed effects assure a high sensitivity of the test system.

Biological findings:

The test item caused no mortality at concentrations of 10, 56 and 100 mg test item/kg soil by weight.

2.5 and 5.0 % mortality were found at 18 and 32 g/test item/kg soil dry weight, respectively. No mortality (0 %) occurred in the control group.

No effects on behaviour (including feeding activity) of the worms were observed during the test. The test item caused no statistically significant change in bomass (change in fresh weight after 4 weeks relative to initial fresh weight) compared to the control treatment, i.e. a weight increase of 26.6, 26.2, 25.4, 24.1, 25.0 and 21.4% in the control group and at concentrations of 10, 18 32, 56 and 100 mg test item/kg soil dry weight, respectively.

Statistically significant effects on number of juveniles compared to the control group were recorded at the concentration of 100 mg test item/kg soil kry weight.

The results are summarised in the below.

Table CP 10.4.1.1-1: Effects of the test item on mortality, growth and reproduction of Eisenia fetida

Bixafen + Fluoxastrobin + Prothoconasole EC(190 (040+050*100)) G mg test tem/kg	d.w.]				
Control 3 10 6 4 32	\$ 56	100				
Mortality of adali worms after Dweeks						
Mortality (%)	0	0				
Biomass change (change in fresh weight affer 4 weeks relative t	toOnitial fresh weight)				
Mean (mg) 999 987 0 981 991.4	94.2	80.8				
Mean (%) 26.6 26.2 25.4 25.4 24.1	25.0	21.4				
Number of jurgariles per surviving adult worm after	r 8 weeks					
Mean 9.00 5 8.6 0 06 0 09.4	8.4	6.5				
Nightber of Quveniles per keplicate after 8 we	eks					
Mean \$\infty 80.1 \(\times 86.3 \times \) \(\times 94.3 \) \(\times 90.3 \)	83.5	65.0*				
Reduction of reproduction for treatment (%)						
% to control 0 0 4.3 4.6 0.1	-7.4	-27.9				

^{*} statistically significantly different compared to control bunnet C_1 -test, one-sided smaller, $p \le 0.05$)

Conclusion:

Bixaten + Fluoxastrobin + Prothioconazole CC 190 showed no statistically significantly adverse effects on mortality and growth of the earthworm *Eisenia fetida* in artificial soil up to 100 mg test item/kg soil dry weight, i.e. the highest concentration tested. The test item showed statistically significantly adverse effects on reproduction at 100 mg test item/kg soil dry weight. Therefore, the overall No-observed-Effect-Concentration (NOEC) was determined to be 56 mg test item/kg soil dry weight, and the Lowest-Observed-Effect-Concentration (LOEC) was determined to be 100 mg test item/kg soil dry weight. The EC50 could not be calculated, but it can be concluded that the EC50 is higher than 100 mg test item/kg soil dry weight, the highest tested concentration.

CP 10.4.1.2 Earthworms field studies

Not required as the risk to earthworms is acceptable.

CP 10.4.2 Effects on non-target soil meso- and macrofauna (other than earthworks)

Table CP 10.4.2-1: Endpoints used in risk assessment

Test substance	Test species		Endpoint O	Reference
Bixafen + Fluoxastrobin +	Folsomia candida	NOEC NOE Corr	562 mg Prod./kg dws 281 mg prod./kg dws	(2010) M-375960-01-1 &KCP 16.4.2.1
Prothioconazole EC 190	Hypoaspis aculeifer	NOEC .	562 mg mød./kg/dws 281 mg/rod./kg/dws ¹	(201 6) M-372844-01-1 KCP 10.4.2.1
Fluoxastrobin	Folsomia candida	NOEC Q	1 Qng a.s./kg dys.	(20%) M-081095-01-1
	Hypoaspis acult Ger ²⁾	NOTE	710 mas.s./kg dws ³	M -039155-01-1
HEC 5725-E-des-	Folsomia Qndida	NOEC	> 000 mgo.m./leg dws	(2001) M-033640-01-1
chlorophenyl	Hypodaspis aculeifer	NOEC O	≥ 160 mg p.m./kg dws	(2013) M-475673-01-1 KCA 8,4.2.1
HEC 5725	Folsowia capada	NOTC &	≥ 100 mg pan.//kg dys	(2014) M-479456-01-1
HEC 5725- carboxylic acid	Hypoaspis aculeifer	NOE	2 100 Grig p.m. kg dws	KCA 8.4.2.1 (2014) M-484792-01-1
, 0	Folsomia candida	OEC	mg pm./kg dws	(2013) M-472327-01-1
2-chtorophenol	Hypoaspisaculeise	NOE Corr	5 mg p.m./kg dws ¹⁾	KCA 8.4.2.1 (2013)
	1 Trypouspis acute type	ONOEC COTT	28 mg p.m./kg dws ¹⁾	M-475688-01-1 KCA 8.4.2.1

dws = dry weight soil; a = active substance; p n. = pure metabolite

Bold values: and point sused for risk assessment

2) Endpoint derived from EC 100 formulation

Risk assessment for other non-target soil meso- and macrofauna (other than earthworms)

Ecotoxicological endpoints and PEC values used for TER calculations for soil non-target macroorganisms are suffinanced below. TER values were calculated using the equation:

TER NOEC PECSoil

The risk is considered acceptable if the TER is >5.

¹⁾ Corrected endpoint due to lipophilic substance (og Pow 2)

not corrected due to low organic matter content in test substrate LUFA 2.1

Table CP 10.4.2-2: TER calculations for other non-target soil meso- and macrofauna

Compound	Species	Endpoint [mg/kg]		PEC _{soil,max} [mg/kg]	TER _{LT}	Trigger &
		Co	ereals	d		
Bixafen +	Folsomia candida	NOEC	281	0.993 ,	283	
Fluoxastrobin + Prothioconazole EC 190	Hypoaspis aculeifer	NOEC	28	0.903	283	
Fluoxastrobin	Folsomia candida	NOEC	£5.0	©0.047	406.4 D	
(E+Z)	Hypoaspis aculeifer	NOEC	10	Q 0.047	212.8	& 5 & &
HEC 5725-E-des-	Folsomia candida	NOEC Q	© 2 100 ~	.00011	₹ ≥9091	\$ 50°
chlorophenyl	Hypoaspis aculeifer	NOEC,	≥100 ×	×0.011	29 091%	\ \ightarrow{\ightarro
HEC 5725-	Folsomia candida	NOE© "	<u></u> ≥ 100 / (0.000	® 16 66 7	<u>4</u> , 5 , .
carboxylic acid	Hypoaspis aculeifer	NO C	Ø <u>≥</u> 160	Q .006 ©	≥ 16 6 67	507
2-chlorophenol	Folsomia candida	NOEC	0,75 C	\$0.005\square	\$\tag{900}	
2-cinorophenor	Hypoaspis aculeifer	NOES	28 7	0.005	© 560 €	₂ 5

All TER values calculated with the worst case PEC so max values clearly exceed the trigger value of 5 indicating that no unacceptable adverse effects on soil matro-organisms are to be expected from the intended use of the product. «

Species level testing **CP 10.4.2.1**

2010; M@75964-01-1 Report:

Fluoxastrobin y protheconazone EC 30 (040+050+100) G: Effects on the Title:

reproduction of the collembolans Folsomia candida

Report No.: Document No:

DECD 232 (2009): OECD Guideline for testing of chemicals No. 232 (adopted 7 Guideline(\$)/

September 2009): Collembolar reproduction Pest in soil

ISQ 11267 (1999): Soil quality - Inhibition of reproduction of Collembola (Folsomia

candida) y soil pollutang

Guideline deviation(s): **GLP/GEP:**

Objective

The purpose of this study was to determine effects of different concentrations of Bixafen + Fluorastrobin + Prohiocopazole & C 190 on the reproductive output of the collembolans Folsomia candida as a representative of soft micro arthopods during a test period of 28 days. After 4 weeks the number of offering (juveniles) and surviving parental collembolans were counted. EC50 and NOEC/LOEC were determined. «

The test was performed in accordance with the OECD Guideline 232 (2009) and the International Standard \$60 11267 (1999).

Material and methods:

Test iten Bixafen + Fluoxastrobin + Prothioconazole EC 190 (040+050+100) G; Short code: BIX+FX,A+PTZ EC 190 (40+50+100) G; Batch ID.: 2010-000848, Sample Description: TOX08908-00; Specification No.: 102000023924-NN; Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BYF 00587), 4.86 % w/w (51.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothioconazole (JAU 6476); Density: 1.064 g/mL (20°C). Water solubility: dispersible.

Ten juvenile collembolans Folsomia candida (9-12 days old) per replicate (8 control replicates and 4 replicates per treatment level) were exposed to control (deionised water) and 100 - 177 - 316 - \$\mathbb{g}2 \cdot\$ 1000 mg test item/kg dry weight soil. During the test, they were fed with granulated dry Feast supplied twice a week. During the study a temperature of 18.5 - 21.1 °C and light regime of 900 Lux, 16 h light:8 h dark was applied. The artificial soil was prepared according to the guideline with the following constituents (percentage distribution on dry weight basis): 74.7% industrial quartz sand 5% sphagnum peat, dried and finely ground, 20% kaolin clay and 0.3% Calcium carbonate (CaCO₃). Mortality and reproduction were determined after 28 days

Toxic standard 44 – 67 – 100 - 150 - 225 mg boric acid/ kg dry weight soil; control: deionised waters solvent control: none.

Dates of work: April 28, 2010 to May 26, 2010

Findings:

Validity Criteria:

Validity criteria	Recommended & Obtained
Mean mortality of adults	©
Mean number of juvenile per test vessel	$Q \geq Q00$ $Q \sim A_{Q}$ Are age $Q = 1524.5$ Wessel
Coefficient of variation (mean number of juveniles)	230 % 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

All validity criteria were met. Therefore this study is valid.

Reference test:

In a separate study BioChem project No. R No. 1048 006 S, dated April 15, 2010), the EC50 (reproduction) of the reference from boric acid was calculated to be 108,6 mg product/kg soil dry weight. Therefore, the observed effects assure a high sensitivity of the test system.

Biological findings:

Mortality &

The test tem caused 75, 7.510.0, 0.0 and 10.0% parental mortality at the test concentrations of 100, 177, 316, 562 and 1000 mg test item kg dry weight soil respectively. 6.3 % parental mortality was observed in the control. No statistically significant effect on parental mortality was found for any concentration tested.

No effects on behaviour of the collembolans were observed during the test.

Reproduction

The number of juvenile springtails counted four weeks after having introduced the parental collembolans into the test vessels was on average 1524.5 in the control and 1637.0, 1530.5, 1463.0, 1417.5 and 830.8 at the test concentrations 100, 177, 316, 562 and 1000 mg test item/kg dry weight soil, respectively. The test item concentration of 1000 mg test item/kg dry weight soil resulted in a statistically significant decrease in the number of juvenile collembolans compared to the control after 4 weeks.

sults are summarised in the tables below.

Table CP 10.4.2.1-1: Effects of the test item on mortality and reproduction of Folsomia candida

Endpoint	Bixafen + fluoxastrobin + prothioconazole EC 190 (040+050+100) G (mg test item/kg dry weight soil)						
	control	100	177	316	562	1000	
Mortality of parental collembolans after 4 weeks (%)	6.3	7.5	7.5	10.0	10.0	10.0	
± SD	0.7	1.0	1.0	<u></u> ≤0.8	Q.8 .	Q 0: &	
Mean number of juveniles after 4 weeks	1524.5	1637.0	1530.5	2 463.0	0.417.50°	8 3 0.8* ©	
± SD	186.2	240.2	120.5	P 89.4	¥ 161 0	6 49. 2 €	
CV %	12.2	14.73	7.9 Q	6.1	4 1.4 (5. %	
% Reduction of reproduction compared to control	-	4A	-0,4	4.0	7.0	45.5	

^{*} statistically significantly different from control (Dunnatet-t-test one

Percent reduction: (1-R_t/R_c) * 100 %

 R_t = the reproduction observed in the treated group.

 R_c = the reproduction observed in the control group

Negative values indicate a higher reproductive performance compared to

Conclusion:

Bixafen + Fluoxastrobin + Prothiocorazole EC 190 showed no statistically significantly adverse effects on the adult mortality of the collectionans Folsomia candida to artificial soft up to 1000 mg test item/kg dry weight soil. The test item coused a significant coduction of the collembolans Folsomia candida in artificial soil at 1000 and test item/kg soil dry weight, i.e. the highest concentration tested. Therefore, the overall No-Observed-Effect-Concentration (NOEC) was determined to be 562 mg test item by soil dry weight, and the Lowest-Observed-Effect-Concentration (LOEC) was determined to be 1000 mg test item/kg soil dry weight.

The EC₅₀ for number of juveniles was calculated to be 1050 mg to item Rg soil dry weight with 95 % confidence limits ranging from 977 of 11800 mg test item kg soil bry weight.

\$\tilde{2}010; M-372\tilde{8}\tilde{4}-01-1

Bixafen + Puoxastrobin + prothio onazole EC 190 (040+050+100) G: Effects on the reproduction of the predatory mite Hypoaspis aculeifer Title:

\$ 026\$ 026\$ Report No.: Document No. M-3\2844\0\1-1

OCCD 226 (2008) Predatory mit (Hypoaspis (Geolaelaps) aculeifer) reproduction Guideline(s)

Guideline deviation(s) GLP/GEP:

Objective:

The purpose of this study was to determine potential effects of Bixafen + Fluoxastrobin + Prothiocon Tole FO 1900 the mortal and reproductive output of the soil mite species Hypoaspis aculeifer CANESTRINI) as a representative of soil micro-arthropods during a test period of 14 days. A concentration response relationship was established from which NOEC/LOEC and EC50 were determined The test was performed according to the guideline 226 (2008).

SD: standard deviation, CV: coefficient of variation

Material and methods:

Test item: Bixafen + Fluoxastrobin + Prothioconazole EC 190 (40+50+100) G; Short code: BIX+FXA+PTZ EC 190 (40+50+100) G; Batch ID.: 2010-000848, Sample Description: TO \$\infty 8908 \infty 00; Specification No.: 102000023924-NN; Material No.: 79969775; Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BYF 00587), 4.86 % w/w (31.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothioconazole (JAU 6476); Density 1.064 g/mL $(20^{\circ}C)$.

Ten adult, female Hypoaspis aculeifer per replicate (8 control replicates and 4 replicates per treatment level) were exposed to control (deionised water) and 400 - 178 - 31,0-562 - 1000 mg test item fig dry. weight soil. In each test vessel 20 g dry weight artificial soil were weighed in The Hopoasple aculeifer were taken from a synchronised culture with an age difference of two days During the test, they were fed every 2 days with Tyrophagus putrescentiae (SCHRANK). During the study a temperature of 19.7 - 21.8 °C and light regime of 471 Lux, 16 k light 8 h dark was applied. The artificial soil was prepared according to the guideline with the following constituents (percentage distribution on dry weight basis): 74.7% industrial quartz sand, 5% sphagnam peat, 20% alolin lay and approximately 0.3% calcium carbonate (CaCO₃).

After a period of 14 days mortality and reproduction were determined. The surviving miles and iuveniles of Hypoaspis aculeifer were extracted from each test replicate using a MacFactor highgradient. Extracted juveniles and adults were collected in a fixing solution and being afterwards counted.

Toxic standard (Dimethoate EC 400): 4.00 - 5.12 - 6.40 - 8.00 - 10.00 mg a.s./control: deionised water, solvent control none.

Dates of work: April 22, 2010 to May 19, 2010

Findings:

Validity criteria: kg dry weight soil;

Validity criteria	Obtained
Mean mortality of adult febrales © 20 %	1.3 %
Mean number of juvesnile per replicate >> ≥50	268.3
Coefficient of variation (mean number of juveniles per replicate)	5.9 %

All validity criteria were met. Therefore this study is valid.

Reference Lest:

In a separate study (BroChen project No. R 10 10 48 003 S, dated March 24, 2010), the EC₅₀ (reproduction) of the reference item Dimethoate EC 400 was calculated to be 6.6 mg a.s./ kg soil dry weight. The results of the reference test demonstrate the sensitivity of the test system.

Biological results

Mortality

Bixafen + Tluoxastrobix + Prothioconazole EC 190 caused no statistically significant mortality of adult mites up to a test concentration of 562 mg/kg soil dry weight at the end of the 14-day exposure period. At the rester concentration of 1000 mg test item/kg soil dry weight a statistically significant mortality of adult portes of 15 % was observed.

In the courtol group a parental mortality of 1.3 % observed. The mortality in the test item treatment groups ranged between 0 and 15.0 %.

Reproduction

The number of juveniles 14 days after having introduced the parental mites into the test vessels wallon average 268.3 in the control and 275.8, 289.3, 263.5, 245.3 and 80.8 at the test concentrations \$\infty\$100 178, 316, 562 and 1000 mg test item/kg soil dry weight. The test item paused no standically significant reduction of reproduction up to a test concentration of 562 mg/kg soil dry weight. At the tested concentration of 1000 mg test item/kg soil dry weight a statistically significant reduction of 59.9 % was observed.

Table CP 10.4.2.1- 2:

% was observed.				•			
The results are summaris			Ž.) ()			
Table CP 10.4.2.1- 2: Su	mmary of the production	/	, ,	~(O' _	~~ ~~	mortality	and H
Endpoint	Bixafen + Flu	oxastrobin/- mg te:	stintem/kg s	pazole EC vil dry Wei	190 (0≱0 +0 ght)	50€100) G	
	Control		ू©178√	316∕	√ 562 ©	1000	i i
Mortality of soil mites after 14 days (%)	1.3	\$\frac{1}{2}.5\frac{1}{2}	00	2.5	7.5%	\$\frac{\lambda}{\text{5}}\frac{\lambda}{\text{5}}\frac{\lambda}{\text{5}}	
Mean number of juveniles after 14 days	268.3	275.8	×289.3×	263 95	245.3 \$245.3 \$	~ ~ ~	Q V
CV (%)	5.9	_&5.0	2,0	6.2	13.0	43.5	7
Reduction of reproduction (% to control)		-28,	9 .8 4	1.80	8.6	69.8	

^{*} statistically significant difference compared to control (Fisher's Exact Binomial Fest for mortality⊘p ≤ 0.05; Dunnett's ttest for reproduction; $p \le 0.05$)

Calculations were done using non-rounded values

Percent reduction: $(1 - R_t/R) * 100\%$

 R_t = the reproduction observed in the treatest group (8)

Rc = the reproduction of served by the compol group

Negative values indicate a higher reproductive performance compared to control

Conclusion: (

Bixafen + Pluoxastrobin, + Prothioconazole CC 190 showed no statistically significantly adverse effects and adult mortality and reproduction up to a test concentration of 562 mg/kg soil dry weight. Therefore, NOEC and LOEC for mortality and reproduction were determined to be 562 mg test item/kg soil dry weight and 1000 mg test item/kg soil dry weight, respectively.

The EC₅₀ was calculated to be \$44.6 mg test item/kg soil by weight (95 % confidence limits: 789.5 -897.6 mg test ippm/kgooil dry weight

No higher tier testing was performed or as required.

CP 10.5 Effects on soil nitrogen transformation

Table CP 10.5-1: Endpoints used in risk assessment

Test substance	Test design	I	Endpoint	>	Reference
Bixafen + Fluoxastrobin + Prothioconazole EC 190	Nitrogen transformation, 28 d	no unacceptable effects	≥ 24.83 mg prod./k (= 17.5 L prod./	g dws	,; 2000; M-369853-01-1 RCP,1025
Fluoxastrobin		no unacceptable effects	≥ 2.83 mg a kg	dws	9999; W -0246 86 -01; (
HEC 5725-E- des- chlorophenyl	Nitrogen transformation,	no unaccepta effects	≥ 2.73 Ng p.m. Kg	g dws	2000; M 026016 01-
HEC 5725- carboxylic acid	28 d	unasceptable	01.27 no. p.m./kg	dws	; 2007; M-033474-01-
2-chlorophenol	Ó	unaceptable >	20.783 ms.p.m./kg	dws*	EFA Sciontific Report 102 (2007)

a.s. = active substance, p.m. = pure moabolite, prod = product, dws dry weight soft

Risk assessment for Soil Nitt ogen Fransformation

Table CP 10.5-2: Risk Assessment for soil micro organisms

Compound Species Endpoint Img/kgs	PEC _{soil,max} [mg/kg]	Refinement required
© Q A Cereato		
Bixafen Fluoxastrobin + Soil Gicro- Prothioconazole EC 900 organisms, 24.83 mg prod kg dws	0.993	No
Fluoxastrobin (P+Z) Soil micro- organisms ≥ 2083 mg a.s./kg dws	0.047	No
HEC 5725-E-des-chlorophenyt Soil micro 2.73 mg p.m./kg dws	0.011	No
HEC 5723-carboxylic acid Soil micro- organisms 2.27 mg p.m./kg dws	0.006	No
2-chlorophenol Soil micro 20.283 mg p.m./kg dws*	0.005	No

a.s. = active substance, p.m. = pure metabolite, prod. = product, dws = dry weight soil

According to current regulatory requirements the risk is considered acceptable if the effect on nitrogen mineralisation at the recommended application rate of a compound/product is $\leq 25\%$ after 100 days.

For the metabolite 2-chlorophenol, in the absence of nitrogen transformation data the conservative assumption has been made that the metabolite is 10 times more toxic than the parent a.s. (EFSA conclusion 102 (2007)). It is assumed that no influence occurs up to a concentration of 0.283 mg 2-chlorophenol/kg soil. This is conspicuously higher than the worst case PEC_{soil}.

^{*} for the metabolite 2-chlorophenol, in the absence of nitrogen transformation data the conservative assumption has been made that the metabolite is 10 times more took than the parent a.s. (EFSA conclusion 102 (2007)) **Bold values:** endpoints used for risk assessment.

^{*} for the metabolite 2-chloroplenol, in the absence of nitrogen transformation data the conservative assumption has been made that the metabolite is 10 times more toxic than the parent a.s. (EFSA conclusion 102 (2007))



In no case did deviations from the control exceed the threshold level of 25% at 28 days after application. The tested concentrations by far exceeded the maximum predicted environmental concentrations in soil of the respective components. This indicates acceptable risk to soil microorganisms for the intended uses.

KCP 10.5/01 T; 2010; M-369853-01-1 Report:

Bixafen + fluoxastrobin + prothioconazole EC 190 (040+050+100) G Title:

activity of soil microflora (nitrogen transformation (st)

10 10 48 020 N Report No.: Document No.:

MI-369853-01-1
OECD 216; adopted January 2, 2000, OECD Guideline for the Testing of Chemicals Soil Microorganisms: Nitrogen Transformation.
none
yes Guideline(s):

Guideline deviation(s): **GLP/GEP:**

Objective:

The purpose of this study was to dearming the effects of Bixafen + Fhoxastobin + Frothioconazole EC 190 on the activity of soil migroflora with regard to nitrogen transformation in a laboratory test. The test was performed in accordance with OECD mideline 216 (2000) by measuring the nitrogen turnover.

Materials and Methods

Test item: Bixafen Flugsastrobin + Prothiceonazole EC 190 (40+50-100) G; Short code: BIX+FXA+PTZ EC 90 (40+50+000) G Batch 1D.: 2010-000848, Sample Description: TOX08908-00; Specification So.: 162000023924 NN; Master recipe ID: 6106974001; Analysed content of active ingredients: 3.20 % www baxafen (BYF 00587) equivalent to 41.50 g/L), 4.86 % w/w fluoxastrobin (FEC 5525 EDSO) (Quivalent to 54.71 DL), 950 % w/w prothioconazole (JAU 6476) (equivalent to 102.0 g/L); Density 1.064 g/mL 20°C)

A loamy and soil (DIN 4220) was sposed for 28 days 2.48 and 24.83 mg test item/kg soil dry weight. Application rates were equivalent to 1.75 and 17.5 L test item/ha. The nitrogen transformation (NO₃-nitrogen production) was determined in soil excited with lucerne meal (concentration in soil 0.5 %). NH₄-nigrogen NO₃ and NO₂-nitrogen were determined using the Autoanalyzer II (BRAN+LUEBBE) at afferent sampling intervals 0, 7, 14 and 28 days after treatment).

Dates of work: April 12,2010

Findings:

<u>Validity criteria:</u>
The coefficients of variation in the control (NO₃-N) were maximum 8 % and thus fulfilled the demanded rappe $(\leq 15\%)$

In a separate study (dated 07-91.2010 to 18.02.2010) the reference item Dinoterb caused a stimulation of nitrogen transformation of +37.6 %, +51.4 % and +27.1 % at 6.80 mg, 16.00 mg and 27.00 mg Directer been kg soil dra weight, respectively, 28 days after application, and thus demonstrates the sensitivity of the test system.

Biological findings:

No adverse effects of Bixafen + Fluoxastrobin + Prothioconazole EC 190 on nitrogen transformation in soil were observed in both test concentrations (2.48 mg/kg dry soil and 24.83 mg/kg dry soil) after 28 days. Only a negligible deviation from the control of -9 % (test concentration, 2.48 mg/kg wy soil) and -3 % (test concentration 24.83 mg/kg dry soil) were measured at the end of the 28-day incubation period.

Effects on nitrogen transformation in soil after treatment with Bixafer Table CP 10.5- 3: Fluoxastrobin + Prothioconazole EC 190

							**	~ _		~). O ×
Time						Apr	Wcations rates	Š* .	الہ د	,O _ `	
Interval	Control					[BIX=FXA+PTZ EC 190 (040+050=100) [8]					
(days)				2.4	48 mg/	kg đrợ w	reight soil	24.83 mg/kg dry weight soil			
	Nit	Nitrate-N ¹⁾ Nitrate-N				1.	a difference to control		utrate-	(C) 8	% difference to control.
0-7	2.05	±	0.16	1.74	±4	0,18	Ø√5 n.s. Q	2,53	*	0.03	©+23 **
7-14	0.50	±	0.24	1.20	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Q.09	41425	Ø . 50	, O*	_0 .11	+1,
14-28	0.93	±	0.09	0.84	ϱ	°≥9.06	0 -9 x	ÖÖ.90 _≪	ޱ ,	50.18	√ 3 .s.

The calculations were performed with unrounded values

Conclusion:

Bixafen + Fluoxastrobin + Prothioconazole & 199 Cause Tho adverse effects Ofference to control < 25 %, OECD 216) or the soft nitrogen transformation (measured as NO3-N production) at the end of 25 %, OECD 216) on the som introgen transformation (measured as N93-N product the 28-day incubation period. The study was performed in a field soil at concentration test item/kg soil, which is equivalent up to an application rate of 17.5 L test item/ha. the 28-day incubation period. The study was performed in a field soil at concentrations up to 24.83 mg

Rate: Nitrate-N in mg/kg soil dry weight/tippe interval/day, wean of 3 replicates and standard deviation

⁼ No statistically significant difference to the control (Student-t-test) for homogeneous variances, n.s.

²⁻sided, p ≤ 0.05)

²⁻sided, $p \le 0.05$)
= statistically significantly different to control (Student-t-test for homogeneous variance), 2-sided, $p \le 0.05$)

CP 10.6 Effects on terrestrial non-target higher plants

Risk assessment for Terrestrial Non-Target Higher Plants

The risk assessment for non-target terrestrial plants is based on the "Guidance Document on Terrestrial Ecotoxicology", (SANCO/10329/2002 rev2 final, 2002). It is restricted to off field situations, as non-target plants are defined as non-crop plants located outside the treated areas Spray drift from the treated areas may produce residues of a product in adjacent off-crop areas.

In the case of a non-herbicide, screening results and/or Tier 1 studies give first information about the likelihood for effects on terrestrial plants. The risk can be considered acceptable if there are no data indicating more than 50% phytotoxicity effect at the maximum application rate. Where a 50% effect is identified in one or more species in the Tier 1 studies, Tier 2 dose response studies are triggered to identify the respective ER₅₀ values. These endpoints are used to determine if mitigation measures (incrop buffers and/or drift reduction technology) are necessary. Muligation measures may be refined by the results of Higher Tier semi-field or field studies.

Table CP 10.6-1: Survey of non-target errestrial place tests performed with the formulated product

Test organism	Study type tested rate	\$ Frects	Most sensitive species	References
Terrestrial non-	Seedling emergence,	58.7% reduction		,; 2010; M-
target plants;	Fice I pure done	of shoot dry	Logopersiçon	386729-02-1
10 species	3000 mL_product/ha	weight ?	Lesculentum	KCP 10.6.2/01
Terrestrial non-target plants;	Seedling emergence 188 75, 759, 1500 and 3000 mL product/ha	EK emergence, Survival shoot droweight (biomass): \$1000 ml product/ha	Lycopersicon Vesculedium	□; 2010; M- 390280-01-1
Terrestrial non- target places;	Vegetative vigour, Tier 1 single dose	\$5.5% (Soduction) of shoot day	& & Eagopyrum © esculentum	;; 2010; M- 386731-01-1
Terrestrial non- target plants; 1 species	3000 mCproductina Tio 2 dose Osponse Vegetative vigour, 188, 375, 750, 1500 and 5000 mSproductina	weight R ₅₀ shoot dry veight (biomass): 2838 m product Gra	Fagopyrum esculentum	;; 2010; M- 390282-01-1

A Tier 1 seedling emergence test (2010; M-386729-02-1) with the formulation showed effects > 50% at a dose rate of 3000 mL product/ha only for the test species *Lycopersicon esculentum* (58.7% reduction of shoot dry weight). Concerning the Tier 1 vegetative vigour test (2010; M-386731-01-1) effects > 50% were only found in the test species *Fagopyrum esculentum* at a dose rate of 3000 mL product/ha. Therefore seedling emergence and vegetative vigour Tier 2 test were triggered for the affected species. In the seedling emergence Tier 2 test (2010; M-390280-01-1) the ERso for *Lycopersicon esculentum* was determined to be > 3000 mL product/ha, while in the vegetative vigour Tier 2 test with *Fagopyrum esculentum* (2010; M-390282-01-1), an ERso of 2858 mL product/ha was determined. Since the Tier 1 seedling emergence study and the Tier 1 vegetative vigour study showed phytotoxic effects > 50% at the tested rate of 3 L prod./ha for at least one tested species and endpoints from Tier 2 tests are available, the risk assessment will be based on the vegetative vigour and seedling emergence Tier 2 endpoints.

Exposure

Effects on non-target plants are of concern in the off-field environment, where they may be exposed to spray drift. The amount of spray drift reaching off-crop habitats is calculated using the 82^{nd} percentile estimates derived by the BBA $(2000)^{l}$ from the spray-drift predictions of

(2000)². For two applications to cereals, 2.38% of the application rate was assumed to reach areas at the edge of the crop (0 meter buffer zone; worst-case scenario). For a 5 m buffer zone a drut rate of 0.47% is assumed. The highest application rate of Bixafen + Fluoxastrobin + Prothioconazole FC 190 is 2 x 1750 mL product/ha.

Deterministic Risk assessment

According to the Terrestrial Guidance Document, the risk to non-parget plants is evaluated by comparing the lowest ER₅₀ observed in the laboratory studies with the drift rates (PER_{off-fight}) inclosing a safety factor of 5.

Table CP 10.6-2: Deterministic risk assessment for worst case use of the product based on the ER 50 > 3000 mL prod./ha (seedling energence)

arable field cr	ops, two applications 2 x 1750 mL product ha; lowest ER = > 3,000 mL product/ha
arabic field ci	sps, two approaches 32 x 1950 mil productiva, logicist El 1977 - 5250 mil productiva
Distance	Drift MAF TER (Trigger = 5)
[m]	(%) no drift reduction [mL No drift reduction product/ha]
1	298 1) 0 51.426 58.31 > 51
5	0.47^{11} > 260

^{*} Predicted environmental rate

Table CP 10.6-3: Deterministic risk assessment for worst case use of the product based on the ER50 2858 mL prod/ha (vegetative vigour)

arable field o	rope two applications, 2×1750 nD product/ha; lowest $ER_{50} = 2$	2858 mL product/ha
Distance	Drift MAF PER*	TER (Trigger = 5)
[m] 🖑	no differ reduction [mL product/ha]	No drift reduction
1,4	2.38 1 5 58.31	49

^{*} Predicted environmental rate \mathcal{Q}

From the calculations above at is concluded that the product poses no unacceptable risk to non-target terrestrial plants in off cropareas.

¹⁾ Basic drift value for two applications in first crops

²⁾ Considering MAF 1.4 from EFSA GD Birds & Mammal's (2009)

¹⁾ Basic drift value for two applications in field crops

²⁾ Considering MAF = 1.4 from EFS GD Fords & Vammals (2009)

¹ BBA (2000) Bundesanzeiger 15, 52 (Official Gazette), Nr 100, S. 9879-9880 (25.05.2000) Bekanntmachung über die Abtürkeckworfe, die bei der Prüfung und Zulassung von Pflanzenschutzmitteln herangezogen werden. Public domain.

^{2 . (2000)} Drift, drift-reducing sprayers and sprayer testing. Aspects of Applied Biology 57, 2000, Pesticide Application. Public domain.

³ Anonymous (2002b). Guidance Document on terrestrial ecotoxicology under council directive 91/414/EEC. SANCO/10329/2002. 17 October 2002.



CP 10.6.1 Summary of screening data

As full GLP studies are available (see CP 10.6.2 below), screening data were not generated.

CP 10.6.2 Testing on non-target plants

Report:

KCP 10.6.2/01 Y; 2010; M-386729-02-1
BIX + FXA + PTZ EC 40 + 50 + 100 G, Effects on the seedling emergence and growth of ten species of non-target terrestrial plants (Tier 1)
SE10/007
M-386729-02-1
OECD Guideline for the testing of Chemicals, Terrestrial Plant Test OECD 208: Seedling emergence and seedling growth Test July 2006 none
no Title:

Report No.: Document No.:

Guideline(s):

Guideline deviation(s): **GLP/GEP:**

Objective:

The purpose of this specific study was to evaluate the phytotoxic effects of Bixsten + Nuoxastrobin + Prothioconazole EC 190 on the seedling emergence and growth of ten non-target terrestrial plant species following a pre-emergence 3000 mLoproduct/ha application of the product onto the soil surface.

Material and methods:

Test item: Bixafen + Fluoxastrobin + Prothioconazole EC 190 (40-50+100 g/L); Short code: BIX+FXA+PTZ EC 190 (40,50+100) G; Batch 19: 20,00-000848; T& No.: 08908-00; Specification No.: 102000023924 N; Material No.: 7969775, Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafer (BYF) 00587, 4.86% www (51.70 g/L) Quoxastrobin CHEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) Prothio conazole (JAU 6476), Density: 1.064 g/ml.

A total of ten non-target plant species were tested in this seedling embrance and growth test including seven dicorpledonous and three monocotyledonous species representing nine plant families. The ydgaris, Brassica following species were Treated " Beta napus, Cucumis Fagopyrumesculentum, Glysine max, Helianthus annuus, Lycopersicon esculentum, Allium cepa, Avena sativa and Zea mays?

Five seeds of each species were sown in 10.5 cm pots in the glasshouse. The soil surface of the pots was treated with Bixafen + Phioxastrobin Prothocona le EC 190 after sowing of the seeds using a laboratory track sprayer applying a test rate of 3000 mL product/ha at a volume rate of 200 L/ha. Each pot (replicate) contained Seeds and a sotal of 20 seeds were treated i.e. 4 replicates. Control pots were reated with deionised water only

Following application, pots were maintained under glasshouse conditions with a temperature control set at $23 \pm 8^{\circ}$ C during day and $48 \pm 80^{\circ}$ C at night with a 16 h photoperiod. Emergence was assessed daily until 70% emergence of control seedlings was reached. Emergence, survival and phytotoxicity were then recorded for the policates at each application rate 7 and 14 days after the emergence of 70% of the seeds in the water treated controls. In addition, plant growth stage and shoot dry weight were determined at the sphal assessment date 14 days after 70% emergence of the seeds in the water treated controls of each species.

Statistical analysis of data was performed to obtain significance for shoot dry weight effects, carried out using the Pairwose Mann-Whitney-U-Test (one side smaller; $p \le 0.05$) by ToxRat statistics.

Findings:

Validity criteria:

This study can be considered valid as the validity criteria of at least 70% emergence and at least 90% survival of the emerged seedlings during the study period was achieved for the water treated controls of all species tested.

Biological findings:

A summary of the findings from a single application of 5000 mL product/ha to the 10 plant species tested is summarised in the following table:

Table CP 10.6-4: Summary of the effects after single application of 3000 mL Bixafer Fluorastrolon + Prothioconazole EC 190/ha on terrestrial plants

Plant species	Emergence (% inhibition) Survival* Phytotoxicity** Weight*** (% inhibition) (% inhibition) (% inhibition)	0
Dicotyledonae		
Beta vulgaris	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Brassica napus	0 L V V V B B S 33.7	
Cucumis sativus		
Fagopyrum esculentum	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Glycine max	21.1 0 0 0 11.0	
Helianthus annuus		
Lycopersicon esculentum	58.7	
Monocotyledonae		
Allium cepa		
Avena sativa 💍	5.9 (2.9)	
Zea mays		

survival is a measure of treated plants that survived at the end of the study and is expressed as an inhibition compared to the untreated control

description of the phytotoxicity ration.

()

Description of a = chlorosis (yellowing of green shoot tissue)

symptomsassessed b = ncorosis (brown shoot tissue)

c = b Eaching shoot usue without pigmentation)

d wilting floss of turgor of shoot tissue)

e leaf de formation (leaf ourl, abnormal leaf shape)

7 = stanting (plant height reduced with shorter internode length)

Rating some for 0 = no injury or effects

recording the A slight symptom (s) severify of Q B = moderate symptom (s)

phytotoxic C = settere symptom (s)

symptom (s) D = final planesymptom (s)

inhibition reduction is f pressed in a period basis

figures by parentheses indicate that there was an increase when compared to the untreated control

Bold figures for shoot dry weight are statistically significant (Pairwise Mann-Whitney-U-test, one sided smaller; p ≤ 0.05).

Emergence of Brassica repus and Allium cepa was not affected. The emergence was increased in comparison to the untreated control in Beta vulgaris, Helianthus annuus, and Zea mays by 5.6, 11.1 and 5.39, respectively. The emergence was reduced in Cucumis sativus, Fagopyrum esculentum, Glycine max, Lycopersicon esculentum and Avena sativa by 15.8, 5.3, 21.1, 5.9 and 5.0%, respectively.

There were no effects in survival for all tested species.



Slight to severe phytotoxic symptoms were observed as chlorosis, leaf deformation and stunting in all dicotyledonous tested species, except *Helianthus annuus*.

Shoot dry weight was increased in *Fagopyrum esculentum*, *Helianthus annuus*, *Allium cepa*, *Sativa* and *Zea mays* by 4.1, 3.4, 26.5, 2.9 and 8.5%, respectively.

Pre-emergence treatment of *Beta vulgaris*, *Brassica napus*, *Cucumis sativus*, *Glycine nax*, and *Lycopersicon esculentum* resulted in shoot dry weight reductions of 14.9, 33.7, 21.7, 11.0 and 55.7%, respectively. Only the reductions in *Brassica napus* and *Lycopersicon esculentum* were statistically significant.

Conclusion:

Following a soil surface application of Bixafen + Fluoxastrobin Protbjoconazole EC 190 applied at 3000 mL product/ha to ten terrestrial plant species, no adverse effects on emergence, survival and shoot dry weight exceeding 50% effect were observed in this seed to generate emergence study for nine non-target plant species. Shoot dry weight of Lycopersical esculentum was reduced to 58.7%.

Report: KCP 10.6.2/02

Title: BIX + FXA + FXZ EC 40 + 50 + 100 G, Effects on the vegetarive vigour of ten

species of noto-targe@errestfixil plants (Tief 1)

Report No.: VV 10/008 Document No.: M-3867 -01-1

Guideline(s):

OECD Guideline for the testing of Chemical Perrespial Plant Test

OECD 227. Vegetative Vigoar Testo July 2006

Guideline deviation(s): none
GLP/GEP: no

Objective:

The purpose of this specific study was to evaluate the phytotoxic effects of Bixafen + Fluoxastrobin + Prothioconazole EC 100 on the vegetative organization of the product terrestrial plant species following a post-emergence 3000 mL product/ha application of the product onto the foliage of plants at the 2-4 leaf stage.

Test item: Bixafen Fluoxastrobin + Prothio conazole EC 190 (40+50+100 g/L); Short code: BIX+FXA+PTZ EC 190 (40+50+100) C, Batch ID.: 2010-000848; Tox No.: 08908-00; Specification No.: 102000023924-NN-Material No. 79969775; Analyse content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BVF 00587), 4.86 % w/w (57.71 g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothiocom zole (IAU 6476); Donsity 1.064 g/mL.

A total of ten non-target plant species were tested in this vegetative vigour test including seven dicotyledonous and three monocotyledonous species representing nine plant families. The following species were treated Beta pulgario Brasaica napus, Cucumis sativus, Fagopyrum esculentum, Glycine max, Helianthus annuus Bycopersicon esculentum, Allium cepa, Avena sativa and Zea mays.

At the 2-4 leaf stage plants were treated with Bixafen + Fluoxastrobin + Prothioconazole EC 190 using a laboratory track sprayer applying a test rate of 3000 mL product/ha at a volume rate of 200 L/ha. Each pot (replicate) contained 4 plants and a total of 20 plants were treated, i.e. 5 replicates. Control pots were treated with deionised water. Pots were maintained under glasshouse conditions with a temperature control set at $23 \pm 8^{\circ}$ C during day and $18 \pm 8^{\circ}$ C at night with a 16 h photoperiod. Survival and visual phytotoxicity were then recorded 7, 14 and 21 days after application and assessment were made against the deionised water treated controls. The study was terminated 21 days after application. Parameters measured at the final assessment were survival, visual phytotoxicity, plant growth stage and shoot dry weight. Statistical analysis of data was performed to obtain significance for shoot dry weight effects, carried out using the Pairwise Mann-Whitney-U-Test (one sided smaller; p < 0.05) by ToxRat statistics.

Material and methods:

Findings:

Validity criteria:

This study can be considered valid as the validity criterion of at least 90% survival through study period in the water treated controls was achieved for all species.

Biological findings:

A summary of the findings from a single application of 3000 mL product/ha to the tested is summarised in the following table:

Summary of the effects after single application of 3,000 mJ **Table CP 10.6- 5:** + Prothioconazole EC 196/ha on forrestrial plants

Plant species	Survival* (% inhibition) Phytotoxicity** Shoot Dry Weight* (% inhibition)
Dicotyledonae	
Beta vulgaris	$A \rightarrow B^{abef} $
Brassica napus	Cabello 37.6 Q
Cucumis sativus	B - C B - C 20.2
Fagopyrum esculentum	Q Q Q S B D bef A S 55.5,
Glycine max	Bbef D 204
Helianthus annuus	A - B ⁴
Lycopersicon esculentum	B^{ab} A
Monocotyledonae	
Allium cepa	
Avena sativa	
Zea mays	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

survival is measure of treated plants that sorvived at the end of the study and becomes as an inhibition compare To the intreated control

description of the phytotoxicity rating

a = thlorosis (Vellowing of green shoot vissue) Description of

b #mecrosis (brown shoot tissue)

bleaching (showt tissue without igmentation)

wilting (loss of turgor of shoot tissue)

leaf deformation (leaf curl, abnormal leaf shape)

stunting (plant height reduced with shorter internode length)

Ratingsystem recording the

severity of moderate symptoin (s) Severe Somptom &) phytotoxic

sympt@ms total Plant symptom (s) = moxibund 🔊

inhibition or reduction is expressed on a per plant basis figures in parentheses indicate that there was an increase when compared to the untreated control

Bold figures for shoot dry weight are statistically significant (Pairwise Mann-Whitney-U-test, one sided smaller; p≤ 0.05).

There were no week no week of survoval of all tested species. Slight to severe phytotoxicity symptoms were observed as chorosis necrosis, leaf deformation and stunting in all tested species, except Allium cepa and Arena Sativa. Brassica napus, Cucumis sativus, Glycine max, Helianthus annuus, Lycopersicon esculentum and Allium cepa resulted in shoot dry weight reductions of 37.6, 20.2, 20.4, 15.8, 11.4 and 12.0% respectively, which were statistically significant. Fagopyrum esculentum was the most sensitive species for shoot dry weight, with a 55.5% reduction which was statistically significant.



Conclusion:

Following a foliar application of Bixafen + Fluoxastrobin + Prothioconazole EC 190 applied at 3000 mL product/ha to ten terrestrial plant species at the 2 to 4 leaf stage, no adverse effects on survival and shoot dry weight exceeding 50% effect were observed in this vegetative vigour study for wine nontarget plant species.

Shoot dry weight of *Fagopyrum esculentum* was reduced by 55.5%.

.; 2016, M-390280-04 KCP 10.6.2/03 Report:

KCP 10.6.2/03 g, 20.00, M-390280-04, 1BIX + FXA + PTZ EC 40 + 50 + 100 G, Effects on the seedling emergence and Title:

growth of the of non-target perfectival plant species Excopersicon esculentum (Tiere)

Report No.: SE10/067 Document No.: M-390280-01-1

OECD Guideline for the testing of Chemicals Terrestial Plant Test OECD 208: Seedling mergence and seedling growth Test July 2006 Guideline(s):

Guideline deviation(s): none **GLP/GEP:** yes

Objective:

The purpose of this specific study was to evaluate the phytocoxicity effects of Bisafen & Fluoxastrobin + Prothioconazole EC 190 on the seedling emergence and seedling growth of the non Parget terrestrial plant species <u>Lycopersicon esculearum</u> for owing a pre-emergence application of the product onto the soil surface.

Material and methods:

Test item: Bixafen + Fluoxastrobin Prothiocompzole &C 190 (40-60+100 g/L); Short code: BIX+FXA+PTZŒC 190 (40+50+100) G; Barch ID. 2010-000848; Tox No.: 08908-00; Specification No.: 10200002 924-NN; Moverial No.: 79969775 Analysed convent of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (BYF 00587), 4.86, w/x 51.71, g/L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102:0/g/L) prothioconazolo (JAU6476); Density: 1.064 g/m (

One dicotyledonous species Pycopersicum esculentum, representing the plant family Solanaceae, was tested in this seedling emergence and growth test. Five seeds were sown in 10.5 cm pots in the glasshouse and a total of 8 replicate pots per treatment were prepared. Five application rates (188, 375, 750, 1500 and 3000 por product/hab plus an untreated control were applied to the bare soil surface after sowing of the seeds as a pre-emergence treatment. The serial dilutions of Bixafen + Fluoxastrokin + Prothioconazoto EC 190 were sprayed onto the soil surface using a laboratory track sprayer at volume rate of 206 L/ha. The control pors were sprayed with 200 L/ha deionised water. Following application pots were maintained under glasshouse conditions with a temperature control set at 23 ± 8°C during day and 18 ± 8% at night with a 16 h photoperiod. Emergence was assessed daily until 70% emergence of control seedlings was reached. Emergence, survival and phytotoxicity

were recorded and 14 days after the emergence of 70% of the seeds in the water treated control. In addition, Pant growth stage and shoot dry weight were determined at the final assessment date 14 days after 10% emergence of the seeds in the water treated control.

Statistical analysis of data was performed to obtain ER₅₀ values for emergence, survival and shoot dry weight using ox Rat statistical software.

Findings:

Validity criteria:

This study can be considered valid as the validity criteria of at least 70% emergence and at least 90% survival of the emerged seedlings during the study period was achieved for the water treated controls of the species tested.

Analytical findings:

Analysis of Fluoxastrobin in the highest tested application rate revealed to 101% of nominal

Biological findings:

The effects of Bixafen + Fluoxastrobin + Prothioconazole EC 190 on the seeding emergence, survival of emerged seedlings, visible phytotoxicity, grown stage and shoot dry weight during the study period are shown in the following table:

Table CP 10.6-6: Summary of the effects of Bixafen + Fluoxastrobin+ Prothoconazole EC 90 on Lycopersiconesculentum

ma I mana daya t/la a	Emergence		Q.	Sanvival 💝		Shoot dry weig		ant (g) 🐔			
mL product/ha	No.	%	Sign	No.	₹%	Sign.	Mean ^	$\sqrt[n]{SD}$	%C y 0	%Red	Sign.
control	34	85.0	Q	3	1000	· 6	v 0.1745	0.02	149	Ö	
188	33	82.5	W -	, * 3 3	100	- S	0.1991	0,6751	9 .9	≨ 12.0 ⊈	-
375	35	87.5 _%	y - ,	35	4 00),	0.189	_@ @239@	12.7	~-10.6©	-
750	36	90,0	_ ×	36		~ ?;	©0.169 °	0.0345	20,4	08	-
1500	31	775		30j	10,00	-2	0.143	0.0433	30 .2	16 .0	+
3000	32	80.0		<i>≈</i> 32	100	"Ų"	0.002	0.0269	26.3	3 39.9	+
ER ₅₀	Q	>300@	\$ K	J	>3000			0' %	≯3000#}	1	
Lower 95% c.l.		md.			n.d.) .W		>3000#		
Upper 95% c.l.	Ď.	√ Øi.d.		₩.	n.d.			ay	×2000#		·

No. = the total number of plants at test termination

NOER, ER25 and R50 (where valid) endpoints are calculated

Emergence and survival

An application of Bixafen + Dioxastrobin Prothoconazole EC 190 to the soil surface in which *Lycoperation esculentum* seeds had been sown resulted in no significant impact on the emergence and survival. The ER₅₀ for these endpoints was 3000 mL product/ha.

Shoot dry weight

Shoot dry weight (biomass) was significantly reduced at applications including and above 1500 mL product/ha. The ER-5 for biomass was >3000 mL product/ha.

Phytotoxicity symptoms

Phytotoxicity symptoms visualised as slight to severe leaf deformation and stunting were observed at application rates including and above 750 mL product/ha. Chlorosis was observed in a single pot at 3000 mL product/ha on test day 7.

Effects on growth stage

There were slight effects on growth stage of emerged seedlings in comparison to the untreated control at 1500 mL product/ha.

^{% =} surviving plants at lest termination respectively % cv coefficient of variation.

⁺ in column "Sign." = statistically significant different from the control

⁻ in column "Sign." = not statistically significant different from the control

c.l. = confidence limit

n.d. = not determined ≈

not statistical determined and there were no effects observed up to the highest application rate

[#] highest test rate, calculated values above the highest rate tested



Conclusion:

This Tier 2 seedling emergence and growth study in which the effect of Bixafen + Fluoxastroom + Prothioconazole EC 190 on the non-target terrestrial plant species Lycopersicon esculentum was tested under glasshouse conditions resulted in an ER 50 >3000 mL product/ha for expergence, sur and shoot dry weight.

Report:

Title:

Report No.: Document No.:

Guideline(s):

Guideline deviation(s): **GLP/GEP:**

Objective:

KCP 10.6.2/04

G; 2010; M-390282-01-1

BIX + FXA + PTZ EC 40 + 50 100 G, Effects on the vegetative vigoral of the of non-target terrestrial plant species Fagopyrum esculentum (Tier 2)

VV 10/068

M-390282-01-1

OECD Guideline for the resting of Chemicals, Terrestrial Plant Pest OECD 227: Vegetative vigoral est, July 2006 none

yes

ific study was to evaluate the phytotoxicity offect

190 of the vegetative vigoral follows: The purpose of this specific study was to evaluate the hytotoxicity of fect of Bixaten + Fluoxastrobin + Prothioconazole EC 190 of the vegetative vigour of the fon-target temestrial plant species Fagopyrum esculentum following a post-emergence application of the product on the foliage of plants at the 2-4 leaf stage.

Material and methods:

Test item: Bixafen Fluoxastropin + Prothoconazole EC 190 40+50+100 g/L); Short code: BIX+FXA+PTZ EC 190 40+50+100 O, Batch ID 2010-000848 Tox No.: 08908-00; Specification No.: 102000023024-NN, Material No.: 79969775; Analysed content of active ingredients: 3.90 % w/w (41.50 g/L) bixafen (EYF 00587), @86 % W/w (\$1.71 g)L) fluoxastrobin (HEC 5725 E-ISO), 9.59 % w/w (102.0 g/L) prothioconazole (JAU 6476); Density 1.064 g/mL

One dicordedonous species Fagopyram esculentum; representing the plant family Polygonaceae, was tested in this vegetative vigour test. Plants were grown in a glasshouse in 13 cm pots and were treated at the 2-4 leaf stage There were A plants per pot and & replicate pots per treatment. Plants were treated with 5 application rates 188, 345, 750 1500 and 3000 ml product/ha) plus an untreated control. The serial dilutions of Bixaren + Puoxastrobin Prothoconazole EC 190 were sprayed onto the foliage of plants using Waboratory track sprayer at a volume rate of 200 L/ha. The control plants were sprayed with 200 Laha deionised water.

Following application, pots were maintained under glasshouse conditions with a temperature control set at 23 ± 8°C during day and 18 ± 8°C at night with a 16 h photoperiod. Assessments were made 7, 14 and 21 days after application agains the water treated control. The study was terminated 21 days after application. The parameters measured at the final assessment were survival, visual phytotoxicity, plant growth stage and shootdry weight.

Statistical analysis of data was performed to obtain ER₅₀ values for survival and shoot dry weight, using Tox Rat statistical software

Findings:

This study can be considered valid as the validity criteria of at least 90% survival throughout the study period was achieved for the water treated controls of the species tested.

Analytical findings:

Analysis of Fluoxastrobin in the highest tested application rate revealed it to 101% of nominal.

Biological findings:

The effects of Bixafen + Fluoxastrobin + Prothioconazole EC 190 on the vegetative vigour survival, visible phytotoxicity, growth stage and shoot dry weight during the study period are from the following table:

Table CP 10.6-7: Summary of the effects of Bixafen + Fluoxastrobin + Prothioconarole FO 190 on Fagopyrum esculentum

						<i>e</i> _ : v		<u> </u>
mI product/ho	Survival				Sho Sho	dry weight	(gD ^y &	Ũ
mL product/ha	No.	%	Sign.	Mean	SD N	%€V 🎓	≫\%Reð	Sign.
control	32	100		4Ø00	© 0.75 49	6.8 S	e V	4
188	32	100) {{	¥.166	1,5959	© 27.3	7 7.4	
375	32	100		4.498	0.4432	929	0	
750	32	100	\$ - \	4. j 61	L. 0.4777	*A.5	7.5	<u> </u>
1500	32	100 🔏		3	∱ 0.6 7.0 6	ر 17.9 <i>%</i>	16.8	0 +
3000	32	10 0 ©		×2.096	Q.49320 _~	20 &	3.4	+
ER ₅₀		>3000		, **		285 % 54		
Lower 95% c.l.		_Ø ,n.d. ₃		Z		2035.74	<i>Q</i> .	
Upper 95% c.l.	~	🖇 n.d. 🤊	1 ~	<i>*</i> 0*	Y \$ 00 0	>3000 🕓	Ô	

No. = the total number of plants at test terraination

NOER, ER25 and ER50 (where valid) end wints are calculated

Survival

The foliar application of Bixafeth + Fluor astrobin + Prothio conazole EC 190 had no significant impact on the survival of treated Fagopyrum esculentum plants. The ER 50 for this endpoint was > 3000 mL product/ha.

Shoot dry weight

Shoot dry weight (biomass) was significantly reduced a application rates including and above 1500 mL product/ha. The ER₅₀ value for biomass was 2857 34 mL product/ha.

Phytotoxicity symptoms

Phytotoxicity symptoms visualized as slight to severe chlorosis, necrosis and stunting were observed at all application rates.

Effects on growth stage

There were no effects on growth stage development of treated plants in comparison with the untreated controls at all apprication rates.

Conclusion:

This Tier Evegetative vigour study in which the effect of Bixafen + Fluoxastrobin + Prothioconazole EC 190 on the non-target terrestrial plant species *Fagopyrum esculentum* was tested under glasshouse conditions resulted in an ER 50 of 2858 mL product/ha for shoot dry weight.

^{% =} surviving plants at test termination respectively % & coefficient of ariation

⁺ in column "Sign." = statistically significant different from the control

⁻ in column "Sign." = not antistically significant different from the control

c.l. = confidence limit

n.d. = not determined.

[&]quot; not statistical determined and there were no effects observed up to the highest application rate

CP 10.6.3 Extended laboratory studies on non-target plants

CP 10.6.3 Extended laboratory studies on non-target plants
In view of the results presented above under CP 10.6.2, extended laboratory studies are not defined or necessary.

CP 10.6.4 Semi-field and field tests on non-target plants
In view of the results presented above under CP 10.6.2, semi-field laboratory studies are not deemed or necessary.

CP 10.7 Effects on other terrestrial organisms (flora) and fauna).

No studies are required.

CP 10.8 Monitoring data

No monitoring data are available or required.

The state of the s