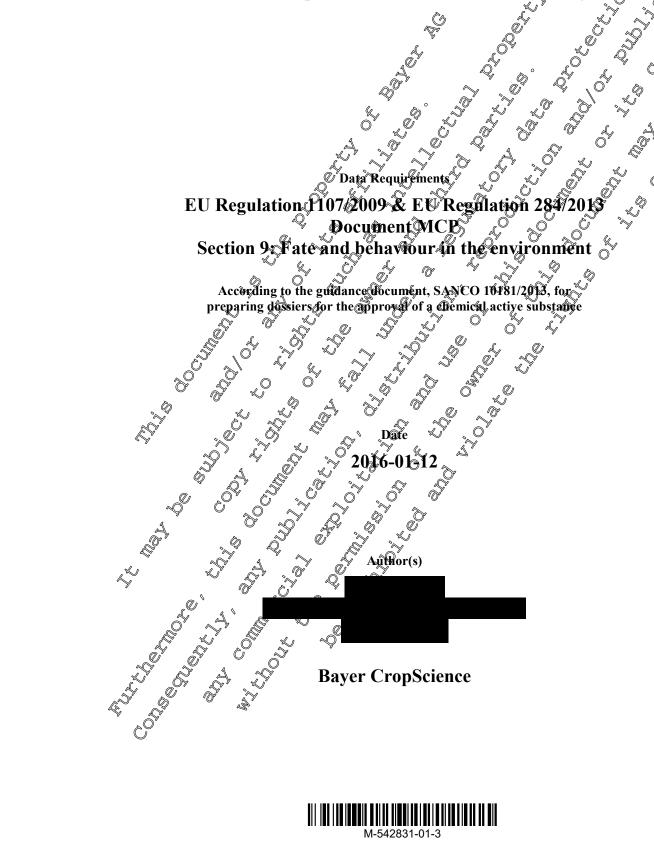
Document Title Summary of the fate and behaviour in the environment fluoxastrobin + prothioconazole EC 200 (100+100 g/L) Data Requirements EU Regulation 1107/2009 & EU Regulation 284/2013 Document MCB Section 9x Fate and behaviour in the environment According to the guidance focument, SANCO 10481/2013, for preparing dassiers for the approval of a chemical and





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CP 9 FATE AND BEHAVIOUR IN THE ENVIRONMENT

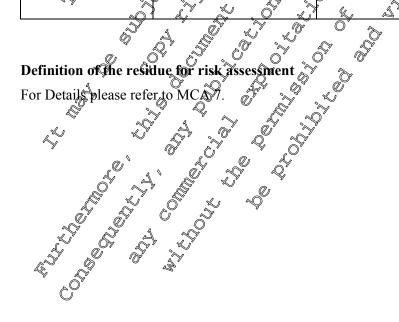
Table CP 9-1: Intended application patterns

Table CP 9-	1: Intended a	pplication patte	rns	F F
Crop	Timing of application (range)	Number of applications	Application interval	Maximum Application rate per treatment El/ha Fluoxastrobin Prothiocopyazo
Wheat, rye, triticale*	BBCH 30-69	1-2	20	1.5 \$\tilde{\text{0}} \tilde{\text{0}} \tilde{\text{150}} \tilde{\text{0}} \tilde{\text{150}} \tilde{\text{0}} \tilde{\text{125}} \tilde{\text{0}}
Barley, oats*	BBCH 30-61	1-2	100	1.5 150 150 150 150 150 150 150 150 150 15
Onions**	BBCH 15-47	1-2	100	125 125 125 125 125 125 125 125 125 125
				21.0-1.25 100-125 100-
			"¥ U	

Table CP 9- 2 are addressed in this document as they were major in environmental fate studies. 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 the an mical
by photoly
a.e. E-isome
out 10:1 ## //
a better soll-sorption
profile. A study with 1
o (\$\frac{1}{2}\to \frac{1}{2}\to \frac{1}{2}\ substitution pattern of that double bond E- and Z-isomers exist. The common name fluoxistrobin denotes the E-isomer. The Z-isomer is known to be an impurity in echnical fluoxastroom (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-isomore is the more E-isomer. Further, the Z-isomer shows a very similar toxicological profile, A study with Daphnia at least comparable, potentially lower ecotoxicological profile than the garent spisomer, degeonstrating that there is no further risk for the aquatic compartment (please refer to CAs 8.2 4.) M-030533307-1). Taking this information into account, both isomers can be evaluated as suit of E. Z-isomers, providing a conservative environmental risk assessments.

Table CP 9-2: Active substance and degradation products addressed in this document

Table CP 9- 2: Active		roducts addressed in this docum	<i>a</i> . °
Compound / Codes	Chemical Structure	Explanation for Consideration	Considered for
Fluoxastrobin (HEC 5725)	E-isomer	active substance	PEC _{soil} PEC _{gw} PEC _{sw} &REC _{sod}
	1 0 0 N CH ₃	Ž,	As a worst case approach, the sam of both isomers (Fluexastron E+Z
HEC 5725-Z-Isomer	Z-isomer 3	photolytic metabolite	1.
			exposure and risk assessment
			0, 2, 3
HEC 5725- carboxylic acid (HEC 7180, M40)	CI F OH		PEC _{soil} PEC _{gw} PEC _{gw} PEC _{sed}
	NON OFH,		
HEC 5725-E-des- chlorophenyl (HEC 7155, M48)		occurrence in oc	PEC _{soil} PEC _{gw} PEC _{sw} & PEC _{sed}
	HO O N CH	(% in water)	
2-chloropheno (M82)		occumence in a contract of the	PEC _{soil} PEC _{gw} PEC _{sw} & PEC _{sed}



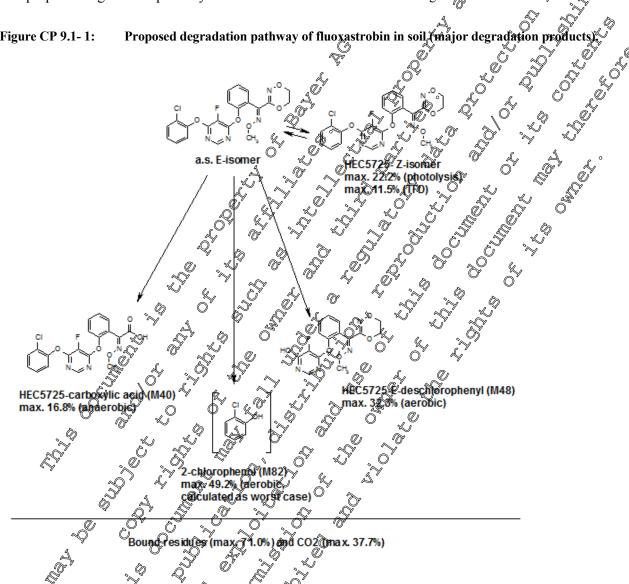
Cable CP 9- 3: D Compartment D	efinition of the residue for risk assessment
Compartment	Posiduo Definition for Dick Assessment
Soil	fluoxastrobin (E- isomer), HEC 5725 - Z-isomer, HEC 5725-E-des-chlorophenyl (M48-E), 2-chlorophenol (M82) fluoxastrobin (E-isomer), HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-E-des-chlorophenyl (M48-E), 2-chlorophenol (M82) fluoxastrobin (E- isomer), HEC 5725-E-des-chlorophenyl (M48-E), 2-chlorophenol (M82) fluoxastrobin (E- isomer), HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-E-des-chlorophenyl (M48-E)
5011	HEC 5725 -Z-isomer,
	HEC 5725-carboxylic acid (<i>M40</i>),
	HEC 5725-E-des-chlorophenyl (M48-E),
	HEC 5725-E-des-chlorophenyl (M48-E), 2-chlorophenol (M82) fluoxastrobin (E-isomer), HEC 5725-Z-isomer, HEC 5725-carboxylic acid (M40), HEC 5725-E-des-chlorophenyl (M480), 2-chlorophenol (M82)
Groundwater	fluoxastrobin (E-isomer),
	fluoxastrobin (E-isomer), HEC 5725-Z-isomer,
	HEC 5725-carboxylic acid (M40),
	HEC 5725-E-des-chlorophenyl (M48@E),
	fluoxastrobin (E-isomer), HEC 5725-Z-isomer, HEC 5725-E-des-chlorophenyl (M48Z), 2-chlorophenol (M82) fluoxastrobin (E- isomer), HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-Z-isomer, HEC 5725-E-des-chlorophenyl (M48Z), fluoxastrobin (E- isomer), HEC 5725-E-des-chlorophenyl (M48Z)
Surface water	2-chlorophenol (M82) fluoxastrobin (<i>E</i> - isomer), HEC 5725- <i>Z</i> -isomer, HEC 5725-carboxylic acid (<i>M</i>)0), HEC 5725- <i>E</i> -des-chlorophenyl (<i>M</i>)8- <i>E</i>)
	HEC 5725-Z-isomer,
	HEC 5725-carboxylic acid (NO#0), \mathcal{O}^*
	HEC 5725-E-des-chlorophenyl (Mas-E)
Sediment	HEC 5725-carboxylic acid (MDO), O HEC 5725-E-des-chlorophenyl (MDO) HEC 57
	2-chlorophenol (M82) fluoxastrobin (E- isomer), HEC 5725-Z-isomer, HEC 5725-E-des-chlorophenyl (MB-E) fluoxastrobin (E- isomer) HEC 5725-Z-isomer none
Air	none Q V X X X X X X X X X X X X X X X X X X
	HEC 5725-E-des-chlorophenyl (M48/E), 2-chlorophenol (M82) fluoxastrobin (E- isomer), HEC 5725-E-des-chlorophenyl (M48/E),

CP 9.1 Fate and behaviour in soil

For detailed information on the fate and behaviour in soil please refer to MCA Section 37 point 7.1.

The proposed degradation pathway of fluoxastrobin in soil is shown in Figure 9.1-1.

Figure CP 9.1- 1:



Rate of degradation in soil

No specific studies with the Cormulation are required. For further information on the fate and behaviour in soft please refer to MCA Section 7, data points 7.1.1 and 7.1.2.

Laboratory studies

For information on laboratory studies please refer to MCA Section 7, data point 7.1.2.1.

Field studies

For information on field studies please refer to MCA Section 7, data point 7.1.2.2.

CP 9.1.1.2.1 Soil dissipation studies

For information on field dissipation studies please refer to MCA Section 7, data point 7.1.2.2.1

CP 9.1.1.2.2 Soil accumulation studies

For information on field accumulation studies please refer to MCA Section, data point .

CP 9.1.2 Mobility in the soil

For information on mobility studies please refer to MCA Section 7 data point 7 CA

CP 9.1.2.1 Laboratory studies

For information on laboratory studies please refer to M

CP 9.1.2.3 Field leaching studies

For information on field leaching studies please refer to MCA Section 7, data point 7.1.4.2.

CP 9.1.3 Estimation of concentrations in soil

New calculations were performed to reflect findings from new studies presented in the settives substance dossier, section 7 "Fate and behaviour in the environment". In addition these calculations considered the most recent guidance documents for exposure calculations. Calculations of predicted vulations. Calculations of pregreted

7. Cata point 7.1 environmental concentrations in soil (PEC_{soil}) are presented below.

Predicted environmental concentrations in soil (PECs)

Endpoints for PEC_{soil}

For deriving the respective end points please refero MCA Section

Key modelling input parameters for floorastropin and its metabolite **Table CP 9.1.3-1:**

Compound	Worst case DTs Maximum non-noomalised occurrence in soil	Molær mass [gemol]	Molar mass correction factor
Fluoxastrobin (E+Z) HEC 5725-E- des- chloropher	DFOP: k _{1 fast} 0.01741 14, k _{2 slow} 0.002913 1/d, g _{fast} 0.4996 (rates equivalent to: DT so fast phase 39 81		1
HEC 5725-E- Odes-chlorophen		348.3	0.7592
HEC 5725- carboxylic acid	28.64 ³ 6 49.2 ⁷	417.8	0.9106
2-chlorophenol	49.27	128.56	0.2802

^{1:} worst case non-formalized field the (Thurston R8/2404) with worst-case DFOP DT90, initial value

^{2:} worst case non-normalized apparent field decline DT₅₀ value.

^{3:} worst casonon-normalized laborator DT50 Value.

^{4:} worst case DT₅₀ value according to the recommendations (DEFSA (EFSA, 2007)

^{...,} M-954569 01-1 (see M 2045, M-524457-010 (see MAA 7,12,2.1)

KCP 9.1.3/01 : 2015; M-537905-01-1 Report:

Fluoxastrobin (FXA) and metabolites: PECsoil EUR - Use in cereals and onions in Europe Title:

onions in Europe

Report No.: EnSa-15-0541 Document No.: M-537905-01-1 not applicable Guideline(s): Guideline not applicable

deviation(s):

GLP/GEP: no

Methods and Materials: The predicted environmental concentrations in soil (REC vi) of fluoxastronin and its metabolites were estimated based on a first tier approach using a Microsoft® Excel spreadsheet. A bulk density of 1.5 kg/L and Osoil mixing depths of 5 cm were osed as recommended by FOCUS (1996) and EU Commission, 4995, 2000). The accumulation potential of flar xastrobin after long term use was also assessed, exploying the mixing depth of 20 cm for the calculation of the background concentration.

Detailed application data used for simulation of Pis

Application pattern used for PEC soil calculations of flagoxastrobin **Table CP 9.1.3-2:**

Individual crop	FOCUS crop assed for interception	Kate per season [g a,s,/ha]	Application Interval Plant interception [dax] \[\mathcal{O} [\%] \]	BBCH	Amount reaching soil per season application [g a.s./ha]
Cereals	Cereals C	2 × 150 ×	*** 2 ********************************	9	2×30.0
Cereals	© Cereals	2 × 1,25	2 80 W	2 × 30-61	2 × 25.0
Onions	Onions	2 × 12/5	10 X 100	2 × 15-47	2 × 112.5

Substance Specific Parameters: The compound specific input parameters (endpoints for PECsoil calculations) are summarized/in Table CP\$1.3-12.

Findings: The maximum PEC values for Haoxastrobin and its metabolites are summarised in Table CP 9.1.3- 3. The maximum short-ferm and long-term PEC_{soil} values and the time weighted average values (TWACsoil) are provided in table of. 1

Maximum PECoil of throxastrobin and its metabolites for the uses assessed

	Fluoxastropin (E+Z)	HEC 5725-E- des- chlorophenyl	HEC 5725- carboxylic acid	2-chlorophenol
Use Pattern	PECsoil@mg/kg]	PECsoil [mg/kg]	PECsoil [mg/kg]	PECsoil [mg/kg]
Cereals 2×150 g. A. ha, 10 days, 2×80%	0.075	0.019	0.011	0.009
Cereals 2×125 g a.s. Na, 14 days, 2×89%	0.062	0.016	0.009	0.008
Omons 2×125 g. 4. /ha, 10 days, 2×10%	0.286	0.071	0.041	0.036

Table CP 9.1.3-4: Cereals, 2 × 150 g a.s./ha: PEC_{soil} (actual) of fluoxastrobin and its metabolites

		2 × 150	rception		
		Fluoxastrobin (E+Z)	HEC 5725-E-des- chlorophenyl	HEC 5725- Carboxylic acid	2-chlorophenot
	Time [days]	PEC _{soil} [mg/kg]	PEC _{soil} [mg/kg]	PEC _{soil}	RECsoil Simg/kgg
Initial	0	0.075	0.019	0.0 €/1	\$\sqrt{0.009} 0.00
Chart	1	0.074	0.018	6 010	29009 X
Short term	2	0.073	0.018	©.010 ×	J 50.009\$ &
term	4	0.072	0.018	0.010	
	7	0.070	0,008	~ * 0 ,9 99	0,007
	14	0.066	0.017	@ \$008 @ g	30 .006
Lana	21	0.062	₩ 0.016 ©) [\footnote{0.006} \infty \infty	₹ 70.005°
Long term	28	0.058	0.015	© 0.00 °	√ 0.0 0 √4 .°
	42	0.052	Q.0014 Q	Q.004 Q	© 003 V
	50	0.049	© 0.013 ° (© .003, ° 3	√ 0.002 √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √
	100	0.036	V (> 0.009	/O<0.0 90 _/	<0.00

Table CP 9.1.3-5: Cereals, 2 \$\infty\$150 g \(\text{g} \). The two controls of fluorastropin and its metabolities

	1				
		2 450	Cer	eals interval 2 × 80% inter	ر الم
		Fluoxastrobin	gra.s./na/y4 days app.	interval 2 × 80% inter	eption
		2. (E+25) &	HEC 5725-Ades-Caloroptenyl	MEC 5728- carboxylic acid	2-chlorophenol
	Time			TWACsoil (TWACsoil
	[days]	[mg/kg]	(mg/kg)	Q_{I} [mg/kg]	[mg/kg]
Initial		r . 0 /7 ~			
Chart	10	0.075		0.040	0.009
Short	\square	I ⊗ ₹ ₩1.17/4	0.018	0.010 0.010	0.009
term	<i>ۇ</i> 4		1 3 0.018 <i>°</i> 6	0.010	0.009
	¥ 7	0.075	0.018	0.010	0.008
EG.	14	0.0660	0.018 0.018 0.017 %	0.010	0.007
Lana	21	Ø	O «0.017 %	3 0.008	0.007
Long	28	4 0.066° ×	0.017 0 0.006 0 0.006	0.008	0.006
term	42	Q 0.062 Q	> 0.0 0 %	0.007	0.005
	, 5Ø	≥° 0,0060 ×	Q.916 "0"	0.006	0.005
	100	0.051	Q. Q0.013 Q	0.004	0.003
¥					
		0.0660 0.0660 0.0660 0.0660 0.051			

Table CP 9.1.3-6: Cereals, 2 × 125 g a.s./ha: PEC_{soil} (actual) of fluoxastrobin and its metabolites

		2 × 125	Cer g a.s./ha, 14 days app.	reals interval, 2 × 80% inte	rception
		Fluoxastrobin (E+Z)	HEC 5725-E-des- chlorophenyl	HEC 5725- Carboxylic acid	2-chloropheno©
	Time [days]	PEC _{soil} [mg/kg]	PEC _{soil} [mg/kg]	PEC _{soil}	PECsuil The Complete
Initial	0	0.062	0.016	0.009	£ 0:008 £
Classet	1	0.062	0.015	6 009	@ 2 9 007 &
Short	2	0.061	0.015	©.008 ×	J 60.007\$ &
term	4	0.060	0.01	£ 0.008	(0.0 6)
	7	0.058	0,00+3	0,007 Q	. O 0,006 G
	14	0.055	0.014	% `% 006 m	*0 .005 *
Lama	21	0.051	\$0.013\Q^	³ 0.005√ €	0.004
Long term	28	0.048	0.013	© 0.000 °	√ 0.0 0 3 °
	42	0.043	Q.Ø11 ~	Q.003 Q	0 002
	50	0.041	2 .011 3	©	√ 0.002 √ √ √ √ √ √ √ √ √ √ √ √ √
	100	0.030	V V0.008	0<0.000	0.002

Table CP 9.1.3-7: Cereals, 2 125 g a.s./ha: TWACG of fluoxastrebin and its metabolities

		2 5/125	Cer	eals and interval 2 × 80% inter	(A) 4:
		20125	g a.s./na@4 days app.	interval 2 × 80 % inter	eption
		Flingxastrobin (E+Z)	HEC 5725 Ades- Coloroptenyl	ffEC 5725- carboxylic acid	2-chlorophenol
	Time [days]	TWACsoil (mg/kg)	TWCsoil	TWACsoil	TWACsoil
	[days]	[mg/kg] ((mg/kg)	(// _ mg/kgl	[mg/kg]
Initial	0				
Cla a set	10	0.062	0.05	₹ 0. 6 69	0.007
Short	Ø,	Q. 9 62	0.005 0.015 0.015	© 0 009	0.007
term			0.015 0	0.008	0.007
	¥ 7	0.066	0.015	0.008	0.007
EŞ.	14	. O Q 0538	0.015	0.008 0.007 0.007	0.006
T	21	Ø	O <0.014 %	△ " 0.007	0.006
Long	28	3 0.055° ×	0.003 0.003 0.003	0.006	0.005
term	42	Q 0.0 Q 0	~ 0.0 0 3 ~	0.006	0.004
	, 5®/	2050 ×	Q.913 "V"	0.005	0.004
	100	0.042	Q. Q0.011 O	0.003	0.002
4					
		0.066 0.068 0.057 0.0550 0.0550 0.042	y		

Table CP 9.1.3-8: Onions, 2 × 125 g a.s./ha: PEC_{soil} (actual) of fluoxastrobin and its metabolites

		2 × 125	Oni g a.s./ha, 10 days app.	ions interval, 2 × 10% inte	rception
		Fluoxastrobin (E+Z)	HEC 5725-E-des- chlorophenyl	HEC 5725-	2-chlorophenot
	Time [days]	PEC _{soil} [mg/kg]	PEC _{soil} [mg/kg]	PEC _{soil}	PECsoil
Initial	0	0.286	0.071	0.04/1	
Short	1	0.283	0.070	6 040	@ 29035 W
term	2	0.280	0.070	©.039 ×	J 0.034
term	4	0.275	0.06	0.037	0.0
	7	0.267	0,067	0 , \$\infty 0 , \$\infty 95 \mathrel{Q}''	0,029
	14	0.250	0.064	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	√ √0.024 √
Lana	21	0.235	№ 0.061 ©	0.025	[∞] 0.019 [∞]
Long	28	0.221	0.058	© 0.024 °	
term	42	0.197	Q.0052	Q.015 Q	0 Q 10 0
	50	0.186	© 0.049 ~ "	© .012 ° 3	√ 0.008 √
	100	0.135	0.034 ×	0.004 °	0.002

Table CP 9.1.3-9: Onions, 2 ×125 g x.s./ha: ToWAC of fluorastropin and its metabolites

	l			· 20 % &	
		2 1 2 2 5	On the contract of the contrac	ions interval 2 × 10% inter	- Ma
		Flitoxastrobin	g 3.s./ha@0 days app.	interval 2 × 10% inter	Ception
		(E+2)	HEC 5725-K-des- Colorophenyl	MEC 5728- carboxylic acid	2-chlorophenol
	Time	TW2Csoil		TWAC _{soil}	TWACsoil
	[days]	TWACsoil [mg/kg]	₩ø/køl�	$\mathcal{D}_{\mathbb{A}} = [\mathbf{m} \mathbf{\sigma} / \mathbf{k} \mathbf{\sigma}] = [\mathbf{m} \mathbf{\sigma} / \mathbf{k} \mathbf{\sigma}]$	[mg/kg]
Initial		,			
Cla a set	10	0.284	0,071	0.041	0.035
Short	\square	@ ¥ .Z03	0.070 0.070 0.069	0.039 0.038	0.035
term	<u>ۇ</u> 4		1\ \&\ \&\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	0.039	0.034
	∀ 7	0.236	0.070 0	0.038	0.032
	14	0.259 0.259	0.067	0.038	0.029
Lana	21	Q 259 , .	O* <0.066 \(\lambda \)	△ 0.032	0.027
Long	28	(0.251° ×	[♥] √00.064 [©] %	0.030	0.024
term	42	Q 0.23 0	0.061	0.026	0.020
	, 5Ø/	0030	Q.959 "0"	0.024	0.019
	100	20.194	Q. Q0.050 O	0.016	0.011
Ÿ					
		0.259 0.2510 0.2510 0.257 0.257 0.257 0.257 0.257			

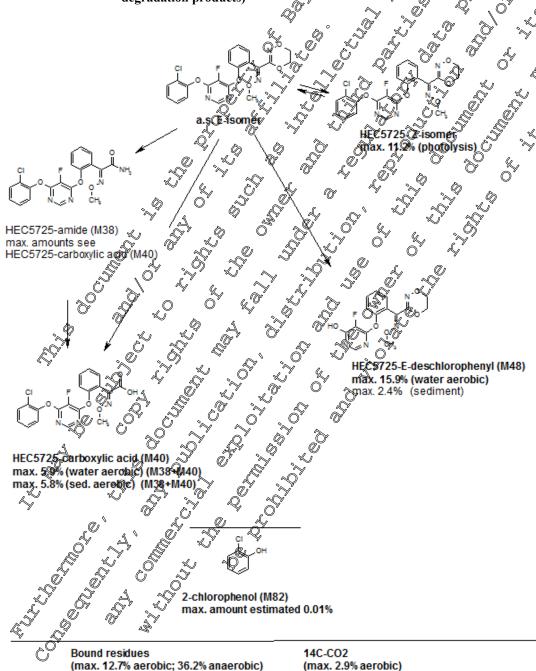
BAYER Ba	yer CropScience		Page 16 of 5 2016-01-1
	P: Section 9 Fate and behaviou	r in the environment	
	200 (100+100) G		
ential acci	imulation in soil:		The mostles for a standard me
oth of 20 cm	n for an arable crop with tillag	e are presented in Table	The results for a standard-maxi
~D 0 1 3	. 10. PFC a of fluovestrabin	taking the effect of accum	ulation into account (mixing distil
<i>7</i> .1.5	of 20 cm)	taking the effect of accum	
	Use Pattern	PECsoil	The results for a standard-maxic CP 9.1.3-10 nulation into account (mixing depth of the continuous of
	Cereals	A plateau Q	[mg/kg] Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
	2×150 g a.s./ha, 14 days, 2×8	0% total*	0.080 V V V V V V V V V V V V V V V V V V
	2×125 g a.s./ha, 14 days, 2×8	o totak	067
	Onions 2×125 g a.s./ha, 10 days, 2×1	planeau ** Notal*	0.020 × 0.306 ×
	* total = plateau (background) one	centration after multifyear us	max. PECsoil
			Y . Q
9			
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		4	

CP 9.2 Fate and behaviour in water and sediment

The proposed degradation pathway of fluoxastrobin in water and sediment is shown in Figure 9.2.

For information on the fate and behaviour in water and sediment please refer to MCA Section 7, data point 7.2.

Figure CP 9.2-1: Proposed bio-degradation pathway of fluoxastrobin in water and sediment (major degradation products)



CP 9.2.1 Aerobic mineralisation in surface water

CP 9.2.1 Aerobic mineralisation in surface water

For information on aerobic mineralisation in surface water studies please refer to MCA Section 2 data of point 7.2.2.2.

CP 9.2.2 Water/sediment study

For information on water/sediment studies please refer to MCA Section 7 data point 7.22.3.

CP 9.2.3 Irradiated water/sediment study

For information on irradiated water/sediment/satudies please refer to MCA Section 7, data point 7.2.2.4. CP 9.2.2 Water/sediment study
For information on water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment study.

For information on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies please refer to MCA Section 7, description on irradiated water/sediment studies p

CP 9.2.4 Estimation of concentrations in groundwater

Calculations were performed, to reflect findings from new studies presented in the active substance. dossier, section 7 "Fate and behaviour in the environment". In addition these calculations consider the most recent guidance documents for exposure calculations.

Calculations of predicted environmental concentrations in groundwater

PEC_{gw} modelling approach

The predicted environmental concentrations in growidwater (PEC_{gw}) for the active substance were calculated using the simulation models FOCUS PEARL and FOCUS PELMO following the recommendations of the FOCUS working group on groundwater scenarios. Further, where a crest of scenario, EOCUS MACRO simulations were performed (EFSA) interest is defined for Guidance Document, 2014¹).

The leaching calculations were run over 26 years as proposed for pesticides which may be applied every year. The first six years are a 'warm up' period only the last 20 years were considered for the assessment of the leaching potential. The 80th percentile of the mean annual groundwater concentrations in the percolate at 1 10 depth under a treated plantation were expluated and were taken as the relevant PECGW values. In spect to the assessment of a potential groundwater contamination this shallow depth reflects a worst case. The effective long form groundwater concentrations will be even lower due to dilution in the upper groundwater dayer &

Crop interception will reduce the amount of a compound reaching the soil and therefore this was taken into account depending of the growth stage at application. The interception rates follow the EFSA Guidance Document (2014) recommendations (Table CP 92.4-1).

1 abic C1 7.2.4-	i. wish wy	17) gryunuwan	a crop mici	zepuon@n	iucs	@	
			Cro Intersee	ption [%]		Z	
	Bare – emergence	D Leaf ≪ dev@Jopment	Ste Selong	-7/->> (/)	Flow	ering	Senescence Ripening
Crop Q	Z.		Bl	ВСН	~		
Į Š	00.009	6 √ 10 - 7 0	√20 - 29	30 39	Q 0 - 69	70 - 89	90 - 99
Winter cereals	\$3 4		2007 (timbering)	≰, 80 ⊿ D(elongg.)	90	80	80
Spring cereals			20 (tilleræg)	(Tong.)	90	80	80
Q :	0 0	210 0	ر گر ^۳ 20 -	39	40 -	- 89	(0)
Onions	0 0	\$\frac{10}{2}		7	4	0	60

40 - 1 40 - 1

¹ EFSA (2014): EFSA Guidance Document for evaluating laboratory and field dissipation studies to obtain DegT50 values of active substances of plant protection products and transformation products of these active substances in soil. EFSA Journal 2014;12(5):3662.

Table CP 9.2.4- 2: Key modelling input parameters for fluoxastrobin and its metabolites

Compound	DT _{50 soil} [days]	Koc [mL/g]	Kom [mL/g]	FREUNDLICH exponent 1/n
Fluoxastrobin (E+Z)	38.89	752.0	436.2	© 0.8584 ©
HEC 5725-E-des-chlorophenyl	56.7	19.3 1)	11.2 1)	0.9367 2)
HEC 5725-carboxylic acid	17.01	56.4	32.84	0.90
2-chlorophenol	23.0	<u>~</u> 104.7	60,7	0.8320

- 1) geomean of neutral pH cluster
- 2) Arithm. mean of neutral pH cluster

CP 9.2.4.1 Calculation of concentrations in groundwater

Predicted environmental concentrations in groundwater PECW

PEC_{ew} values for the use in cereals and onions FO

KCP 9.2.4.1/00 Report:

Fluoxastrophy (FXA) and metabolites: PEGew F in cereals in Europe Title:

Ensa-15-0545 Report No.: M-534900-Q1-1 Document No.: not applicable Guideline(s): Guideline deviation(s): not applicable **GLP/GEP:**

2015; M-537902-01-1 Report:

R; ; 2015; M-537902-01-1
Paroxastrobin (FXA) and metabolites: PCgw OCUS FEARL, PELMO EUR - Use in Onions in Europe
Ensa 15-055
M-537902-01-1
For applicable
Thou applicable Title:

Report No.: Document No: not applicable Guideline(3) Guideline deviation(s): not applicable GLP/GEP:

The predicted environmental concentrations in ground water (PECgw) for fluoxastrobin and its metabolites were calculated using the simulation model FOCUS PEARL (version 4.4.4) and FOCUS PELMO (version 5.5.3). Crop interception was taken into account according to the BBCH growth stage, as recommended by EFSA (EFSA (2014), FOCUS (2014)). The absolute dates for applications based on BBCH codes given in the GAP were determined using AppDate2 (Klein (2010)), a German regulatory tool for estimating application dates and crop interception.

Typically, a Jeaching assessment is carried out considering aerobic conditions as a common agricultural situation. Therefore, observed major aerobic metabolites were taken into account, implementing their amounts and behaviour as observed under aerobic conditions.

However in an aerobic soil a further fast degrading major metabolite, HEC5725-carboxylic acid (HECTY80, MAO), was identified (16.9 % at day 120), which did not occur under aerobic conditions. Based on these observations, a conservative anaerobic leaching assessment was carried out for this metabolite respectively.

Anaerobic leaching scenario:

Under common agricultural situations in Europe, considering e.g. climatic conditions or stope of fields, it is obviously unrealistic, that a total treated agricultural field or area turns anaerobic, each year after application and lasting for a long time period, as typically considered for aerobic leaching assessments. Such conditions would make farming effectively impossible.

Therefore, two more realistic, but still very conservative scenarios were considered here.

Scenario 1: Anaerobic conditions may occur <u>regularly</u> plane field or cropping areas when come water remains in <u>small sinks</u> and <u>furrows</u> with low permeability. In this case, only a relatively small percentage of the total cropped area or field would be affected.

Scenario 2: Anaerobic conditions on <u>larger scale</u> may occur due to flooding long overs. Typically, this flooding will not occur regularly or each year, only with <u>large time intervals</u> in between

The following assumptions were made to address these two scenarios. Partly additional satery factors were applied to address uncertainties in the estimation.

Here, it is implicitly included that anaerabic conditions occur more or less impediately after application (1 day later) and that anaerobic conditions are as strict as simulated in the lab. Increality, it may take considerable time after conding until anaerobic conditions occur, because the remaining oxygen in soil and water has to be consumed by microbes first. Furthermore, in the lab studies anaerobic conditions are ensured by ventilating the samples with nitrogen. Such conditions will not appear in reality.

Therefore, it has to be noted, that the described assumptions and scenarios are highly conservative.

Table CP 9.2.4.1-1: Assumptions used for anaerobic reaching scenarios

Scenario	Assumption of the state of the	Safety	actually used
		æctor 🗬	
1	not nore than 10 % area of an agrico tural field becomes	» 1°°	application rate reduced to
	ana Probic every year shortly after application		10 %, applied every year
			(application rate 100 %,
		Y	applied every year, PEC _{gw}
)	divided by 10)
2	Calculation base for dimension of evees dykes and flood plains along rivers are 100-year-noodings. Hence,	10	application rate 100 %,
	plains along rivers are 1000-year-Moodings. Hence,		applied every 10 years
	ponding on larger areas can be assumed to occur in		
both	Farmer will not apply on saturated and pronded fields.		degradation time for parent
	Therefore, it is assumed that parent compound degrades 1		before anaerobic = $\frac{1 \text{ day}}{1 \text{ day}}$
	day under aerobic conditions before araerobic conditions		
-	occur.		
both	Anaerobic conditions usually with not last for longer than		maximum occurrence in
/	1 week. Maximum occurrence of metabolite might not		anaerobic soil of $\underline{M40}$ =
	yet bereached at this time.		16.9% (found after 120 d)
both	After an anacrobic period prormal aerobic agricultural		Aerobic lab DT ₅₀ of 17.01 d
	conditions may cominate in soil again. Thus, aerobic		(M40)
((Regradation of the anaerobic metabolite is assessed.		



Pseudo application of anaerobic metabolite:

The anaerobic metabolite is assumed to be applied directly to the soil by pseudo application. Hence, no "pathway"-calculation was done in which the parent is applied. This is considered the only plausible but conservative way to account for the anaerobic formation (expressed by the maximum occurrence) and the aerobic degradation of the anaerobic metabolite. Applying the aerobic pathway for groundwater calculations may disregard the formation under anaerobic conditions.

Detailed application data used for simulation of PEC for all compounds were compiled in Table CP 9.2.4.1-2.

Table CP 9.2.4.1-2: Application pattern used for PEC w calculations.

1 abic C1 7.2.4.1- 2.	Аррисации р	% ,		Heation X	? 	Amount
Individual crop	FOCUS crop used for interception		Antervat	Plant Sinterception	BBCH &	reaching soil per season application
		@a.s./ha	[days]			[g and ha]
Winter & spring cereals, GAP	-	2 × 50	J 1429	Z - Z	\$0-69\$°	Ø -
Spring cereals 1, simulation	Spring cereals	J× 150	\$ ⁴ (2	2 80	3069	2 × 30.0
Spring cereals 2, simulation ²⁾	Spring cereals	2 × 23.68 1)	14	\$\frac{1}{2} \times 80,	\$30-69	2 × 4.54 ¹⁾
Winter cereals 1, simulation	Winter cereals	2 × 150	JA 5	2 × 80 ×	30-69	2 × 30.0
Winter cereals 2, simulation ²⁾	Wintercereals	2 × 2 2.68 1)		02 × 80 ×	\$30-69	2 × 4.54 ¹⁾
Winter & spring cereals, GAP		2 × 125	¥14 \$		30-61	-
Spring cereals simulation	Spring cereals	2 × 125		0 2 × 80	30-61	2 × 25.0
Spring cereals 4, simulation	Spring rereals	2× 18.90 ¹⁾	\$ 14 \$	2×80	30-61	2 × 3.78 ¹⁾
Winter cereals 3, simulation	Winter cereals	.20125	(K4 () &	2 × 80	30-61	2 × 25.0
Winter cereals 4, 🔊 simulation ²⁾	Winter Sereals.	2 × 18 90 ¹⁾	\$ 14\$	2 × 80	30-61	2 × 3.78 ¹⁾
Onions, GAP®	~O~~~	2×125	7 249	-	15-47	-
Onions 1, simulation	Onion	0 × 125	20 10	2 × 10	15-47	2 × 112.5
Onions 2, simulation ²	Onions &	2 8.90 ×	10	2 × 10	15-47	2 × 17.0 ¹⁾

Pseudo application [g motabolito/ha]

For cerest and onion applications, absolute dates were derived for the simulation runs. All application ngriarised in the table below.

Pseudo application pattern for anaerasic metabolite HEC 5725-carboxylic acid: parent rate – 1 d degradation, corrected for molar masses and mass mum occurrence in anaerobic soil (= 100% metabolite rate)

Table CP 9.2.4.1-3: Application dates and related information for fluoxastrobin as used for the

Individual crop	Spring cereals	Winter cereals	Onions	, A
•	1 – 4	1 – 4	1 - 2	
epeat Interval for App. Events	Every Year	Every Year	Every	sed for the
Application Technique	Spray	Spray	Spray	
Absolute / Relative to	Absolute	Absolute	Absolute	sed for the
Scenario	1 st App. Date (Julian day)	(Julian day)	1 st App. Dave	
2 001	Offset ©	Offset	Offset	
	10 Apr (100) ×	21 Apr (U11)	29 May (149)	
	28 Apr (118)	19 Apr (109)	290May (149)	
	050 un 9	25 May (148)	08 Jun 5 (89) 29 May	
	28 Apr (P8)	19'Apr (109)	29 May (149)	
	22 April (112)	15 Apr (4) (105)	29 May (149) (149) 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	
		10 Apr (100)	0 - Q - Q -	
4//11	10 /10 %	(400) - - 30 Mar (89)	© 08 Apr (98)	
		06 Jan	- - -	
		92 Mar (61)	14 May (134)	

Substance specific and patodel related input parameters for FOCUS PEARL & PELMO PEC_{gw} calculations are summarised in Table CP 9.2 1-4. Degradation pathway related parameters are given in Table CP 9.24.1-5.

Table CP 9.2.4.1-4: Compound input parameters for fluoxastrobin and its metabolites

_		Fluoxastrobin	HEC 5725-E-	HEC 5725-	2- 0°
Parameter	Unit	(E+Z)	des-	carboxylic	chlorophenol
		(E · Z)	chlorophenyl	acid 奏	
Common				A A	
Molar Mass	[g/mol]	458.8	348.3	417.80	128.56 (264.81)
Solubility	[mg/L]	2.292	9600	244-000	236000
Vapour Pressure	[Pa]	5.63E-10	6.00E-05	7.00E-04	1,44E+02
Freundlich Exponent		0.8584	367	Ø .9043	0.8520
Plant Uptake Factor		0.0	0.0	₽ 0.0	
Walker Exponent		0.7	<i>6</i> ≯ 0.7	0.7	
PEARL Parameters			4 4	' &° &	
Substance Code		FXA	E-des 🦠	©Carb ©	Chlpb C
DT_{50}	[days]	38.89	ِ • 56.7ِ°ُ	√ 17.00 °	23.9
Molar Activ. Energy	[kJ/mol]	65.4	65A	C 654 S	65.4
Kom	[mL/g]	436.2	₩ <u>1</u> ₽2 Ø	* 3 2.8 ***	\$60.7 ♣
$K_{\rm f}$	[mL/g]		y ~~ ~~	1 - 5	
PELMO Parameters					
Substance Code		O AS	AN AN	Pi as ô	r Bi
Rate Constant	[1/day]	6 ⁵ 0.0 €7,82	© 0, % ©222	0.994075	Ø .0301 4
Q_{10}		<i>2</i> 958	2.58	2.58	[\$\text{5}\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\}\$}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
Koc	[mL/g	<i>₿</i> 752.0 ₺	© 19.36°	O 560°	© 10°42.7

PELMO parameters: An auxiliary molar mass of 2-chiorophenol is incoduced, to compensate for the low split degradation rate and to cover the correct mass flux

Table CP 9.2.4.1-5: Degradation pathway related parameters for fluoxastrobin and its metabolites

Degradation fraction from → to
(FOCUS PEARL) 0, QUI QUI QUI A
0.00917 Active Substance -> A1 @
Degradation rate from $\rightarrow \text{to}$ 0.00865 Nective Substance -> B
(FOCUS PELMO)
0.03044 B1 < < BROCO2 @

Findings: PEC_{GW} were evaluated as the 80th percentile of the mean annual leachate concentration at 1 m soil depth. BOCUS PEARC and PELMO PEC_{GW} results for fluoxastrobin and its metabolites after application to winter and asring cereals and onions are given in Table CP 9.2.4.1-6.

Spring cereals: FOCUS PEARL & PELMO PEC_{gw} results of fluoxastrobin and **Table CP 9.2.4.1-6:**

its	metabolites			
Use Pattern			reals 1 - 3,	interval HEC 5725- carboxylic acid 1
	2 × 150	g a.s./ha, 2 × 80%	interception, 14 d	HEC 5725- carboxylic acid ¹
	El	HEC 5725-E-		Y HEC 5725
	Fluoxastrobin	des-	2-chlorophenol	HEC 5/25-
	(E+Z)	chlorophenyl		PEC s/25- carboxylic acid ¹) PEC gw yrg/L <0.0001 <0.001
FOCUS PEARL	PECgw	PECgw 🏠	PECgi	
FOCUSTEARL	[µg/L]	[μg/L] 🖫	[μg/🎉	Jug/L
	< 0.001	1.09%	\$9.001 \$0.001 \$0.000	
	< 0.001	3, <u>9</u> 86	0.001 .	(° <0,00)
	< 0.001	20272		Q" <u></u> <6.001
	< 0.001	9 .678	<0.001 \$6.001 \(\tilde{\tilie}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	(1.00) (1
	< 0.001	0 1.678	Ø.001 €	
	< 0.001	18/1/10	£0.00£°	0 <0,001 Δ PEC _{gw}
FOCUS PELMO	PEC _{gw}	PEC _{gw}	PEGgw [µg/L]	PECgw
	[μg/L]	\(\sqrt{\mug/\mathbb{L}}\)	O' [µg/L] O	<u> </u>
	<0.0010 <0.000	0.903	₹ 0.00}	03901 O
	<0.000	[* ·2,438 & *	0.001 0.001 0.001 0.001 0.001 0.001	© <0.001 © 0.001 © 0.001
	<0.001	A	\$ <0.901 C	0.001
	\$0.001 \$0.001	2.21a 1.67 1.602	0.001	<0.001 ⁸ <0.001
	<0.001	1.094	\$0.001 \$0.001 \$\left\{0.001}	<0.001
1) Danida annliastia			IEC 570 Standard	in a dist (Commin 1)
r seudo applicatio		teropic metabolite i		ic actu (Scenario 1).
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J Z A	49			
	× ×			<0.001
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Ĉ.				

Table CP 9.2.4.1-7: Winter cereals: FOCUS PEARL & PELMO PECgw results of fluoxastrobin and its metabolites

its	metabolites					
Use Pattern		Winter ce	reals 1 - 3,			
	2 v 150 /h - 2 v 900/ ' - 4 4 14 - 1 · - 4 1					
,		HEC 5725-E-		HEC 5725- carboxylic acid		
	Fluoxastrobin	des-	2-chlorophenol®	F HEC 5725-F		
	(E+Z)	chlorophenyl	A	carboxylic acid		
	PECgw	PECgw (%)	PEC _g	PEC _{gw}		
FOCUS PEARL	μg/L]	[μg/L] 🖫	[μg/ 4]			
	< 0.001	1.20%	\$0001	(1.00)		
	< 0.001	2.498	0.001			
	< 0.001	25.7 6 20.68 8	<0.00	<0.001 2. <0.001		
	< 0.001	9.561	≈ ^y <0°0001	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
	< 0.001	% 1.57% °	\$6.001	<0.0 0 ¥		
	< 0.001	0'0,9 %	≈ 0.00 }	<0.0001 ≥		
	<0.001	(0 9 59 0	Q <0.001	©.001 <0.001 <0.001 <0.001		
	<0.001	0.276	<0.0001 0	√<0.001 [™]		
	<0.001	0.276	6 .001	<0.00€¥		
EOCHE DEL MO	PEC	PEC _{gw}	PEC	PLC _{gw}		
FOCUS PELMO	[µg⁄[k]] (°	mg/Ll 💝	l 🌂 [uới] 🔌	Ang/Ll/		
	60.001			<0.001 <0.001 <0.001		
	~~~0.001√ ~~~0.001√	2.566 L	0.001	<0.001		
	<0.4001 ≈ 5	2.300	<0.001	∠O`OO1		
	· · · · · · · · · · · · · · · · · · ·	~ Y 4//Y	< <b>9</b> 001	0.001		
	<0.001 [©]	1.63%	0.001	< 0.001		
	<b>₹</b> 0.00 <b>₺</b>	O 1386 Q	×0.001	© <0.001		
		.\$7.118.€°	○ <0.001 √	< 0.001		
	< <b>⊘</b> 00001 °√	0.333	© <0.001 0.001	< 0.001		
9	0.001	J 0. <b>50</b> 7 J	Ø0.001	< 0.001		
1) Pseud application	pattern for the aga	erobic metabolite I	HE 5725-carboxyl	ic acid (Scenario		
		Ö' 'U Q				
			. 0			
			<i>*</i>			
e sõ						
Q 0 _{\$}						
4						
Pseudo application						

Document MCP: Section 9 Fate and behaviour in the environment FXA+PTZ EC 200 (100+100) G

Spring cereals: FOCUS PEARL & PELMO PECgw results of fluoxastrobin and **Table CP 9.2.4.1-8:** 

1	its metabolites				
Use Pattern	Spring cereals 4 & 5,				
-		2 × 125 g a.s./ha, 2 × 80% interception, 14 d interval			
	Fluoxastrobin	HEC 5725-E-des-	2-chlorophenol	erval  HEC 5795- carboxylic acid	
	(E+Z)	chlorophenyl	n	carboxylic acid	
FOCUS PEARL	PEC _{gw} [μg/L]	PECgw [µg/L] 《冷	PEC _{gw}	W	
	< 0.001	0.901	<0.001		
	< 0.001	2.538	\$0.001 \$0.001	< 0001	
	<0.001 <0.001	1.875	<0.001 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	<0.001	
	<0.001	1.365* 1.386	<0.001	0.00g 0.00g	
	< 0.001	<b>\$4</b> 9.945	<0.901 20.001 4	<0.001	
FOCUS PELMO	PEC _{gw} [μg/L]	PEC			
	(0.001 e	7.744 2.015 1.829	(1001) (1001) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1000) (1	[μg/€]  0.001  0.002  0.001  0.001  0.001	
	<0.001	2.015	₹ ₹0.001 1	Ø.001 ©	
	<0.001	1.829	\$\\ \pi\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	<0.00¢	
	<0.001 <0.001 <0.001 <0.001		~ <0.0001 Ö	<0.001	
	<0.001	1.385 9.326 0.9049	© 5001 ° 5	© <0.001	
	<0.061	0.9040 4	0.001	© [≈] 0.001	
Pseudo application	on pattern for the anae	erotor metabolite HEC	5728-carboxylic.acod	(Scenario 1)	
			5725-carboxylic,acad		

**Table CP 9.2.4.1- 9:** Winter cereals: FOCUS PEARL & PELMO PECgw results of fluoxastrobin and its metabolites

	its metabolites				
Use Pattern Winter cereals 4 & 5,					
	2 × 1:	25 g a.s./ha, 2 × 80%	interception, 14 d in	erval 👏	
	Fluoxastrobin	HEC 5725-E-des-	2.11	erval  HEC 5725- carboxylic acid  PDC gw	
	(E+Z)	chlorophenyl	2-chlorophenol	HEC 5725-	
EO CHIC DE A DI	PECgw	PECgw	PECgw	PPC _{gw}	
FOCUS PEARL	[µg/L]	[μg/L] (%)	[/T f [™]	«Îŭg/Ll®	
	< 0.001	0.996	<0,001		
	< 0.001	2.043	<0.001 <0.001		
	< 0.001	2.207	0.001	<0.001	
	< 0.001	1.28	0.000		
	< 0.001	1.300		~ R0.00> / ~	
	< 0.001	<b>€</b> 0.823 <b>€</b> 0°	\$ <b>9</b> €001 €	<0.001 <0.001 \$0.001	
	< 0.001	00.7930	0.000	b≫′ ~∩ ∩∩1 «	
	< 0.001	I ⊿ 0.2/2≥9	Q <0.001 Q	0.000°	
	< 0.001	L. 2.685 ~ 7	<0.001 <0.001	0.001 0.000 0.000	
EOGLIC DEL MO	PEC _{gw}	~~// · // ~ //	PECond	PEC _{gw}	
FOCUS PELMO	Tug/L1 🍣	PEC _{gy} γ (μg/b) ς	l ZMug/IĈ≀ ≲	@Mirg/II	
	<0.001	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	<0.001 0.001 0.001 0.001	20.001 20.001 20.001	
	<0.001	2.2736 2.2736	10001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 × 0001 ×	<0.001	
	<0.00	2.272	Q0.001 7	\$0.001	
	<0.001	1.421	0.001 0.001 0.001 0.001	0.001	
	<0.001 \$0.001	1.421	<0.001	© <0.001	
	\$0.001 \$0.001	Ø <b>₽</b> .064 <b>↓</b>	~ ×0.001,75°	<0.001	
	. < 0.04001 🙈		<0.067 <0.001 <0.001 <0.001	< 0.001	
	<0.001				
	0.001	0.21	<0.001	< 0.001	
1) Pseudo applicati	on pattern for the anae	erobic metabolité HEC	3725-carbox vice acid	(Scenario 1)	
, O				,	
			O		
, <b>6</b>					
			¥ ~		
			~ <u></u>		
N			4		
٨			<b>3</b>		
<b>4</b>			7		
4					
4		Q			
	~ _				
S,	1, 8, 22	Q			
		<b>Q</b>			
F &		P			
	7		3725-carboxytic acid		
Č.					

Onions: FOCUS PEARL & PELMO PECgw results of fluoxastrobin and its **Table CP 9.2.4.1-10:** 

m	etabolites			interval				
Use Pattern	2 × 125	Onions 1 - 3, 2 × 125 g a.s./ha, 2 × 10% interception, 10 d interval						
	Fluoxastrobin (E+Z)	HEC 5725-E- des- chlorophenyl	2-chlorophenol	HEC 5725-				
FOCUS PEARL	PEC _{gw} [μg/L]	PEC _{gw}	PEC L	Carboxylic acid 1  PEC gw Grg/L  CO.000				
	<0.001 <0.001 <0.001 <0.001 <0.001 <0.001	5.104 8.359 76786 8.502 2.590 2.967	\$\frac{9.001}{0.001}\$. \$\frac{0.009}{0.001}\$. \$\frac{0.009}{0.001}\$. \$\frac{0.001}{0.001}\$.	0.0001 0.0001 <0.0001				
FOCUS PELMO	PEC _{gw} [µg/L]	PEC _{gw} μg/Ľ	PECgw C [µg/L]	PEC _{gw}				
	<0.001 <0.000 <0.001 <0.001 0.001 <0.001	4.704 4.704 7.248 5.789 3.891 2.174	0.001 0.001 0.001 0.001 0.001 0.001	0.0002 0.0001 0.0002 0.0001 0.0001				

Pseudo application pattern or the anaerobe metabolite HEC 572 scarbos viic acid (Scenario 1).

As described for scenario 1, 500 % of the potential pseudo application, rate of anaerobic HEC 5725carboxylic acid was applied, each war. AWPEC values for all ground water scenarios and application periods resulted already in concentrations \(\leq 0.003 \), also without a division by 10. Therefore, a further simulation according Scenario 2, every 10 years, was not carried out anymore, as it is already covered with the first simulation.

Conclusion: There are no concerns for groundwater from the use of fluoxastrobin in accordance with the use pattern for the representative formudation.

The concentration of the metabolite MEC \$725-E-des-chorophenyl (M48) was predicted to reach groundwater at concentrations exceeding 0.1 µg/2. However, the relevance of this metabolite was assessed and the metabolite is non-relevant in groundwater (see Document N4).

# OCUS <u>MACRO</u>

As recommended by FOCUS 2014 PEC were calculated in addition with MACRO 5.5.3, as the seen ario has been defined for cereals and onions.



**Report:** KCP 9.2.4.1/03 ,; 2015; M-537903-01-1

Title: Fluoxastrobin (FXA) and metabolites: PECgw FOCUS MACRO 5.5.3 EUR - Usean

cereals and onions in Europe

Report No.: Ensa-15-0546
Document No.: M-537903-01-1
Guideline(s): not applicable
Guideline deviation(s): not applicable

GLP/GEP: no

The predicted environmental concentrations in groundwater (PEC_{gw}) for throxastrobin and its metabolites were calculated using the simulation model FOCUS NACRO (version 55.3) to simulate macro pore flow for drained soils for scenario. Crop interception was taken into account according to the BBCH growth stage, as recommended by EFSA (EFSA (2014), FOCUS (2014)). The absolute dates for applications based on BBCH codes given in the GAP were determined using AppDate2 (2015)), a German regulatory tool for estimating application dates and grop interception.

Typically, a leaching assessment is carried out considering aerobic conditions as a common agricultural situation. Therefore, observed major aerobic metabolities were taken into account, implementing their amounts and behaviour as observed under aerobic conditions.

However, in anaerobic soil, a further fast degrading major metabolitie, HES 725 carboxylic acid (HEC7180, M40), was identified (16.9 % at day 120), which did not occur under aerobic conditions. Based on these observations, a conservative anaerobic leaching assessment was carried out for this metabolite, respectively.

# Anaerobic leaching scenario

Under common agricultural situations in Europe, considering e.g. climatic conditions or slope of fields, it is obviously unrealistic, that a total treated agricultural field or area turns anaerobic, each year after application and dasting for a long time period, as typically considered for aerobic leaching assessments. Such conditions would make farming effectively impossible.

Therefore, two more realistic, but still yery conservative scenarios have been considered here:

Scenario 1: Anaerobic conditions may occur regularly in plane fields or cropping areas, when rain water remains in small sinks and furrows with low permeability. In this case, only a relatively small percentage of the total cropped area or field would be affected.

Scenario 2: Anaerobio conditions on larger scale may of ur due to flooding along rivers. Typically, this flooding will not occur or each year, only with large time intervals in between.

The following assumptions have been made to address these two scenarios. Partly, additional safety factors are applied to address uncontainties in the estimation.

Here, it is implicitly included that anaerobic conditions occur more or less immediately after application (1 day later) and that anaerobic conditions are as strict as simulated in the lab. In reality, it may take considerable time after ponding until anaerobic conditions occur, because the remaining oxygen in coll and water has to be consumed by microbes first. Further on, in the lab studies anaerobic conditions are assured by ventilating the samples with nitrogen. Such conditions will not appear in reality.

Therefore to has to be noted, that the described assumptions and scenarios are highly conservative.

**Table CP 9.2.4.1-11:** Assumptions used for anaerobic leaching scenarios

Scenario	Assumption	Safety	actually used
		factor	
1	not more than 10 % area of an agricultural field becomes	1	application rate reduced to "
	anaerobic, every year shortly after application		10%, applied every year
			(application rate 100 %
			applied every ar, PKC gw
		\ V	divided by 10)
2	Calculation base for dimension of levees, dykes and flood	10	application rate 190 %
	plains along rivers are 100-year-floodings. Hence,	Q	applied every by years
	ponding on larger areas can be assumed to occurrin		
	average every 100 years.	Q' <u>~</u> •	
both	Farmer will not apply on saturated and ponded fields.		degradation time for parent
	Therefore, it is assumed, that parent compound degrades		before anaerobic = 1 day
	day under aerobic conditions before anarrobic conditions		
	occur.	(O' )	
both	Anaerobic conditions usually will not last for longer than	4	naximum occurrence in
	1 week. Maximum occurrence of metabolite might not	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	anaerobic soil of M40
	yet be reached at this time.	LO X	16.9% (found after 130 d)
both	After an anaerobic period, normal actrobic agricultural		Accibic law $DT_{50}$ of 17.01 d
	conditions may dominate in soil again. Thus, aerobic		[ <b>A</b> 40)
	degradation of the anaerobic metabolite is assested.		

# Pseudo application of ana robig metabolite

Pseudo application of anarrobic metabolite:

The anaerobic metabolite is assumed to be applied directly to the soil by pseudo application. Hence, no "pathway"-calculation was done in which he parent is applied. This is considered the only plausible but conservative way to account for the apaerobic formation expressed by the maximum Detailed application data used for simulation of PPC_{ew} for all compounds were compiled in Table CP 9.2.4.1-12. occurrence) and the acrobic degradation of the anacrobic metabotire. Applying the aerobic pathway for

Table CP 9.2.4.1-12: Application pattern used for PEC_{gw} calculations

1 able CP 9.2.4.1- 12:	Application p	ication pattern used for PEC _{gw} calculations				
				lication		Amound
Individual	FOCUS crop	Rate	Interval	Plant	BBCH	reaching soil
	used for	per season		interception	stage	per 🗞 ason "
crop	interception			_		application
		[g a.s. /ha]	[days]	[%]	O ^T	[g a.s./ha]
Winter & spring		2 150	1.4	4	20.60	
cereals, GAP	-	2 × 150	14	- 🐇	30-69	
Spring cereals 1,	Coming a compala	2 × 150	14 <b>V</b>	2 . 00	30-69	. 20 0
simulation	Spring cereals	2 × 150	14%	2 × 80	30-69	\$\frac{1}{2} \times 30.00
Spring cereals 2,	G	2 × 22 (0.1)	«V14	25/00	30069	Q 2 (\$\int_{4.1}) = \( \)
simulation ²⁾	Spring cereals	$2 \times 22.68^{-1}$	4 14	Q 80	30-69	* 2 ×&F.54 */
Winter cereals 1,	Winter coreels	2 × 150	) 14	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~ ~ ~ ~ °	\$ 20P
simulation	Winter cereals	1.	9 14	or 2 x xy	30-69	2 × 3 <b>(.)</b>
Winter cereals 2,	Winter cereals	2 × 22.6 (1)	\$\times_14 \times_5	2500	37 <b>6</b> ² 69 ".	2 ×44.54.1)
simulation ²⁾	winter cereais	2 × 22.08/1/		2 80	3/02-09	2 🕰 4.54 1) .
Winter & spring		2 125	1 1	~ A	© 30-€1,	A.
cereals, GAP	-	2 123			© 30-100 ₀	
Spring cereals 3,	Spring cereals	02 × 45x	4 i ~		# 61 S	2 × 25.0
simulation	Spring cerears	D \$ 2 ^ \$ 25 3	J 14 J	\$ 80 ℃	\$ 0-01 W	Z ^ 23.0
Spring cereals 4,	Spring cereas	2 × 18 00 1	<i>"</i> ∕3⊾∧1	2 × 80	30-6	×2 × 3.78 ¹⁾
simulation ²⁾	Spring cereass	2 3 18.90			) 30 <b>-0</b> 1	* \$2 \ 3.76
Winter cereals 3,	Winter Cereals	2 × 125	⁷ 14 ×	Ø × 80≿	30-61	2 × 25.0
simulation	Willier Gereals		14 /	~ 800	30-01 O	2 ^ 23.0
Winter cereals 4,	Winter cereals	26 18.90	ν "@" -1.4	2 2 80 ~	30 <b>46/</b> i	2 × 3.78 ¹⁾
simulation ²⁾	valuer cerears	20 18.90	\$14 \$		7 30-01	2 ^ 3.76 /
Onions, GAP		© 2 × 1©5	° 10 √	<b>Y</b> - 4.	∘ <b>№</b> -47	-
Onions 1,	Onions ®	2. © 125 . Š	140	2 × 10	15-47	2 × 112.5
simulation	Onions	49 123 N			13-41	2 ^ 112.3
Onions 2,	Onions	2 × 18.90 1)	1 N 10 N	<u> </u>	15-47	2 × 17.01 ¹⁾
simulation ²⁾	D, omons		S' >		15 17	2 ** 17.01

1) Pseudo application of metabolite /ha]

For cereal and onion applications, absolute dates were derived for the simulation runs. All application dates are summarised in the table below.

Table CP 9.2:QI- 13: Application dates and related information for fluoxastrobin as used for the simulation runs.

Individual crop	Spring cereals	Winter cereals	Onions
App. Forents	Every Year	Every Year	Every Year
Appleation of Technique	© Spraty	Spray	Spray
Absolute / Relative to 4	ABsolute	Absolute	Absolute
Scenario	1 st App. Date (Julian day)	1 st App. Date (Julian day)	1 st App. Date (Julian day)
	10 Apr (100)	21 Apr (111)	29 May (149)
	Repeat Interval for App. Cents App. Cents Application Technique Absolute Relative to Scenario	Repeat Interval for Every Year Appl. Rection	Repeat Interval for Every Year Every Year

Substance specific and model related input parameters for FOCUS MACRO PEC_{gw} calculations are summarised in Table CP 9.2.4.1- 14.

Pseudo application pattern for anterobic metabolite HE@5725 carboxylic acid: parent rate – 1 d degradation, corrected for molar masses and maximum occurrence in anaerobic soil (= 100% metabolite rate)

Table CP 9.2.4.1- 14: Compound input parameters for fluoxastrobin and its metabolites

Parameter	Unit	Fluoxastrobi n (E+Z)	HEC 5725-E- des- chlorophenyl	HEC 5725- carboxylic	2- W chlorophenol
Common				G 417.8	
Molar Mass	[g/mol]	458.8	348.3	[™] 417.8	128.56
Solubility	[mg/L]	2.292	9600	244 000	23,500
Vapour Pressure	[Pa]	5.63E-10	6.0E-05	7.00E-04°	1 × 44 × 4
Freundlich Exponent		0.85	0.936	0.904	Ø.85200°
Plant Uptake Factor		ρ *	Q:Q:	.90	J 05 .
Walker Exponent		<b>0</b> (20 1)	0.491)	0.49(1)	0.49(1)
DT ₅₀	[days]	<b>₹</b> 8.89	\$6.7 6°	<b>4</b> 7.01 <b>€</b>	©23 (4)
Formation fraction		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~ 0.514 <b>3</b>	Q - \0'	
MACRO Parameters		~ ~		~ ~\	
Koc	[mL/g]	7 <b>5</b> 2.0 🖒	19.3	¹ 56.4	104.7
$Q_{10}$		<b>₹2</b> .58 ² ,©	<b>2</b> .58 ²	2.58 ²	258 ² / ₂ °
Canopy dgradation half-life	[ <b>/ [b</b> ]		~ 10 <u>4</u>	\$ 10 °	100
Metabolite conversion factor (fconvert) ³⁾	~ ~		O.3906 🗞	O _40	0.2802

¹⁾ as proposed for MACRO 5.5.3

Findings: PEC_{GW} were evaluated as the 80 perceptile of the mean annual teachate concentration at 1 m soil depth. FQCUS MACRO PEC_w results for fluctuatorism and its metabolites after application to winter and spring cereals and onions are given in the table below.

Table CP 9.2.4.1 45: FOCUS MACRO PEC gw results of fluoxastrobin and its metabolites at

Scenario	Fluoxastrobio	HEC 5725 E-des	25cmoropsenoi	HEC 5725- carboxylic acid ¹⁾
		PEC:	PEC _{gw}	PEC _{gw} [μg/L]
$2 \times 150 \text{ g a.s./h}$	0.00	0.984	<0.001	<0.001
Winter cereals 2 × 150 g a hha	< 0001		<0.001	< 0.001
Spring cereals 2 × 125 g a.s./ha	<0.001	9.811	< 0.001	< 0.001
Winter cereals 2 × 125 g a.s./ha	\$ .001 E	0.877	< 0.001	< 0.001
Onions 2 × 125 g a.s./m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<b>3</b> .81	< 0.001	<0.001

Pseudo application patern for the anactobic metabolite HEC 5725-carboxylic acid (Scenario 1).

As described for scenario 1,00% of the potential pseudo application rate of anaerobic HEC 5725-carboxylic acid was applied, each year. All PEC_{gw} values for all groundwater scenarios and application periods resulted already in concentrations  $\leq 0.001~\mu g/L$ , also without a division by 10. Therefore, a further somulation according Scenario 2, every 10 years, was not carried out anymore, as it is already covered with the first simulation.

corresponding parameter in MACRO Tresp 6.0948

metabolite formation in MACRO is based on molar masses M and formation fraction: fconvert =  $M_{metab} / M_{parent} *$  formation fraction  $\bigcirc$ 

⁴⁾ not available, as no formation traction available, pseudo application ded in MACRO

The concentration of the metabolite HEC5725-E-des-chlorophenyl (M48) was predicted for reach groundwater at concentrations exceeding 0.1 µg/l. However, the relevance of this metabolite is non-relevant in groundwater (see Document N3).

CP 9.2.4.2 Additional field tests

No additional field studies were performed or required due to leav PEC_{SP}, values calculated see CP 9.2.4.1). nin.

) was predicted and the state of this metal at N4).

Interest of this metal at N4), the state of the st

# CP 9.2.5 Estimation of concentrations in surface water and sediment

New calculations were performed, to reflect findings from new studies presented in the active substance dossier, section 7 "Fate and behaviour in the environment". In addition these calculations consider the most recent guidance documents for exposure calculations. Calculations of predicted environmental concentrations are presented below.

# Predicted environmental concentrations in water PECsw) and sediment PECsw) and sediment PECsw) and sediment PECsw)

For deriving the respective end points please refer MCA Section 7, data point 7.2

Table CP 9.2.5-1: Key modelling input parameters for Quoxastobin and its metabolites at Steps 1-2 level PEC calculations

		I I	- <del>                                    </del>	(	0
Parameter	Unit	Fluoxastrobin (E+Z)	HEC 5725	_ НЕС©\$725 °	2-cheropherol
			≠E-des-chlor@phenyl	-carboxylic acid	4, 5
Molar Mass	g/mol	458	348.3	.≪417.8©°	<b>₹</b> 128 <b>©</b> 6
Water Solubility	mg/L	2,292	\$ 9690 O	244000	<b>23</b> 000
Koc	mL/g	√√52 °°	19.3	244000	ູ≪ມ່04.7
Degradation					**************************************
Soil	days	38.89	) 56.P	⁰ 17.01	<b>½</b> 23
Total System	days	« 1° 238.4 ° 1	1000*	, 🕼 67, <u>8</u> 9 (	1000*
Water	days	288.4	Ž P000* ~	₹ 67,89 Ø	1000*
Sediment	days%	[₹ ¶000 <b>*</b> %]	′ ∡. 1000*\ ≪	<b>6</b> 7.89	1000*
Max Occurrence	. ·				
Water / Sediment	% N	100 C	18.3	19.8	0.01
Soil	Wi [*]	, 300 X	S 32.2 @,	[™] 16.9	49.2

^{*} Default value used

Table CP 9.2.5 : Addition of modelling input parameters for fluorastrobin at steps 3/4 level PEC calculations

, Q	J. 43 A		<i>Q \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\</i>
	Parameter	Unit 🔊	Fluoxastrobin (E+Z)
	General Parameters		
	Modar Maks 🝣 🔘	$g/m\delta l_{\nu}$ %	458.8
	Water Solubility &	mgoL	2.292 5.6E-10
	Vanour Pressure 🔎	Ra S	5.6E-10
	I lange Uplanes actor		0.0
4	Wash-Off actor PRZM, Q	1/cm 0	0.5
	Wash-Off Factor MACKO	1/cfw C	0.05
	Campia		
4	KON A O	mL/g	752
A Total			0.8584
(	Degradation Soil	Z	
¥.	Degradation Soik Soik	ays	38.89
	Water & O	days	238.4
F.	Sediment	days	1000
	Walker Exponent		0.7 (PRZM), 0.49 (MACRO)
	Effect of Temperature		
	Agitivation Energy	J/mol	65 400
	Exponent	1/K	0.095
	Q10		2.58
$\smile$			



**Report:** KCP 9.2.5/01 ,; 2015; M-537907-01-1

Title: Fluoxastrobin (FXA) and metabolites: PECsw, sed FOCUS EUR - Use in cereals od

onions in Europe

Report No.: Ensa-15-0571
Document No.: M-537907-01-1
Guideline(s): not applicable
Guideline deviation(s): not applicable

GLP/GEP: no

Materials and Methods: Predicted environmental concentrations in surface water and sediment (PEC_{sw} and PEC_{sed}) of fluoxastrobin and its metabolites were calculated for the use in whiter and spring cereals and onions in Europe. All relevant entry routes of a compound into surface water (combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

At FOCUS Step 2 the application period was set to March to May and the use on Northern and Southern Europe was considered. Details of the application pattern used in the Step 2 calculations are summarised in Table CP 9.2.5-3.

Table CP 9.2.5-3: Application pattern used for PEC_{sw,sed} calculations at FOCUS Steps 1822

Crop			_	FOCUS crop	Spason	Trop cover
-	[g a.s./ha]	[days	stage	(crop grown)	O V	<u> </u>
Cereals, GAP	2 × 150	\$4,A	<b>30</b> -69	\$ <b>-</b> 0	<u> - "&gt; "</u>	<u>, 0</u>
Cereals (winter),	2 150	14	≫ 530 60€	Winter caracte	Mare	Intermediate crop cover 2 20 %
simulation 1	2 °% 130 °		20-02			
Cereals (spring),	2 × 150	, K4V	20 CO		O- 1/4/-	Intermediate crop cover
simulation 2	> 2 × 1500 <b>y</b>		30-69	Spring cereals	Mar May	20 %
Cereals, GAP	2 \$ 125 9	<b>%</b> 14 %	30-61		4	<b>V</b> -
Cereals (winter),	× 125	14	30-61	Whater cereals	Mar May	Intermediate crop cover
simulation	Ox ^ 123		% .	Winter Cerears		20 %
Cereals (spring)	2 425	& 1.4 A	20 (1%	Spring cereals	) Mar,∜May	Intermediate crop cover
simulation 2	2 × 123 % 1 ×	\$ 14 \$	30-02	"Spring cerears	Mai ~ May	20 %
Options, GAP	②× 12 <b>5</b> \$	100	15-47	G - 19	~ -	-
Orions, >	2 × 125	×1/0	∰-47.	Vegetables, bulb	Mor Mov	Minimal crop cover
simulation S	" Z ^_1,23	<b>₹</b> ₩0 %	(L)D-4/	Vegetables, bulb (arable crops)	iviai May	10 %

In FOCUS Step 3, the application take for each evenarios determined by the Pesticide Application Timer (PAT) which is part of the FOCUS SW Scenarios. The user may only define an application time window. Absolute application dates for the crop simulation runs were estimated using a German regulator tool AppDate 2². Details of the parameters used in the Step 3 calculations are summarised in Table CP 9.2.5-4

^{2015:} Computer programme: "AppDate: Estimation of application dates based on crop development." (v.2.0b.).

**Table CP 9.2.5-4:** Application dates of fluoxastrobin for the FOCUS Step 3 calculations

Parameter	Winter cereals	Spring cereals	Onions
PAT start date		1 9	Absolute ground spray
rel./absolute	Absolute	Absolute	Absolute ground spray
			Absolute
Appl. method	ground spray	ground spray	ground spray (CAM2)
(appl. type)	(CAM 2)	(CAM 2)	Absolute ground spray (CAM2)
No of appl.	2	2	
PAT window			
range	44		1
		44	
Appl. interval	14	¥ 14	
Application	PAT Start Date	AT Start Date	PAT Start Date
Details		AT Start Date	PAT Start Date
D1	20/04/02	27/05/01/07 28/04/01 18/05/01	21/94/01 A
D2	23/05/02		
D3	02/07/02		0 0 21/04/01
	02/07/02	28/04/01	25/94/01
D4	21/04/02	18/05/01 × 4	18/04/0
D5	15/03/02	09/04/010	
D6, 1 st	02/03/02		√
D6, 2 nd	&		15902/02%
R1	20/04/02		\$ 100/101
	20/0 <del>4</del> /02 %		
R2	¥ Q	27/05/01 28/04/01 18/05/01 09/04/00 	21/94/01 18/04/01 18/04/01 18/04/01 05/05/01 15/02/02 \$8/04/01 22/02/01 22/02/01 22/02/01
R3	10/04/6/2		22902/01
R4	15/03/02	© 09/0 <b>4</b> /01 © ©	22/02/01
C1:	4	0-20 1-16: S S S	1 - 1 - CD 0 2 5 1
and for the Sten	s 3&4 simulation runcoin Ta	% 09/04/01 \$\frac{1}{2} \text{ \$\frac{1}{2}\$} \text{ \$\frac{1}{2}\$	
and for the step			
~			<b>*</b>
Findings: Steps	s 1&2: The maxion im PGC	Csw and PECsed values for fluo	exastrobin and its metaboli
-4 C4 1 9-2	$\mathbb{Q}_{-1}$	Sw and I so sed value of I of I de	Mydroom and no metacon
at Steps 1&2 are	e sammansed in Table CP 9		A.
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		able CP 2.5-2.	

Table CP 9.2.5- 5: Maximum PEC_{sw} and PEC_{sed} values for fluoxastrobin and its metabolites at Steps 1&2

									æ°"
Use pattern	Scenario		Fluoxastrobin (E+Z)		5725 des- phenyl	HEC -carbox	5725 ylic acid	2-chlon	phenol
		PECsw	PECsed	PECsw	PECsed	PECsw 4	PECsed	PECw	PEC sed
		[µg/L]	[µg/kg]	[µg/L]	[µg/kg]	[μg/L] ^Δ	»[μg/kg]	[µ@L]	ong/kgl
	Step 1	52.69	375.50	35.93	් _{රී} 6.87	19.46	10.89	<b>23.56</b>	¥13.1 <b>4</b> √
	Step 2			₹	7		(	Ď 🔊	<b>4</b>
Cereals	N-EU Multi	8.05	58.68	5.1,2	1.00	<b>2</b> .30	1.28	2,99	<b>₽</b> .62 €
$2 \times 150$ g a.s./ha	S-EU Multi	14.66	108.41	10,21∕0	1.95	∜ 4.48 °	2,50	5.63	رُم 3.14 مَرُّمُ
	N-EU Single	4.54	33.09	<b>2</b> .86	0.55 ~	1.400	<b>∌</b> 79	<b>1.76</b>	0.98
	S-EU Single	8.26	61.04	<b>₹</b> 5.55	10.7	·2,76	1.54	3.40	1.90
	Step 1	43.91	312.92	29. <b>%</b>	5573	<b>≈</b> \$6.22 €	9.08	19:63	<b>4</b> Ø.95
	Step 2		0"					d	
Cereals	N-EU Multi	6.71	48.90	<b>7.33</b> (	) 0.8 <b>3</b> Q	1.9	1.07	© 2.43 ©	1.35
$2 \times 125$ g a.s./ha		12.22	<b>\$90.35</b>	8.41	1%62	<b>3</b> 473 .	ÕŽ.09,	© 2.43 © 4.69	2.62
	N-EU Single	3.78	7,727.5 <b>7</b>	2.38	, <b>A</b> A6	©¶.18,	0.66	<b>14.4</b> 7	<b>20</b> .82
	S-EU Single	6.88@	50,8₹	<b>4</b> ,62	<b>≈</b> 0.89 ×	∑ 2.3 <b>%</b>	1,29	<b>₽</b> .99	^U 1.11
	Step 1	43.9°	312.92	% <b>2</b> 9.94 ≰	) 5.73 °	16.22	<u>,</u> \$9.08	§19.6 <i>3</i>	10.95
	Step 2	$Q_{j}^{y}$	i de	~	\D'				
Onions	N-EU Multi	<i>@</i> ,7.39 ≼	\$54.08	4.84	9.93	$\sqrt{2.14}$	1,19	_@ 2.84	1.58
$2 \times 125$ g a.s./ha	D 20 11141111	≫13.60°√	100.71	9944	چاً.82 ش	<b>♦</b> 4.19	2.95	©₹.51	3.08
	N-EU Single	* *	30.48	£2.66	0.54	1.32	Ø0.73	1.64	0.91
	S-EU Single	7066	<b>3</b> 6.69 (	5.18	1.00	<u></u> \$2.58 €	🔊 1.44 🧖	3.18	1.77

Step 3: The maximum PEC_{sy} PEC_{cy} values and time weighted everage concentrations at Day 7 of fluoxastrobin for relevant FOCUS step 3 Genarios are given in the following tables.

Table CP 9.2.5-6: Winter cereals: Maximum PECsw PECsed and TWACsw-7 values for fluoxastrobin at Step 3

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	& X		Fluoxastro	bin (E@Z)		
se pattern		Cerea	\(\sigma\)	2×050 g a.s.	/ha	
	Si	ogle application	/	∆ Mul	tiple applicatio	ns
	PECsw	TWACsw-7	PEC sed	PECsw	TWAC _{sw} -7	PEC _{sed}
FOCUS scenario	Jμg/L	/μg/L	µg/kg}	[µg/L]	[µg/L]	[µg/kg]
D1 (ditch)	Ö [™] 1. 0438 ° ° °	0.8	3.28 %	1.044	0.874	5.479
D1 (stream)	Q3 64 ~	y Omo	1%04	0.795	0.272	2.590
D2 (ditch)	Ŷ.056 %	49 ?716 🗳	"W 733	1.137	0.825	4.912
D2 (stream)	© 0.845°	© 0.09	0.764	0.831	0.386	2.457
D3 (ditch)	y 0.952 A	v 0. 1 99 °	Ç 0.692	0.834	0.200	0.865
DA (pond)	[2 €0033 . @	r Q\$\text{930}	0.254	0.042	0.040	0.443
Ď4 (stream)	@.731 ල්	0.00100	0.036	0.685	0.021	0.079
D5 (pond)	0.033	© 0.03 0	0.250	0.048	0.046	0.411
D5 (stream)	, 0,7\$8 ×	0.004	0.022	0.724	0.010	0.060
D6 (ditch)	6 948	2447	0.553	0.834	0.353	1.021
R1 (pond)	€0.076 °	0.072	0.696	0.203	0.193	1.683
R1 (stream)	0.620	0.071	0.532	1.663	0.207	1.522
R3 (stream)	» 0,8 8 3	0.113	1.268	1.337	0.182	1.429
RA (stream)	҈0 ∕∕807	0.218	0.836	1.724	0.483	1.931

Table CP 9.2.5-7: Spring cereals: Maximum PEC_{sw}, PEC_{sed} and TWAC_{sw}-7 values for fluoxastrobine at Step 3

			Fluoxastro	obin (E+Z)		ZŽ 6			
Use pattern		Co	ereals (spring),	reals (spring), 2 × 150 g a.s./ha 💸					
	S	ingle applicatio	n	Mul	tiple applicati	ions 🧳 🧳 💮			
	PECsw	TWAC _{sw} -7	PEC _{sed}	PECsw	TWACsw-7	PEGed			
FOCUS scenario	[µg/L]	[µg/L]	[µg/kg]	[μg/L] 🐇	[μg/L]	i [μĝ/kg] ζ			
D1 (ditch)	1.010	0.826	3.916 🖔	1.403	1.204 📞 "	~7.135 €			
D1 (stream)	0.841	0.137	1.595	0.728	0.329°	\$\times^3.184\times			
D3 (ditch)	0.950	0.155	0.582	0.831	0.1440	0. 69 1 (
D4 (pond)	0.033	0.030	Q.260	Ø47 .	Ø944 . ``	@ .453 @			
D4 (stream)	0.777	0.011	60 .053	0.693	0.024	0.092			
D5 (pond)	0.033	0.030	© 0.249	0.046	0.043	(J) 0.405			
D5 (stream)	0.798	0.006 &	0.034	D 0,#¥7 ≪	/ 0,009 °	> 0. 6 €3			
R4 (stream)	1.101	0.338		#177 🔎	6 489 (2 .475			

Table CP 9.2.5-8: Winter cereals: Maximum PECov, PECted and WACsv-7 values for Cluoxastrobin at Step 3

		K O	Fluoxastro	bit (E+27)		V
Use pattern			æeals (winter)	2×125 g a.s./		**
	SA SA	ngle application TWAC 5.7 [μg/L]	n 🐉 🔎	Ø Mu	ltipl@applicati	
	PECs	TWAC \$157	PECsed	PEC _{sw}	TWAC _{sw} 9	PEC _{sed}
FOCUS scenario	[μg/L] 0.869 0.718 0.8700 0.700 0.093 0.027 0.6090 0.028	~ [μg/ L]	🧳 [μg/k g]	lug/k	🤝 [μg/@)	[µg/kg]
D1 (ditch)	0:869	0.682	2.699 2.040	0.866	0.724	4.468
D1 (stream)	0.718	9.082 0 20.586	≥£040, ©°	&Q.660 ₀	© 206	2.096
D2 (ditch)	©0.870°	<i>‱</i> 0.586	~~2.19 6	◎0.936>⁄	0.676	3.951
D2 (stream)	© 0.700	0.07	0.600 0.81 9.211	a, 0.683	0.313	1.946
D3 (ditch)	3 0 0 93	0.466	Q.5 81 _ Q	0.683	0.166	0.727
D4 (pond)	0.027 0.6090 0.028	0.025 0.002 0.025	0.211	Ø.035 🗳	0.033	0.366
D4 (stream)	©0.609O	© 0.00 %	0.02	0.035 4 5 0.571 0.940	0.017	0.063
D5 (pond)	© 0.028	0.Q25 ×	0.230	0.940	0.038	0.344
D5 (stream)	9 631 👟	° 0,50 03 ° C	0.018 @	0.603	0.008	0.050
D6 (ditch)	9 .790	ॐ .122 √	Ø.463	0.695	0.294	0.859
R1 (pond)	0.062	« 0.05 9 °	0.02 0.2 0.2 0.018 0.463 0.581 0.499 1.060	0.167	0.158	1.404
R1 (stream)	\$\text{\$\text{\$\text{\$0.52}\$1}\$}\$	© 0:058	0.4349	1.355	0.169	1.281
R3 (stream)	₽ 736 €	Ø 092 ≪	1.060	1.090	0.149	1.196
R4 (stream)	Ø.662,ॐ	Ø.180×	3 0.702	1.410	0.397	1.620
D4 (pond) D4 (stream) D5 (pond) D5 (stream) D6 (ditch) R1 (pond) R1 (stream) R3 (stream) R4 (stream)						

Table CP 9.2.5- 9: Spring cereals: Maximum PEC_{sw}, PEC_{sed} and TWAC_{sw}-7 values for fluoxastrobin at Step 3

			Fluoxastro	obin (E+Z)					
Use pattern		Co	ereals (spring),	eals (spring), 2 × 125 g a.s./ha					
	S	ingle applicatio	n	Mu	ltiple applicat	ions , 🤝			
	PECsw	TWAC _{sw} -7	PECsed	PECsw	TWACsw-7	PEGed			
FOCUS scenario	[µg/L]	[µg/L]	[µg/kg]	[μg/L] 🐇	🏓 [μg/L] 🦠	ľ [μĝ⁄kg] 🎺			
D1 (ditch)	0.840	0.685	3.236	1.166	0.999≴√″	~3.772 \$			
D1 (stream)	0.701	0.101	1.280	0.60	0.248°	© 2.558°			
D3 (ditch)	0.792	0.129	0.488	0.693	0.107	0.581			
D4 (pond)	0.027	0.025	Q.216	6 039 .	Ø.936 °	9.3 74 0			
D4 (stream)	0.647	0.008	0.044	0.578	Ø.019	0.076			
D5 (pond)	0.028	0.025	© 0.209	0.038	0.03%	(1) 0.33 0			
D5 (stream)	0.665	0.005 &	0. 03 9 ×	Š 0 ,≴9 7	~ 0, 00 7	9 0. 64 4			
R4 (stream)	0.900	0.277	[1 ! 378	₽ 786 ₽	6 401 (2 .065			

Table CP 9.2.5- 10: Onions: Maximum PEC, PEC, and WAC. 7 values for Juoxastrobin at Step 3

		K O'	*FIQOXASUFO	bin (E+Z)		V
Use pattern			🖔 Onioos, 2 🗸	175 g ą.9./ha 😞	Itiple applicati	~
		ingle application	n 🔊 🛴	Ø Mt	ltiple applicati	ions
	PEC _{sw}	I WAC Silver	PECsed	I TECsw?	I WAC _{sw}	PECsed
FOCUS scenario	[μg/L] 0.027 0.6047 0.785 0.077 0.666 0.684	TWAC \$ \$ 7 [μg/L	n PEC _{sed} [µg/kg]	[μg/🌬	[~, μς/φ]	[µg/kg]
D3 (ditch)	0:791	0.\$\frac{1}{2}\text{0}.\$) 0, 4 50	0.692	Q 172	0.555
D4 (pond)	0.027	Ø.025 💍	\$ 0.450 \$.223, ©	l	0.043	0.503
D4 (stream)	©0.604°	≈ 0.016	0.055	©0.525 ×	0.046	0.147
D4 (stream) D6 (ditch) D6 (ditch) R1 (pond) R1 (stream) R3 (stream) R4 (stream)	© 0.7 <u>8</u> 5	9.025 0.016 0.059 0.050	0.238 0.257 40.750	0.693 0.693		0.630
D6 (ditch)	0 Ø83 🔊	0:950	1 1 2 3 5 7 2 9	0.693 0.696 0.173 4	0.242	0.827
R1 (pond)	≥0 .077 *	& 0.072 ×	<i>"</i> ₩.750 ~	Ø.173 🗳	0.163	1.561
R1 (stream)	€ 0.66©	© 0.089.°°	0.53	1.622		1.228
R2 (stream)	© 0.684	0.047	y 0.672	1.622	0.117	1.623
R3 (stream)	₩942 🔏	0,57 8 C	0.482 @	_1 .4 81	0.192	1.128
R4 (stream)	¥.661	₽ .175 √	1 .061	3.057	0.414	2.236
<i>V</i>			**************************************			

Step 4: The maximum PEC_{sw} and PEC_{sed} values and time weighted average concentrations at Day 7 of fluoxastrobin for relevant FOCUS Step 4 scenarios are given in the following tables.

Table CP 9.2.5-11: Winter cereals: Maximum PEC_{sw} values for fluoxastrobin at Step 4 after single and multiple applications

					Fluoxastro	obin (E+Z)	4		
				Cereal	ls (winter),	$2 \times 150 \text{ g}$	<u> </u>		
			Single ap	plication	Z,	Q	Multiple a	pplications	
Buffer				[µg/L])	4	"Oa	PEC	/μg/LD	
Width	Scenario		Drift Re	eduction 🧘		Q ,	o Drift(R	eduction	<u> </u>
& Type		0%	50%	75%0	90%	√ 0′% ∅;	50%	√05% ⊗	90%
	D1 (ditch)	0.350	0.220	0,191	Ռ191 <i>4</i>	0.454	. 0 04 54 °	0.454	0.484
	D1 (stream)	0.345	0.195	0 1/21	0.120	0.337	Ø.284 S	0.284	0.284
	D2 (ditch)	0.454	0.454	0.454	0.454	00951	0.95	0.951	₽ 0.95∤ °
	D2 (stream)	0.336	0.289	0.2890	0.289	0.597	0. 59 7	0.597	0.507
	D3 (ditch)	0.258	0.129	0.065	0.026	0.216	~0°408		0.022
	D4 (pond)	0.028	0.01	0.011	©0.010	0.036	₩ 0.025	0.023	3 .022
5m	D4 (stream)	0.267	0 633	%Ø.067.	0.038	3 .242	0.12	00081	0.081
SD	D5 (pond)	0.029	0.014	© 0.007	0.003	7 0.04 2	0.021	\$0.011\cdot\)	0.005
	D5 (stream)	0.277	0.138	0.069	3 0.028 §	0.259	0128	0.064	0.026
	D6 (ditch)	0.257		09064	> 0.02€ ″	0016		09054	0.033
	R1 (pond)	0.074	0.067	0.064	0.062	Ø.199 Ø	<i>C</i> o	©182	0.178
	R1 (stream)	0.571	9/.571 00.000	0.57	00371	1.663	1,663	1.663	1.663
	R3 (stream)	0.809	0.809	0.899	0.809	1.337	(1.33 / % (1.72 %)	1.337	1.337
	R4 (stream)	0.807	, 0.807 QJ91	0.101	0.80	(1.724	0.854	1.724	1.724
	D1 (ditch) D1 (stream)	0.245	Ø.125	0.19	0,191 0,120	0.284	0.45%	0.454 0.284	0.454 0.284
	D1 (stream) ©	0.203 \$454 %	0.454	0.120° 0.454	©0.454©	0.284	0.284 _ 20 .951	0.284	0.284
	D2 (stream)	0.289	0.289	0.289 s	0.289	0.201 Ø597 .2	9.931 0.597	0.597	0.597
	D3 (diten)	0.287	00068 Q	00.034	0.289	\$ 112	0.056	0.028	0.011
	D4 (pond)	0.620	ر 0.011	0.054	Q:010	0.02	0.030	0.028	0.011
10m	D4 (stream)	√0,142 «	0.071	0038	0.038	0.425	0.021	0.022	0.021
SD	(pond)	0.02 1	0.000	0.005	0.002	0.030	0.015	0.008	0.004
&RO	D5 (stream)	0.149	0.073	0.037	0.015	~ 0.133	0.066	0.033	0.021
	D6 (ditch)	0.436	₩0.068 ©	0.034	[©] 9:016 ≈	0.112	0.056	0.033	0.033
	R1 (pond)	.0.034	0.029	.0.9 27	0.02	0.087	0.079	0.075	0.072
	R1 (stream)	Q.0.26Q\$	0,260	×0.260 \$	0.260	0.755	0.755	0.755	0.755
	R3 (stream)	0.3	20,369 ×	0.369	0.369	0.601	0.601	0.601	0.601
	R4 (stream)	0.3 64	30.364Q	0,3604	© 364	0.778	0.778	0.778	0.778
	D4 (ditch)	0.191	0.19	×0,191 «	© 0.191	0.454	0.454	0.454	0.454
4	🗗 (stream) 🦠	$\sqrt{9}0.128$	0.120	©0.120°	0.120	0.284	0.284	0.284	0.284
J ,	D2 (ditch)	0.454	0/454	0.454	0.454	0.951	0.951	0.951	0.951
	D2 (stream)	9 289 3	$\sqrt{0.2890}$	0,289	0.289	0.597	0.597	0.597	0.597
	D3 (ditch)	'6.071 °C	0.036 0011	0.018	0.007	0.057	0.029	0.014	0.006
20m	D4 (pond)	0.071 C	900 11	$\mathbb{Q}.0.010$	0.010	0.025	0.023	0.022	0.021
SD &	D4 (stream)	<i>0,0</i> 34	~9.038 _{@1}	0.038	0.038	0.081	0.081	0.081	0.081
RO	D5 (Fond) \(\sqrt{'}	€014 ≰	`	0.004	0.002	0.020	0.011	0.006	0.003
10	Do (stream)	0.076	0.038	0.019	0.008	0.068	0.034	0.021	0.021
× ×	D6 (diton) 🐧	0.07	0.035	0.018	0.016	0.057	0.033	0.033	0.033
4	R1 (pond)	(Q. 6)\$\forall 9	0.015	0.014	0.013	0.046	0.041	0.038	0.036
Æ,	R lostream	1 36	0.136	0.136	0.136	0.395	0.395	0.395	0.395
*	(stream)	0.194	0.194	0.194	0.194	0.314	0.314	0.314	0.314
* SD and	R4 (stream)	0.190	0.190	0.190	0.190	0.406	0.406	0.406	0.406

^{*} SD and RO denote spray drift and runoff buffer

Table CP 9.2.5- 12: Winter cereals: TWAC_{sw}-7 for fluoxastrobin at Step 4 after single and multiple applications

					Fluoxastro	hin (F±7)			
						$\frac{\text{DBH}(E+Z)}{\text{3.2} \times 150 \text{ g}}$	o s /ho 🎘		
			Single ar	oplication	is (willter),	9		pplications	
Buffer				-7 [μg/L]		-		-7 [μg/k]	
	Scenario			eduction			Drift Ro		~Q'
& Type		0%	50%	75%	90%	0% 0	50%	75%	7 90%
	D1 (ditch)	0.283	0.183	0.176	_e 0.176	0.43\$	0.435	0.435	0,435
	D1 (stream)	0.110	0.110	0.110	0.110	0.272	0.272	0.27	€ 10° 12° 12° 12° 12° 12° 12° 12° 12° 12° 12
	D2 (ditch)	0.258	0.183	0.183	0.183	Ø.¥19 ∂	° 0.419	0(419	0.419
	D2 (stream)	0.096	0.096	0.096	0.096	> 0.233₡ٌ	0.233	\ \ \ \ 	0.230
	D3 (ditch)	0.054	0.027	0,013	0.005	0.052	,00026 T	0.043	0.005
	D4 (pond)	0.026	0.013	9 010	Z 0.00 9	0.034	0.023	0.021	4 0.020
5m	D4 (stream)	0.010	0.010	0.010	0.0	Ø.021 C	0.02 i	Ø21 g	\$\$\0.02£,°
SD	D5 (pond)	0.026	0.013 📈	0.00	0.003	0.032	0,020	0.010	0.005
	D5 (stream)	0.001	0.001	Q.000	000.000	0.064	20,002	> 0.002	0002
	D6 (ditch)	0.040	0.02	(0,0 10 ×	0.004	Q.691	№ 0.04 <i>5</i> ®	0.4022	© .009
	R1 (pond)	0.070	0.064	\$ 0.060\$	0.059	189	0.1.78	A472 👸	0.169
	R1 (stream)	0.071	0 .071	0.071	0.071	0.207	0207	\$0.20 <i>7∜</i>	0.207
	R3 (stream)	0.113	0.113	0,43	Ø.113 6	0.182	©.182 °	0.182	0.182
	R4 (stream)	0.218	0.218	0.218) 0.218 °	00183	0.483	0.483	0.483
	D1 (ditch)	0.182)	0.176	©0.17 6	0.176	J. 9.435 J	0.435	0.435	0.435
	D1 (stream)	0.110	0.110	0.100	6 9110	0.272	0.272	© 0.272	0.272
	D2 (ditch)	183	0.183	0.083	£0.183	0.4449	9 .419	0.419	0.419
	D2 (stream)	0.096	0.096	0.096	0.096	Ø 233	0.23	0.233	0.233
	D3 (ditch)	0.02	6 014	0.007	0.003	00.027		0.007	0.003
10m	D4 (pond)	0.018	0.010	0.069	0 :009	0.025	0.022	0.021	0.020
SD.	D4 (stream)	6010	0.01%	0.010	90.0100	0.621	Ø.021	0.021	0.021
&RO	D5 (pond)	0.019	00009	9.005 0.005	0.002	0.028 🕊	0.014	0.008	0.004
	D5 (stream) D6 (ditch)	0.00	©0000 &		0000	0.002	0.002	0.002	0.002
	Do anton)	0.021 ×0.032 ×	0.010	0.005	1 <i>U/</i> /167	0.047	0.023	0.012	0.005
,	R1 (pond) R1 (stream)	0.032 × 0.032 ×	∫ 0.02 5 0. © 2	0.032	0.024	0.083	0.075 0.093	0.071 0.093	0.068 0.093
Ä	R3 (stream)	0.03	0.052	0.032 \(\sigma 0.052\)	0.032 20.052	$\gg 0.081$	0.093	0.093	0.093
	R4 (stream)	0.032	0.032	0.032	Ø.099 £	0.220	0.081	0.081	0.031
	D1 (ditch)	30 176 S	0.176	£0,176	0.176	0.220	0.220	0.220	0.220
	D1 (ditelogation)	Q0.1100	0.170	30.110 S	0.170	0.433	0.433	0.433	0.433
	D2 (dijch)	0.13	~%.183~			0.272	0.419	0.272	0.419
	D2 (stream)	0.63		0.103/	0.183	0.413	0.233	0.413	0.233
	Da (ditch)	0.015	0.096Q 0.067	0,696 20,004 ×	0.001	0.233	0.233	0.233	0.233
é	(anten) D 4 (pond)	0.013	0.010	\$0.000 \$0.000 \$0.000	0.009	0.023	0.007	0.003	0.019
20m	D4 (stream)	0.0410	Ø.010 Ø	0.040	0.010	0.021	0.021	0.021	0.021
- 7 <u>~</u> ^	D5 (pond)	G 6113	∾ĭ∩ ∩∩ <i>6</i> Q	00003	0.001	0.019	0.010	0.005	0.003
	D5 (stream)	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002
	D6 (ditch) 4	0.010	9 905	0.003	0.002	0.024	0.012	0.006	0.004
	R1 (pond)	0.08	0.015 _@		0.012	0.044	0.039	0.036	0.034
	R K stream	00017 .≰	U 0.01♥	0.017	0.017	0.049	0.049	0.049	0.049
	(stream)	0.027	0.027	0.027	0.027	0.042	0.042	0.042	0.042
2	R4 (stream) 🗳	0.050	0.052	0.052	0.052	0.115	0.115	0.115	0.115
23			off buffer						

Table CP 9.2.5-13: Winter cereals: Maximum PEC_{sed} values for fluoxastrobin at Step 4 after single and multiple applications

					T-1	1. ~ -			
					Fluoxastro				
					ls (winter),	$2 \times 150 \text{ g}$		4	
			Single ap	plication]		pplications	
Buffer				[µg/kg])			PEC sed	[μg/kg]	
Width	Scenario			eduction		٨		eduçiiøn	
& Type		0%	50%	75%	90%	0% @	50%	Ø5% <u></u>	¥ 90%¥
	D1 (ditch)	2.370	2.321	2.296	2.281	4.73€	4.609	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4,503
	D1 (stream)	1.300	1.298	1.298	يريم 1.298	2.579	2.575 💍	2.5%	©.573 °
	D2 (ditch)	1.620	1.487	1.457	1.439	3.\$53 ₫	°3.25 7	3(209	3.180
	D2 (stream)	0.761	0.759	0.750	0.759	> 1.809 <i>©</i>	1.743	\\\\\\.732_\@	1.726
	D3 (ditch)	0.197	0.101	0.052	0.021	0.239	00123	> [™] 0.064	0.027
	D4 (pond)	0.228	0.145	6 703	© 0.07 9 €	0.\$99	©0.265	0.198	0.160
5m	D4 (stream)	0.035	0.035	0.034	0.034	Ø.075 €	0.074	9 73	₹0.07 3 €
SD	D5 (pond)	0.218	0.115	0.062	0.029	0.358	0.494	Ø.111	0.066
	D5 (stream)	0.008	0.004	0.002	Ø.002	0.0222	0,012	> 0.007	0007
	D6 (ditch)	0.158	0.08	Ø,042 ×	0.019	0.285	\$¥0.149@*	0.078	3 .034
	R1 (pond)	0.674	0.603	3 0.568	0.547	Ør.647	1.53	1484	1.451
	R1 (stream)	0.523	Ø:521 °	0.519	0.519	71.500	1502	31.499	1.498
	R3 (stream)	1.224	1.2110	1 204	9.199	1.389	₩377 ©	1.372	1.368
	R4 (stream)	0.829	0.827	0.826	0.825	1915	1.91	1.908	1.907
	D1 (ditch)	2.324)*	2.297	2.284	2.276	4.614	4.545	4.511	4.491
	D1 (stream)	1.299	OF.298	1.208	10297	2.540	2.57/4	© 2.573	2.572
	D2 (ditch)	1 490 0 700	1.45%	1.43	1.434	3.261	3.211	3.186	3.171
	D2 (stream)	0.760	0.759	0.759	0.75%	Ø.744 Ø.128⊈	1.73	1.727	1.723
	D3 (ditch)	0.10	6 (955	0.028	0.0¥2 0.074 @	0.322	0.066	0.034	0.014
10m	D4 (pond)	0,181 0,035 %	0.034		90.034©	0.322	0.226 Ø.073	0.180	0.153
SD	D4 (stream) D5 (pond)	0.161	9 0.0342 00086	0.034 × 0.047 L	0.024	0 654 264 ×	0.146	0.073 0.089	0.073 0.057
&RO	D5 (stream)	0.005	©003 &	0.002	0.024	. 0.204 % 0.012	0.007	0.089	0.037
	D6 (ditch)	0.086	0.045 ₄	0.002	0002	0.15	0.007	0.007	0.007
	R1 (pond)	±0.080 ±0.336 ≤	0.043	0.0255	0.238	0.125	0.694	0.652	0.627
	Ry (stream)	0.330 A	0.2	0.181	0.230	0.508	0.506	0.632	0.504
	R3 (stream)	0.160	0.345	0.1810	0.338	♥.508 №0.458	0.452	0.304	0.304
	R4 (stream)	0.366	20,345 €	0.364	© 364	0.805	0.432	0.801	0.800
	D1 (ditch)	\$ 298	2 284	2977	2.276	4.547	4.512	4.495	4.484
	D1 (stream)	Q 298	1.298	297	1 297	2.574	2.573	2.573	2.572
	D2 (dijch)	1.460	°4½444 ~	1.435	1.430	3.212	3.186	3.174	3.166
	D2 _s (stream)	Ø5759 ≈	0.759	0.989	0.758	1.733	1.727	1.724	1.722
	D3 (ditch)	0.057	0.029	0,\$39 20,015, 4 20.082	0.006	0.067	0.035	0.018	0.007
• 0	(pond) >	0.142	. U. LU I	©0.082°	0.070	0.256	0.194	0.164	0.146
20III	D4 (stream)	0.034	Ø.034 Ø	0.034	0.034	0.073	0.073	0.073	0.073
SD &	D5 (pond)	g \$111	₩0.066Q	0034	0.019	0.183	0.106	0.071	0.050
RO T	D5 (stream)	0.003	0.002	0.002	0.002	0.007	0.007	0.007	0.007
	D6 (ditch) 4	\ 0.046 \	9 925	$\mathbb{Q}_{0.014}$	0.010	0.082	0.043	0.023	0.022
	R1 (pond)	0.04 6 0.4 9 4	0.157 _@	0.138	0.126	0.433	0.376	0.348	0.330
	R J (Stream)	_ 	IJ 0.0 9 ᡚ	0.091	0.091	0.254	0.253	0.252	0.252
	RØ (stregnn)	©.167	0.163	0.161	0.160	0.227	0.224	0.222	0.221
	R4 (stream) 🗳	∩ 1×005×	0.194	0.194	0.194	0.425	0.423	0.423	0.422
* SD and	RO denote spray	drift and run	off buffer						
Æ.									
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C	J								

Table CP 9.2.5- 14: Spring cereals: Maximum PECsw values for fluoxastrobin at Step 4 after single and multiple applications

& Type	Scenario D1 (ditch) D1 (stream)	0%	PECsw Drift Re	Cereal oplication [µg/L])		obin (E+Z) 2 × 150 g a	a.s./ha S Multople a A PECsw	pplications [µg/L6] eduction	
Width & Type 5m	D1 (ditch) D1 (stream)		PECsw Drift Re	plication [μg/L])	(- <u>1</u> 8);	ľ	Multople a	pplications	
Width & Type 5m	D1 (ditch) D1 (stream)		PECsw Drift Re	[μg/L])		1	APECsw	[µg/L]	
Width & Type 5m	D1 (ditch) D1 (stream)		Drift Re				∠ I LUsw	IME/LAD"	W.a
& Type 5m	D1 (ditch) D1 (stream)						White De	duckan	~. Q`
5m	D1 (stream)		500/		90%	0%_Ø	50%	75%	>> 90
5m	D1 (stream)		50%	75%	- Van				
5m	` /	0.311	0.235	0.235	0.235 0.147	0.523	0.523	90.523 0.32	0,3 0.3
		0.308 0.258	0.154 0.129	0.147 0.064	© 0.147 0.026	0.327 0.216 @	0.327 0.10 %	0.32%	Oh c
	D3 (ditch) D4 (pond)	0.238	0.129	0.064	0.026	0.216 ∂ >0.040©	0.108	0054 0.026	0.0
SD	D4 (pond) D4 (stream)	0.028	0.014	0.012			0.028 _00122	0.086	Q.
	D4 (stream) D5 (pond)	0.284	0.142	0,071 9,007	0.043 0.003	0.24.3	M 020 C	0.010	وبي 0.0 م
	D5 (pond) D5 (stream)	0.029	0.013	0.073	0.029	Ø253 C	0.020 0.126		
	R4 (stream)	1.101	1.101	1.104	0.029 1.101 _{&}	2.17%	2.120 2.177	2.177	2.1
	D1 (ditch)	0.235	0.235		7 225 C	0.582	\$.0 522 °	√ 0.522	2.1
	D1 (anch)	0.233	0.233	Q,233 QQ,¥47 ≪	0.235 0.147	0.527	0.327	0.327	Q .3
	D3 (ditch)	0.104	0.150	\$0.034\$	0.094	Ø:112	0.056	\$ 028 B	
10m	D4 (pond)	0.137	0.008	0.012	0.011	0.030	0.027	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.0
SD	D4 (stream)	0.020	0.075	0.012	Ø.043 6	0.129	©.086	0.086	0.0
&RO	D5 (pond)			0.005	50.092	QQ28	0.012	0.000	0.0
	D5 (stream)	0.021 0.15 5	0.077	©0.039	0.015	(V) 131 @	0.066	0.033	0.0
	R4 (stream)	0.501	0.501	0.50	6 9501	0.978	0.978	© 0.978	0.9
	D1 (ditch)	9 235 a	0.235	0.235	\$\int_0.235\\	0.523	9.523 ×	0.523	0.5
	D1 (stream)	0.147		3. 147	0.140	©.327	0.32	0.327	0.3
20	D3 (ditch)	~ 0 07 <i>a</i>	0.147 \$936	0.018	0,007	057	0.028	0.014	0.0
20m	D4 (pond) D4 (stream) D5 (pond)	0,014	Ø.012~	0.01	1 0.011	0.028	0.025	0.024	0.0
SD &	D4 (stream)	. 6078 ×	0.043			0.686		0.086	0.0
RO	D5 (pond)	0.014	0,0007	№ .004 €	$^{9}0.002$	Ø 019 🔏	0.010	0.005	0.0
	D5 (stream)	0.080	©040 %	0.02 0	0008	£0.067	0.033	0.019	0.0
	R4 (stream) ®	0.262	© 0.262	0.262	9 .262	0.510	0.510	0.510	0.5
* SD and 1	D4 (stream) D5 (pond) D5 (stream) R4 (stream) R0 denote spray	drift and rusk	off buffer						
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Table CP 9.2.5- 15: Spring cereals: TWAC_{sw}-7 for fluoxastrobin at Step 4 after single and multiple applications

		пррисаен							
						obin (E+Z)			
					ls (spring).	$2 \times 150 \text{ g a}$			
				plication		N		ppneations	
Buffer				-7 [μg/L]				v-7 [μg/Δ)	
Width	Scenario	22/		eduction		, i		educiion	// ALS/
& Type	D1 (11: 1)	0%	50%	75%	90%	0%	50%	75%	90%
	D1 (ditch)	0.256	0.219	0.219	0.219	0.513	0.512 0.320	0.512	0.312 0.320 [©]
	D1 (stream) D3 (ditch)	0.137 0.042	0.137 0.021	0.137 0.010	0.137	0.320 0.036	00018	0.320	0.004
5m	D3 (ditcil) D4 (pond)	0.042	0.021	0.010	0.010	0.037©	0.018	9.024 ©	0.002
SD	D4 (stream)	0.020	0.013	0.011	0.010	A		0.024	0.024
SD	D5 (pond)	0.026	0.013	0.007	Ø 0.003	0.027	∑M ∩19≪	0.010	, 0.004
	D5 (stream)	0.002	0.001	. 0 001 🖔	0.000	0.003	0.002	Ø01	0.00t
	R4 (stream)	0.338	0.338 🦟	0.338	0.338	<b>₹</b> 0 479€	0.476	0.474	0.473
	D1 (ditch)	0.219	0.219	0,219	0.219 0.137 0.002	0.542	×0,512	0.512	0512
	D1 (stream)	0.137	0.13	<b>20,</b> ₹37 ⊌	$\int_{0.137}$	0.920	40.3200	0.320	<b>©</b> .320
10m	D3 (ditch)	0.022	0. <b>©</b> ľ1	0.006 0.011	0,002		0.00	<b>№</b> 005 @	0.002
SD	D4 (pond)	0.018	0.012	0.011	0.010	0.0280	0025	30.023	0.022
&RO	D4 (stream)	0.011	0.0110	0 0 1	Ø.011 6	0.024	©.024	0.024	0.024
	D5 (pond)	0.019	0.010	0.005	0.002	QQ26 4002 Q	0.012	0.007	0.003
	D5 (stream)	0.004)* 0.154	0.001	0.000	0.000 09154	0.217	0.001 0.215	Ø.001 Ø 0.215	0.001 0.214
	R4 (stream) D1 (ditch)	0.134	0.21%	0.6340	£ 0.210- 3	0.542	9.512	0.512	0.214
	D1 (atten)	0 137	0.219 0.137	0.137	0.130	©,320	0.326	0.312	0.312
• •	D3 (ditch)	0.137	<b>% 9</b> 06	0.003	0.001	00.010	0.005	0.002	0.001
20m	D4 (pond)	0,012	<b>30</b> .011		<b>0</b> :010		0.024	0.023	0.022
SD & RO	D4 (pond) D4 (stream) D5 (pond)	<u>,</u> 66011 ≥	9 0.01 <b>%</b>	0.011	[\(\gamma 0.01 \)[\(\gamma \)	0,624	<b>\$</b> 0.024	0.024	0.024
KO		0.013	0,006	<b>№</b> .003 €	0.002	0.018		0.005	0.003
	D5 (stream)	$\Theta \cap Ood$	©0000 &	0.000	0000	0.001	0.001	0.001	0.001
	R4 (stream) O	0.081	0.081	0.081	9.081	0.113	0.113	0.112	0.112
* SD and	RQ denote spray	drutt and rum	øtt butter»	Q					
E		v , S			' <b>\</b> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	~O`			
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C	R4 (stream) RQ Renote spray								

**Table CP 9.2.5-16:** Spring cereals: Maximum PEC_{sed} values for fluoxastrobin at Step 4 after single and multiple applications

			аррисаци		Fluovosta	obin (E+Z)			
						, 2 × 150 g a	s /ho 🏷		
			Single or	oplication	rə (əhring)		- A 2	pplications	
Buffer				/μg/kg])		1		[μg/kg]	
Width	Scenario			eduction		5	Drift R		
& Type	20010110	0%	50%	75%	90%	0% Ø	50%	75%	90%
	D1 (ditch)	2.938	2.805	2.738	_e 2.698	5.74	5.528	Ø5.418	5,352
	D1 (stream)	1.580	1.575	1.573	$\sqrt[6]{1.572}$	3.453	3.144		®137 ¥
	D3 (ditch)	0.165	0.084	0.043	0.018	Ø.₹90 @	° 0.09	00050	0.02 L
5m	D4 (pond)	0.234	0.152	0.110	0.086	$\sim 0.410$	0.281	9.218	
SD	D4 (stream)	0.040	0.039	0,039	0.038	0.086	00084	0.083	0.082
	D5 (pond)	0.217	0.115	6063	<i>7</i> /3°0.0 <i>3</i> ;≰∠/	0.352	0.190	0.106	0.060
	D5 (stream)	0.013	0.007	0.004	0.002	Ø.020 €	0.010	\$ 006	0.006
	R4 (stream)	1.631	1.627	1.624	1.623	2.445	2.437	2.433	2.480
	D1 (ditch)	2.813	2.742	2.707	2.686 1.574	5.5346	~5,422 <u>~</u>	5.365	5331
	D1 (stream)	1.576	1.57	(1) 372 ×	1.5/4	3.944	∜3.1400°	3.438	©.136
10m	D3 (ditch)	0.089	0.045	0.023	0.000	Ø.101	0.05	Ø27 &	
SD	D4 (pond)	0.188	0.039©	0.099 0.0998	0.082	0.3330	0 <b>2</b> 44 <b>0</b> 0.083	\$0.200 \$\int 0.083\text{\text{3}}\text{\text{6}}	0.174
&RO	D4 (stream) D5 (pond)	0.039		0.048	0.0380	0.084	0.142	0.083	0.082
	D5 (pond) D5 (stream)	0.160 0.00 <b>2</b>	0.004	0.048 % 0.002	0.002	(\$239 (\$.011)	0.142)*	0.006	0.052 0.006
	R4 (stream)	0.627	0.004	0.623	0.002	0.984	0.006 0.976	© 0.974	0.000
	D1 (ditch)	2 745	2 70%	2/6/20	\$.2.679°	5 800	366°	5.337	5.319
	D1 (diteil) D1 (stream)	1 573	2.700 ₀	571	1 570	Ø 140	3.138)	3.137	3.136
	D3 (ditch)	0.04	6K.074	0.012	0.005	00.053	0.027	0.014	0.006
20m	D4 (pond)	0.148	\$ 108 108	0.089	0.78	0.272	0.214	0.185	0.168
SD &	D4 (stream)	€ 639	0.03	0.038 .	90.038	0.683	<b>Ø</b> .083	0.082	0.082
RO	D5 (pond)	0.111	0,0061	©.035 √	0.02	<b>179</b>		0.065	0.044
	D5 (spream)	0.00	©0002 &	©0.00 <b>2</b> €″	0002	£0.006	0.006	0.006	0.006
	R4 (stream) O	0.324	$0.323_{4}$	0.322	<b>322</b>	0.54	0.509	0.508	0.507
* SD and	RQ denote spray	drift and run	off buffer						
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C	D5 (stream) R4 (stream) D1 (ditch) D1 (stream) D3 (ditch) D4 (pond) D5 (pond) D5 (stream) R4 (stream) R0 Jenote spray								

Table CP 9.2.5-17: Winter cereals: Maximum PEC_{sw} values for fluoxastrobin at Step 4 after single and multiple applications

						1. (= =						
			Fluoxastrobin (E+Z)  Cereals (winter), 2 × 125 g a.s./ha									
					ls (winter),				<u> </u>			
			Single ap	plication		]		pplications				
Buffer			<b>PECsw</b>	$[\mu g/L]$			△ PECsw	[µg/L]				
Width	Scenario			eduction	<i> A</i>		∜Drift Re	eduçtiøn				
& Type		0%	50%	75%	90%	0% Ø	50%	75%	90% [®]			
	D1 (ditch)	0.287	0.178	0.141	_e 0.141	0.34	0.348	©0.3485	0,348			
	D1 (stream)	0.285	0.161	0.098	0.089	0.279	0.218	0.21%	©.218			
	D2 (ditch)	0.358	0.358	0.358	0.358	Ø.₹51 ø	° 0.754	00751	0.751C			
	D2 (stream)	0.274	0.229	0.229	0.229	<b>√</b> 0.47,4 <i>©</i> °	0.474	√9.474 ©	0.474			
	D3 (ditch)	0.215	0.107	0,054	0.022	0.180		0.045	0.018			
5m	D4 (pond)	0.024	0.012	0.008	Z 0.00 <b>%</b>	0.030	0.020 0.101	0.018	₄ 0.017			
	D4 (stream)	0.223	0.111	0.056	0.0	Ø.201 °C	) 0.101°	Ø65	\$\frac{1}{2}0.06 <b>3</b> €, °			
SD	D5 (pond)	0.024	0.012 📈	0.006	0.003	0.035	0 <b>.</b> 978	0.009	0.004			
	D5 (stream)	0.231	0.115%	Q.U <b>&gt;</b> /8	©.023	0.243	×0,106	¥ 0.0 <b>5</b> 3	0021			
	D6 (ditch)	0.214	0.10	Ø Ø Ø 54 ×	0.024	Q.) <del>\</del> 80	<b>∜</b> 0.090®	0.045	<b>©</b> .026			
	R1 (pond)	0.061	0,055	<b>\$0.053</b> \$	0.051	<b>163</b>	0.15	J49 0	0.146			
	R1 (stream)	0.466	<b>%</b> 466	0.466	0.466	71.3550	1835	\$35,5€°	1.355			
	R3 (stream)	0.658	0.658	0,638	<b>3</b> 0.658 6	1.090	£.090	1.090	1.090			
	R4 (stream)	0.662	0.662	0.662	0.662	10110	1.41	1.410	1.410			
	D1 (ditch)	0.185	0.141	©0.14 ₁	0.141	J. 9.348 Q	0.348	0.348	0.348			
	D1 (stream)	0.168	07.102	0.089	09089	0.218	0.218	<b>©</b> 0.218	0.218			
	D2 (ditch)	19,358 ₄	0.35	0338	√y0.358 _y °	0.∜≸Î	<b>9</b> .751	0.751	0.751			
	D2 (stream)	0.229	0.229	<b>3</b> .229	0.229	<b>Q</b> 474	0.47	0.474	0.474			
	D3 (ditch)	0.11	<b>6 9 5</b> 7	0.029	0.011	00.094	0.047	0.023	0.009			
10m	D4 (pond)	0.017	Ø.009	0.008	<b>0</b> :008	0.022	0.019	0.018	0.017			
SD	D4 (stream)	<b>6</b> 118	9 0.05 <b>9</b>	0.031	90.031	0.495	Ø.065	0.065	0.065			
&RO	D5 (pond)	0.017	00009	9.004 L	0.002	0.025 <	0.013	0.007	0.003			
	D5 (stream) D6 (ditch)	0.123	©061 &	0.03	0012	0.111	0.055	0.028	0.016			
	Do anton)	0.14	0.057	0.028	0.013	0.024	0.047	0.026	0.026			
	R1 (pond)	©0.028 \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	) 0.024 ×	0.212	0.021	0. <b>0</b> 72 0.616	0.065	0.062	0.059			
	K³ (stream) K³ (stream)	0.300	0.2§2 _0.300 _	0.212	0.300	Ø:010 ≈>0.490	0.616 0.490	0.616 0.490	0.616 0.490			
	R4 (stream)	0.36%	299 C	0.300	Ø.299	0.636	0.490	0.490	0.490			
	D1 (ditch)	30 141 S	0.144	0,799 0,141	0.140	0.030	0.030	0.030	0.030			
	D1 (stream)	Q0.105	0.149	30.089 30.089	0.140	0.348	0.348	0.348	0.348			
	D2 (disch)	0.358	. °€%358 ~		0.250	0.751	0.751	0.751	0.751			
	D2 (stream)	0.50	A	0.358 0.229 20.015, «	0.338	0.474	0.474	0.474	0.474			
	D3 (ditch)	0.059	0.229	%0.015 ×	0.006	0.048	0.024	0.012	0.005			
	(diten) (pond) >	$\sqrt[9]{0.03}$	0.030	©0.015	0.008	0.020	0.024	0.012	0.003			
20III	D4 (stream)	0.0461	Ø.031 É	0.008	0.031	0.065	0.065	0.065	0.065			
SD &	D5 (pond)	<b>9</b> 012	$\gg 0.006$	0.003	0.001	0.017	0.009	0.005	0.002			
RO	D5 (stream)	0.064	0.032	0.016	0.006	0.056	0.028	0.016	0.016			
	D6 (ditch)	\ 0.05 <b>©</b>	<b>9</b> 930	20.015	0.013	0.048	0.026	0.026	0.026			
	R1 (pend)	0.05	0.013 _@	0.011	0.011	0.038	0.034	0.031	0.030			
	R J (stream)	<b>O</b> 111 ×	₩ 0.11®	0.111	0.111	0.322	0.322	0.322	0.322			
	(stream)	0.158	0.158	0.158	0.158	0.256	0.256	0.256	0.256			
1	12 1 (ctroken) 1	∩ 1≈¶76≤2	0.156	0.156	0.156	0.332	0.332	0.332	0.332			
* SD and	RO denote spray	drift and run	off buffer	1	1	<u>.                                    </u>						
	RO denote spray											
*												
Ĉ	Ĭ											

Table CP 9.2.5- 18: Winter cereals: TWAC_{sw}-7 for fluoxastrobin at Step 4 after single and multiple applications

					T31 .	1. (5:5)			-, \$
						obin (E+Z)	- 🌭		
					ls (winter),	$2 \times 125 \text{ g}$			
	T		Single ap	plication				pplications	
Buffer				-7 [μg/L]			<b>ZWACsw</b>		
Width	Scenario			eduction		لم	≫Drift Re	~// * *	
& Type		0%	50%	75%	90%	0% Ø	50%	Ø5%	× 90%
	D1 (ditch)	0.231	0.148	0.131	0.131	0.329∜	0.329	©0.3295	0,329
	D1 (stream)	0.082	0.082	0.082	0.082	0.206	0.206	0.26	©.206 %
	D2 (ditch)	0.205	0.135	0.135	0.135	0.330 ₽	° 0.33 <b>6</b> %	0330	0.33Q
	D2 (stream)	0.068	0.068	0.068	0.068	<b>√</b> 0.181 <i>©</i> `	0.184	<b>\</b> \ <b>9</b> .181_\\$	0.184
	D3 (ditch)	0.045	0.022	0,011	0.004	0.043	<b>9</b> 00021 (	5°0.04.	0.004
	D4 (pond)	0.021	0.011	6008	© 0.00 <b>₹</b>	0.028	0.018 0.016	0.017	0.016
5m	D4 (stream)	0.007	0.007	0.007	0.007	Ø.016 C	© 0.016	<b>£</b> 016	~0.01 <b>6</b> , °
SD	D5 (pond)	0.022	0.011	0.007	0.002	0.033	0.077	0.009	0.004
	D5 (stream)	0.001	0.001%	Q,0 <b>%</b> 0	Ø.000	0.063	×0,001	> 0.001	00001
	D6 (ditch)	0.033	0.016	Ø,008 ×	0.003	0.075	<b>₩</b> 0.03 <b>%</b>	0.0029	<b>3</b> .007
	R1 (pond)	0.058	0.052	0.050	0.048	<b>155</b>	0.146	941	0.138
	R1 (stream)	0.058	0.058	0.058	0.058	0.16	0/1/69	Ĵ0.169∜	0.169
	R3 (stream)	0.092	0.092	0 92	Ø.092 6	0.149	0.149	0.149	0.149
	R4 (stream)	0.180	0.480	0.980	0.180	0 <b>Q</b> 97	0.39	0,397	0.397
	D1 (ditch)	0.153	0.131	0.131	0.131	© 329 Q	0.329	0.329	0.329
	D1 (stream)	0.082	0.082		09082	0.206	0.206	© 0.206	0.206
	D2 (ditch)	0,139	0.135	0.35	0.135	0.330	V.330	0.330	0.330
	D2 (stream)	0.068	0.068 X012	Ø.068	0.068	©,181 ©0.022	0.186) 0.011	0.181	0.181
	D3 (ditch)	0.02	Ø.008	0.006	0.002	0.022	0.014 $0.017$	0.006	0.002
10m	D4 (pond)	0,013 , 6007 ≱	0.00	0.069 0.007 ₂	0.007 0.007	0.020 0.6\16	Ø.017	0.016	0.015
SD	D4 (stream) D5 (pond)	0.016	% 0.00% 0 <b>%</b> 08	9.004 L	0.002	0.023 ×	RL 2/	0.016 0.006	0.016 0.003
&RO	D5 (speam)	0.000			0.002	0,023 × 20,002	0.0012	0.000	0.003
	D6 (ditch)	0.647	©000 §	0.000	0000	0.02	0.001	0.001	0.001
	R1 (pond)	±0.017 ±0.027 ±≤	0.023	0.0021	0.020	0.008	0.013	0.010	0.056
	Ri (stream)	0.027	0.025 0.626	0.026		0.076	0.001	0.036	0.036
	R3 (stream)	0.042	0,042	\$\int 0.042;	0.042	~0.067	0.066	0.066	0.066
	R4 (stream)	0.042	©.042 ©0.082	0.042	© 0.042 £	0.181	0.181	0.181	0.181
	D1 (ditch)	△0.131 ⊗	0.134	<b>131</b>	0.130	0.329	0.329	0.329	0.329
	D1 (stream)	Q0.082	0.082	\$0.082\$	0.082	0.206	0.206	0.206	0.206
	D2 (drijch)	0.133	°0/:135 ~	0 0 135	0.135	0.330	0.330	0.330	0.330
	D2 (stream)				0.133	0.181	0.181	0.181	0.181
	D3 (ditch)	≈0.012 <b>≈</b>	0.068	×0.003 ≪	J 0.001	0.011	0.006	0.003	0.001
20	<b>©</b> 4 (pond) %	$\sqrt{0.010}$	0.008	<i>∞</i> 0 007″У	0.007	0.018	0.016	0.016	0.015
20m SD &	D4 (stream)	0.007	0.007 (	0.007	0.007	0.016	0.016	0.016	0.016
SD &	D5 (pond)	Ø10 3	≫ U UU3≪.	0003	0.001	0.015	0.008	0.004	0.002
RO T	D5 (stream)	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
	D6 (ditch)	(\sqrt() ()(0097 ₁ )*	<b>6 6 0 0 0 0</b>		0.001	0.020	0.010	0.005	0.003
	R1 (pond)	0,04	0.012	0.011	0.010	0.036	0.032	0.030	0.028
	R J (stream)		₩ 0.01¥P	0.014	0.014	0.040	0.040	0.040	0.040
_	(stream)	$Q_{0.0220}$	0.022	0.022	0.022	0.035	0.035	0.035	0.035
4	R4 (stream) 🗳	0.00	0.043	0.043	0.043	0.095	0.095	0.095	0.095
* SD and	RO denote spray	drift and run	off buffer						
Æ,		Z"							
v &	Ŏ ^Ŋ								
C	J								

Table CP 9.2.5- 19: Winter cereals: Maximum PEC_{sed} values for fluoxastrobin at Step 4 after single and multiple applications

					-	1. /= =						
			Fluoxastrobin (E+Z)  Cereals (winter), 2 × 125 g a.s./ha									
					ls (winter),							
	I			plication		]		pplications				
Buffer				[µg/kg])			<b>PEC</b> sed	[μg/kg				
Width	Scenario		Drift Ro	eduction	Č.		™Drift Re	eduçtiøn				
& Type		0%	50%	75%	90%	0% @	50%	Ø5%	¥ 90%¥			
	D1 (ditch)	1.895	1.853	1.832	1.819	3.84∜	3.737	\$2.68 <b>2</b>	3,648			
	D1 (stream)	1.037	1.036	1.035	©1.035	2.486	2.083	2.0	©.081			
	D2 (ditch)	1.257	1.182	1.157	1.142	<b>2.</b> €38 ∂	° 2.55	2516	C _{2.492}			
	D2 (stream)	0.598	0.597	0.59	0.596	<b>√</b> 1.400 <i>©</i>	1.358	√¥.349 ¢	1.340			
	D3 (ditch)	0.165	0.085	0,043	0.018	0.201	Ø0104 (	0.053	0.022			
	D4 (pond)	0.189	0.119	0.084	&0.06 <b>3</b> €	0.\$30	©0.217	0.160	0.128			
5m	D4 (stream)	0.028	0.027	0.027	0.05	<b>9</b> .060 C	0.059	Ø58	₹ <b>0.05</b> %,°			
SD	D5 (pond)	0.183	0.097	0.052	0.024	0.300	0.462	0.090 ©	0.084			
	D5 (stream)	0.007	0.004	0.002	Ø.002	0.048	20,010	> 0.005	0005			
	D6 (ditch)	0.132	0.06	Ø Ø Ø 35	0.015	0.240	<b>≈</b> 0.12 <i>5</i> @″	0.065	<b>©</b> .028			
	R1 (pond)	0.563	0.503	0.473	0.455	Ør.374	1.282	<b>1</b> 236	1.209			
	R1 (stream)	0.441	0.439	0.438	0.437	71.2680	1265	31.263	1.262			
	R3 (stream)	1.023	1.0110	1 905	(3.002 b)	1.162	₩.152	1.147	1.145			
	R4 (stream)	0.696	0.694	0.693	0.692	1006	1.602	1.600	1.599			
	D1 (ditch)	1.855	1.833	1.822	1.815	\$.742 \Q	3.684	3.655	3.637			
	D1 (stream)	1.036	OF.035	1.035	19035	2.083	2.982	© 2.081	2.080			
	D2 (ditch)	1 185 0 507	1.15	1.45	1.137	2.560	¥.518	2.497	2.484			
	D2 (stream)	0.597	0.597	Ø:59/	0.596	(4,359 (0).108 (4)	1.34	1.344	1.341			
	D3 (ditch)	0.089	ØØ46 Ø099	0.023	0.010	0.265	0.056	0.029	0.012			
10m	D4 (pond)	0,150 0,027 >	0.02		0.059	0.265	0.183 Ø.058	0.144	0.121			
SD	D4 (stream) D5 (pond)	0.135	% 0.02₩ 0 <b>%</b> 072	0.027 · 0.039 L	90.027 0.020	0 039 220 ×	0.121	0.058 0.071	0.058 0.044			
&RO	D5 (spream)	0.00		(020 . )/	0.020	40 010	0.006	0.071	0.044			
	D6 (ditch)	0.672	©0002	0.002	©.009	0.120	0.068	0.003	0.003			
	R1 (pond)	0.072 ≤0.281 ≤	0.03	0.00	0.198	0.648	0.578	0.543	0.522			
	Ri (stream)	00.281	0.257	0.151	0.134	0.423	0.378	0.420	0.322			
	R3 (stream)	0.13	0,285	0.282	20.280	≫0.380	0.375	0.420	0.420			
	R4 (stream)	0.306	©.205 ©0.305	0.202	© 304	0.671	0.669	0.668	0.667			
	D1 (ditch)	△ 834 Å	1 892	4.816	1.8130	3.685	3.655	3.641	3.632			
	D1 (stream)	Q1.035	12035	× 035\$	1.035	2.082	2.081	2.081	2.080			
	D2 (disch)	1.159	%1146≪	1.139	£1.135	2.518	2.497	2.486	2.480			
	D2 (stream)	<b>6</b> 597 _≈	0.597Q	0.596 20.012 ×	0.596	1.349	1.344	1.342	1.340			
	D3 (ditch)	≈0.048 <i>\$</i>	0.597Q 0.024 0.082	<b>№</b> 0.012 ≪	0.005	0.056	0.029	0.015	0.006			
20	<b>D</b> 4 (pond) >	$\sqrt[9]{0.117}$	0.082	&©0 066£¥	0.056	0.209	0.156	0.131	0.116			
20III	D4 (stream)	0.027	Ø.027 Ø	0.027	0.027	0.058	0.058	0.058	0.057			
SD &	D5 (pond)	<b>g</b> 693 3	°>> U.U.>6><	0028	0.016	0.152	0.086	0.055	0.038			
RO T	D5 (stream)	0.002	0.002	0.002	0.002	0.006	0.005	0.005	0.005			
	D6 (ditch) 4	\ 0.0 <i>3\</i>	<b>9</b> 5920	$\approx$ 0.011	0.008	0.069	0.036	0.019	0.016			
	R1 (pond)	0.163	0.131 _@	0.115	0.105	0.362	0.314	0.290	0.275			
	R J (stream)		₩ 0.0 <b>7</b> %	0.076	0.076	0.211	0.210	0.210	0.209			
_	PØ (stregnn)	$Q_{0.1380}$	0.134	0.133	0.131	0.188	0.185	0.184	0.183			
× ×	R4 (stream) 🗳	∩ 1≈€C≥∞	0.162	0.162	0.162	0.354	0.353	0.352	0.352			
* SD and	RO denote spray	drift and run	off buffer									
Æ, "												
v &	Ö											
C	J											

Table CP 9.2.5- 20: Spring cereals: Maximum PECsw values for fluoxastrobin at Step 4 after single and multiple applications

			Tr -		Fluovostra	ohin (F±7)			
		Fluoxastrobin (E+Z)  Cereals (spring), 2 × 125 g a.s./ha							
			Single or	oplication	ra (ahr mg)			pplications	
Dffau				pneation [μg/L])		1		ppneations [μg/L	
Buffer Width	Scenario			lμg/L]) eduction		3	Orift R	- 0	
& Type	Scenario	0%	50%	75%	90%	0%	50%	75%	90%
ш турс	D1 (ditch)	0.256	0.178	0.178	_e 0.178	0.414	0.411	0.411	0,411
	D1 (stream)	0.257	0.176	0.170	0.170	0.457	0.257		€ 57 S
	D3 (ditch)	0.215	0.127	0.054	0.021	Ø. 80 €	° 0.096	0.23 7	0.018C
5m	D4 (pond)	0.024	0.012	0.009	0.009	$\sim 0.033$ ©	0.022	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	0.0
SD	D4 (stream)	0.236	0.118	0.059	0.034	0.204	Ø0102	0.069	0.069
	D5 (pond)	0.024	0.012	0.006	7, 0.00 <b>3</b>			0.009	₄ 0.004
	D5 (stream)	0.243	0.121	0.061 %	0.00	Ø211 C	0.017 0.105	Ø53	0.021°
	R4 (stream)	0.900	0.900 🏑	0.900	A ŠTOO	7 786	1.486	1.786 S	1.786
	D1 (ditch)	0.178	0.178	Q.17/8		0.44	<b>20,411</b>	0.41/1,	QQ#11
	D1 (stream)	0.136	0.14	Ø,¥12 ⊌	0.112	Q. <del>2</del> 57	.‱.257®	0.257	<b>3</b> .257
10m	D3 (ditch)	0.114	0.057	<b>\$0.028</b> ₽	O D M	<b>1</b> 0.093	0.04	Ø23 8	0.009
SD	D4 (pond)	0.017	0.010	0.009	0.009	0.0240	0021	\$0.020€	0.019
&RO	D4 (stream)	0.125	<b>♥</b> 0.063�	0,934	Ø.034 6	0.106	<b>0</b> .069	\$\text{0.069}	0.069
ako	D5 (pond)	0.017	0.009	0.005	0.002	0023	0.012	0.006	0.003
	D5 (stream)	0.12 <b>9</b> ,"	0.064	$\bigcirc 0.032$	0.013	J. 109 Q	0.055	0.027	0.015
	R4 (stream)	0.409	0.409		09409	0.802	0.802	<b>©</b> 0.802	0.802
	D1 (ditch)	19 <b>,</b> 178 4	0.178	0.78	√J0.178	0.44√1	9.411	0.411	0.411
	D1 (stream)	0.112	0.112 66030	0.112	0.110	Q0,257	0.25 <i>D</i>	0.257	0.257
20m	D3 (ditch)	0.112		0.012	W GOO	00.047	0.024	0.012	0.005
SD &	D4 (pond) D4 (stream) D5 (pond)	0,011	0.009	0.009	<b>0</b> :009 @	0.022	0.020	0.019	0.019
RO	D4 (stream)	_ 6065 €	y 0.034	0.034	90.034©	0,669	<b>4</b> 0.069	0.069	0.069
110			0,006	Ø.003 4	0.00	0.016	0.008	0.004	0.002
	D5 (stream)	0.0	©033 &	0.01	0007	\$0.056 0.418	0.028	0.015	0.015
1.05	R4 (stream)	0.244	0.214	0.214	214	0.419	0.419	0.419	0.419
* SD and	RQ denote spray	drutt _s and rum	øtt butter»	<b>O</b> *					
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Ş	R4 (stream) RQ denote spray	″ ‰″							
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Table CP 9.2.5- 21: Spring cereals: TWAC_{sw}-7 for fluoxastrobin at Step 4 after single and multiple applications

		пррисаці	<b>, 11</b> 5		- ·	11 (75 75)				
			Fluoxastrobin (E+Z)  Cereals (spring), 2 × 125 g a.s./ha							
					ls (spring).					
				plication		N		pplications		
Buffer				-7 [μg/L]				v-7 [μg/Δ)		
Width	Scenario			eduction	CA-	, , , , , , , , , , , , , , , , , , ,	^	educiion	// ALS/	
& Type		0%	50%	75%	90%	0%	50%	75%	¥ 90%¥	
	D1 (ditch)	0.211	0.163	0.163	0.163	0.39	0.398	0.398	0.398	
	D1 (stream)	0.101	0.101	0.101	0.101	0.248	0.248		0.248	
_	D3 (ditch)	0.035	0.017	0.009	0.003	0.031	° 0.015	0008	0.003	
5m	D4 (pond)	0.021	0.011	0.009	0.008	0.031	0.021	©.019 © 0.019		
SD	D4 (stream)	0.008	0.008	0,008	0.008	0.019	90019 °	0.008	0.019 a 0.004	
	D5 (pond) D5 (stream)	0.022 0.002	0.011 0.001	2 0.000 € 2 0.000 €	© 0.00 <b>2</b> 0.0∮€	0.003	0.016 0.001	0.008 2.001	0.004 0.00*	
	R4 (stream)	0.002	0.001	0.000	0.000	Ø.393 _%	0.001	0.389	0.001	
	D1 (ditch)	0.163	0.277	0.21	W 163		*0,398 g	0.389	0.3 <b>28</b> 0.398	
	D1 (ditch) D1 (stream)	0.103	0.103	© 103 0 101 ×	Ø.163 0.104	0.348	√0.2480)	0.3248	©.248	
	D3 (ditch)	0.101	0.1009	\(\int_{0.05}\)	0.002	<b>1</b> 0.016	0.00	0.276 004 0	0.002	
10m	D4 (pond)	0.015	0.009	0.005 0.008	0.008	0.022	0.0019	50.018	0.002	
SD	D4 (stream)	0.008	0.008	0.008	Ø.008 &		©.019	0.019	0.019	
&RO	D5 (pond)	0.016		0.004	0.002	0022	0.01	0.006	0.003	
	D5 (stream)	0.004	0.001	©0.00Q	0.000	J. 6.001 @		0.001	0.001	
	R4 (stream)	0.126	0.126	0.126	<b>6</b> 9126	0.178	0.001 0.177	© 0.176	0.176	
	D1 (ditch)	% 163 ₄	0.163	0.463	£0.163≈°	0.39%	<b>9</b> .398	0.398	0.398	
	D1 (stream)	0.101	0.191	0.002	0.100	@,248 _/	0.248	0.248	0.248	
20m	D3 (ditch)	~ 0.01/g	<b>%</b> Ø05	0.002	0,001	00.008	0.004	0.002	0.001	
SD &	D4 (pond) D4 (stream) D5 (pond)	0,010	0.009		<b>0</b> :008	0.020	0.019	0.018	0.017	
RO	D4 (stream)	<b>€</b> 008 €	0.00%	0.008	P0.008	0.649	<b>9</b> .019	0.019	0.019	
110		0.011	00005	Ø.003 4	0.001	0.015		0.004	0.002	
	D5 (stream)	0.000 0.066	©0000 §	0.000	0000	0.001	0.001	0.001	0.001	
* CD and	R4 (stream)	0.000 drift and mod	0.066	0.066	9.066	0.023	0.092	0.092	0.092	
SD and	Reg Genote spray		JII Dulkar	2		No.				
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**Table CP 9.2.5-22:** Spring cereals: Maximum PEC_{sed} values for fluoxastrobin at Step 4 after single and multiple applications

Table CP 9.2.5- 23: Onions: Maximum PECsw values for fluoxastrobin at Step 4 after single and multiple applications

			Fluoxastrobin (E+Z)							
						125 g a.s./h	ıa 💸			
			Single ar	plication	,			pplications		
Buffer				[μg/L])				μg/Lb		
Width	Scenario			eduction	₽n		[©] Drift R	eduçtiøn		
& Type		0%	50%	75%	90%	0% Ø	50%	<b>75%</b>	y 90%	
	D3 (ditch)	0.214	0.107	0.054	0.021	0.186	0.090	,©0.045°	0,018	
	D4 (pond)	0.024	0.016	0.015	© 0.015	0.045	0.042		<b>©</b> .041	
	D4 (stream)	0.221	0.110	0.055	0.043	0.185 €	° 0.112	0Q12	90.112	
_	D6 (ditch)	0.213	0.107	0.054	0.025	<b>√</b> 0.180 <b>©</b>	0.090	<b>9</b> .045	&// <b>&gt;</b> 2	
5m	D6 (ditch)	0.213	0.107	0,054	0.025	0.18]	00090	0.046	0.026	
SD	R1 (pond)	0.075	0.068	0064	© 0.06 <b>2</b>	0.469	©0.157	0.151	0.147	
	R1 (stream)	0.666	0.666	0.666	0.666	©622 ©	1.622	\$822	1.622	
	R2 (stream)	0.263	0.263	0.263	0.263	0.487	0.487	0.487	0.487	
	R3 (stream)	1.042	1.042	1.042	V1.042	1.489	1,481	1.481	12481	
	R4 (stream)	1.661	1.66	\$1,661 ×	1.664	3.95/	≈3.057@}	3.057	©.057	
	D3 (ditch)	0.114	0.057	0.028	0.011	Ø.093	0.045	023	0.009	
	D4 (pond)	0.017	0.059	0.015 0. <b>04</b> 3	0.015	0.040	0.042 - 0.112	0.041 0.112	0.041	
	D4 (stream)	0.117	0.059	0.029	0.043	0.102	0.047	0.112	0.112	
10m	D6 (ditch) D6 (ditch)	0.113		0.029 % 0.029	0.014	(4094 ©	•	0.026	0.025 0.026	
SD	R1 (pond)	0.1 kg/ 0.034	0.057	7 r d	0.014	0.075	0.048 0.067	© 0.063	0.020	
&RO	R1 (polid) R1 (stream)	0.534 0.302	0.302	0.0 <b>27</b> 0 <b>.\$</b> 02	\$\int 0.302\inf \sqrt{\chi}	0.0334	03907 ≈0734 ×	0.734	0.734	
	R2 (stream)	0.133	0.30 <u>2</u> 2	0.117	0.110	©,217	0.21	0.734	0.734	
	R3 (stream)	0.153	0.637 0.466	0.466	0.186	0.675	0.678	0.675	0.675	
	R4 (stream)	0,753	<b>30.753</b>	0.75	<b>1</b> 753 @	1.387	1.387	1.387	1.387	
	D3 (ditch)	, 6059 %	0.030	0.015	90.006	0.047	Ø.024	0.012	0.005	
	D4 (pond)	0.015	0015	9.015 L	0.014	042 &	0.041	0.041	0.041	
	D4 (stream)	0.060	©043 §	0.043	0043	0.112	0.112	0.112	0.112	
20	D6 (ditch)	0.039	0.030	0.025	0.025	0.048	0.025	0.025	0.025	
20m	D6 ditch)	<b>20</b> .059 ≤	) 0.03 <b>0</b>	0915	0.014	0.048	0.026	0.026	0.026	
SD &	R (pond)	©0.019\$	0.0016	0.014	0.013	0.040	0.035	0.032	0.030	
RO &	R1 (stream) 🌂	0.158	<b>0</b> .158	0.158	0.158	>0.384	0.384	0.384	0.384	
	R2 (stream)	0.069	©0.064	0. <b>06</b> 1	Ø.061 ²	0.113	0.113	0.113	0.113	
	R3 (stream)	<b>2</b> 0.243	0.243	243	0.243	0.354	0.354	0.354	0.354	
	R4 (stream)	20.394	0394	30.394°S	0.394	0.726	0.726	0.726	0.726	
* SD and	RO denote spray	drift and run	off bruffer		<b>*</b>					
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Table CP 9.2.5- 24: Onions: TWAC_{sw}-7 for fluoxastrobin at Step 4 after single and multiple applications

					Tall 4	11 (17)			
			Fluoxastrobin (E+Z) Onions, 2 × 125 g a.s./ha						
			~		nions, 2 ×				,W * \( \)
	T			plication		_		pplications	
Buffer			TWACsw					,-7 [μg <b>∕</b> ¶	
Width	Scenario		Drift Re		- CA	ام	♥Drift R		
& Type		0%	50%	75%	90%	0% Ø	50%	Ø5% Ø	× 90%
	D3 (ditch)	0.031	0.016	0.008	0.003	0.02	0.015	<b>90.007</b>	0,003
	D4 (pond)	0.021	0.015	0.014	© 0.014	0.042	0.040		0.039
	D4 (stream)	0.016	0.016	0.016	0.016	0.045	° 0.045	0045	0.045
<i>F</i>	D6 (ditch)	0.017	0.009	0.007	0.007	0.041	0.024	<b>9</b> .010 ©	
5m	D6 (ditch)	0.014	0.012	0.012	0.012	0.063	00031	0.019	0.019 a 0.138
SD	R1 (pond)	0.070	0.063	0.081	0.058	0.459 0.197 °C	0.147 0.197	0.141 X197	. "\
	R1 (stream)	0.081	0.081 0.047 «	0.081	0.0 <b>9</b> 4 0.047	0.117	0.197 0.197	0.117	0.19 <b>7</b> 0.1 <b>©</b>
	R2 (stream) R3 (stream)	0.047 0.078	0.047	0.078	0.947 0.078	0.192	\ \0\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<i>γ</i>	0.10
	R4 (stream)	0.078	0.07	0.0% 0.175 ×	0.175	0.13×2 0.4914	0.4140	0.192 0.4 <b>0</b> /4	<b>3</b> .414
	D3 (ditch)	0.173	0.1008	\$0.004\$	0.002	<b>%</b> .914	0.068	£004	0.002
	D4 (pond)	0.017	<b>0</b> .008	0.014	0.014	70.013 70.0410	0.003	\$0.039\langle	0.002
10m	D4 (polid) D4 (stream)	0.013	0.016	0.014	Ø.016	0.043	©040 ©045 =	0.045	0.039
	D6 (ditch)	0.010		0.007	\$ 0.00 P	0.043	0.01	0.043	0.043
	D6 (ditch)	0.002	0.012	©0.012	0.012	P 033 0	0.019	0.007	0.007
SD	R1 (pond)	0.012	0.012		0.012	0.07	0.063	© 0.058	0.015
&RO	R1 (stream)	9.036	0.036	0:036	L,0.036	0.0818	97088 ×	0.088	0.030
	R2 (stream)	0.021	0.030	0.021	0.020	©,053	0.05	0.053	0.053
	R3 (stream)	0.036	<b>6.93</b> 6	0.036	0.036	00.088	0.088	0.088	0.088
	R4 (stream)	0,079	<b>3</b> 0.079	0.0	0.79	0.186	0.186	0.186	0.186
	D3 (ditch)	€009 %	0.004	0,002 %	90.001	0.698	<b>Ø</b> .004	0.002	0.001
	D4 (pond)	0.014	0@14	<b>№</b> 014 €	0.019	040 ×	N. V	0.039	0.038
	D4 (stream)	0.010	©016 &	0.01	00016	£0.045	0.045	0.045	0.045
20	D6 (ditch)	0.007	0.007	0.007	<b>9</b> .007	0.01	0.007	0.007	0.007
20m SD &	D6 ditch)	<b>∞</b> 0.012 ≪	) 0.01 <del>2</del>	0.0012	0.012	Q. <b>@1</b> 9	0.019	0.019	0.019
SD & RO	R (pond)	©0.018\$	0.4375	0.013	0.012	0.038	0.032	0.030	0.028
KU «	R1 (stream) 🖔	0.049	0.019	0.019	0.019	<b>≫</b> 0.046	0.046	0.046	0.046
	R2 (stream)	0.041	ÇÕ.01 <b>1</b> √	0 <b>.0</b> ¥1	Ø.011 ~	0.028	0.028	0.028	0.028
	R3 (stream)	<b>2</b> 0.019	0.019	0.019	0.010	0.046	0.046	0.046	0.046
	R4 (stream)	Q0.0415°	0.041	30.041	0.041	0.097	0.097	0.097	0.097
* SD and	RO demote spraco	drift and run	offsuffer						
*									
	RO denote spray	drift and run							

Table CP 9.2.5- 25: Onions: Maximum PECsed values for fluoxastrobin at Step 4 after single and multiple applications

		1				11 (17:17)			
						obin (E+Z)			
			Cinals a		onions, 2 ×	125 g a.s./h	ıa 👸	nnliaction	
D 66				plication				pplications	
Buffer	G			[µg/kg]) eduction			PECsed ZD.:. ← D.	[µg/kg] [©] eduç <b>ïi</b> øn	
Width	Scenario	0%	50%	75%	90%	0% Ø	50%	75%	90%
& Type	D3 (ditch)	0.127	0.065	0.033	e0.014	0.152	0.078	0.040	0,017
	D3 (ditcil) D4 (pond)	0.127	0.063	0.033	0.014	0.13	0.078		0.344 [©]
	D4 (stream)	0.207	0.157	0.152	0.053	0.45	0.403 ₀° 0.144√	0.30 00144	0.144C
	D6 (ditch)	0.093	0.062	0.040	0.042	~0. <b>x</b> +5 € ~0.256€	0.150	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
5m	D6 (ditch)	0.732	0.675	0.646	0.629	1.533	.1©443 °	1.399	1 772
SD	R1 (pond)	0.528	0.526	Ø 325	@ 0.524 J	14217	¥ 214 C	1.212	, 1.211
	R1 (stream)	0.669	0.668	0 668 %	0.668	\$\frac{1}{2}\text{618}	1.616	<b>15</b> 815	1.615
	R2 (stream)	0.466	0.461	0.008	0.457	1.095	1.686	1.081	1.078
	R3 (stream)	1.046	1.041	1.03/8	√037 e	2.244	2208		2203
	R4 (stream)	0.127	0.06	Ø,033 ×	0.014	Q. P32	₩0.078@}	0.0240	<b>©</b> .017
	D3 (ditch)	0.068	0.035	©0.018©	0,007	<b>%</b> .081	0.042	\$622 @	0.009
	D4 (pond)	0.179	0/143	0.125	0.114	0.436	0383	\$0.356€	0.340
	D4 (stream)	0.053	0.053©	0,933	<b>3</b> 0.053 6	0.144	© 144	0.144	0.144
1.0	D6 (ditch)	0.064	0.048	0.042	0.042	0Q.55	0.09	0.069	0.067
10m	D6 (ditch)	0.354	.0.310	©0.288	0.275	₹Ø.720 ©	0.651	Ø.617	0.596
SD	R1 (pond)	0.198	0.197	0.196	Ø9196	0.444	0.442	<b>⊘</b> 0.441	0.441
&RO	R1 (stream)	<b>10,172</b>	0.171	0.71	<b></b> \$0.171 <b></b> ₹	0.440/8	<b>9</b> .407	0.406	0.406
	R2 (stream)	0.203	0. <b>29</b> 0	<b>3</b> .199	0.193	<b>Q</b> ,457	0.45	0.449	0.448
	R3 (stream)	0.41	<b>0</b> (415	0.413	0.413	00.864	0.861	0.859	0.858
	R4 (stream)	0,068	Ø.035	0.018	<b>0</b> :007	0.081	0.042	0.022	0.009
	D3 (ditch)	<b>©</b> 036 €	9.01 <b>%</b>	0,009	90.004©	0.042	<b>J</b> Ø.022	0.011	0.005
	D4 (pond)	0.155	0431	9.119 L	0.112	400 ≪	<b>)</b> 0.365	0.347	0.336
	D4 (stream)	0.053	©053 &	( U.U.)	0053	<b>2</b> 0.144	0.144	0.144	0.144
20m	D6 (ditch)	0.048	0.042	0.042	0.042	0.099	0.070	0.067	0.067
SD &	D6 (ditch)	<b>30.201</b>	J 0.170	00755	0.145	0.3099	0.352	0.329	0.315
RO &	Ri (pond)	©0.102	0.491	0.101	0.100	0.227	0.226	0.225	0.225
Ţ	R1 (stream)	0.079	0.079	0.079	0.079	<b>∀</b> 0.186	0.185	0.185	0.185
	R2 (stream)	0.507	0.106	0.195	0.104	0.239	0.236	0.235	0.234
	R3 (stream)	20.215 20.036	0.2113	0.213 0.009 5	0.21	0.445	0.443	0.442	0.442
* CD and	R4 (stream) RO denote spray	3 0.03 0 m	02098	0.0090°	0.904	0.042	0.022	0.011	0.005
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## **CP 9.3** Fate and behaviour in air

For information on the fate and behaviour in air please refer to MCA Section 7, data point 7.3.

## **CP 9.3.1**

Estimation of concentrations for other coutes of exposure
her routes of exposure if the product is used according to good and the estimations are considered incressary. For information on route and rate of degradation in air and transport via air please reference of the section 7, data points 7.3.1 and 7.3.2.

Due to the low volatility and short half-life in air no PCC calculations are required

## **CP 9.4**

There are no other routes of exposure if the product is used according to good agricultural practice. Therefore no further estimations are considered necessary.