



EFSA NTTTP Opinion : An Industry Perspective

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Proposed endpoints for risk assessment of herbicides & PGRs



Reproductive endpoint

- 5th percentile of distribution of ER_{10} for effects on reproduction
 - not assessed under legal data requirements
 - estimated from ER_{10} (veg vig) with extrapolation factor of 3
 - estimated from ER_{50} (veg vig) with extrapolation factor of 35

No proposals as to how to use these endpoints in risk assessment

- exposure calculations
- safety factors
- in-field v off-field risk

Impact of proposed endpoints on off-field risk assessment



Herbicide A

- Existing endpoint based on SSD for ER₅₀ - HC₅ of **27** mL formulation/ha
- Proposed endpoint adjusted to account for reproductive effects - **0.771** mL formulation/ha
- TER = HC5 / PER
- TER trigger = 1

Buffer distance (m)	TER based on existing endpoint		TER based on proposed endpoint	
	No DR	90% DR	No DR	90% DR
1	0.5	5.4	0.015	0.15
5	2.6		0.075	0.75
10			0.15	1.5
15			0.21	
20			0.29	
30			0.43	
40			0.61	
50			0.71	
75			1.1	

DR = Drift reduction



Impact of proposed endpoints on mitigation

Herbicide	Existing Endpoints		Proposed Endpoints	
	Buffer (m)	Buffer (m) with 90% DR	Buffer (m)	Buffer (m) with 90% DR
A	5	1	75	10
B	3	1	> 50	10
C	5	1	> 50	15
D	10	1	> 50	20
E	1	1	30	3
F	20	3	> 50	> 50
G	10	1	> 50	30
H	15	1	> 50	40
J	10	1	> 50	30

Assuming a buffer size of 30-50 m:

- 2 ha field ~ 50 % loss of cropped area
- 20 ha field ~ 15 % loss of cropped area

Impact of proposed changes to off-field exposure values



Current risk assessment scheme

- Predicted Environmental Rate (PER)
 - Based on drift for a single application
 - Drift values from FOCUS (2001)

EFSA Opinion

- Multiple applications
- Other routes of exposure
- New values for drift

- **Further loss of cropped area**

An industry perspective ~ the consequences

➤ Severe restrictions on the use of herbicides in European Agriculture

Unsprayed buffers on this scale would drastically change:

- the landscape, as growers would increase field sizes, leading to loss of off-field habitat
- weed pressure, as such large areas of aggressive weeds have to be left untreated
- crop quality, yield and farmer's income
- more food imports into Europe



NTTPs ~ Next steps ?

Further research is required to evaluate the perceived issues raised in the EFSA Opinion

- Protection goals ?
- Need for in-field assessments ~ can provision of food web support be addressed via other means e.g. set aside ?
- Does the existing risk assessment scheme provide adequate protection for off-crop habitats?

Many issues already raised in independent SETAC workshop (Wageningen, April 2014)

- Several tripartite (academia, government & industry) activities are underway to address uncertainties in risk assessment scheme