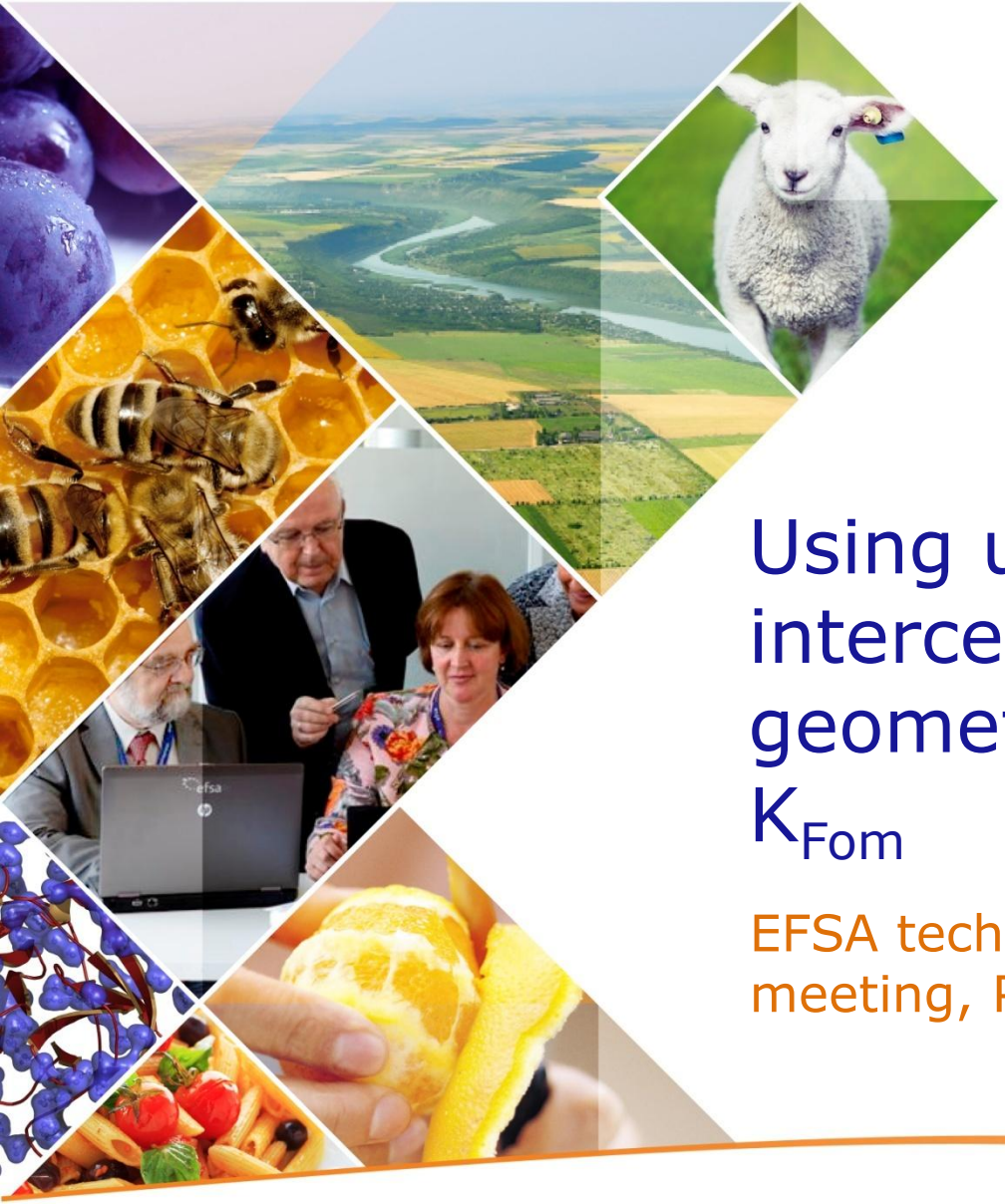

Using updated crop interception values and geometric mean K_{Foc} or K_{Fom}

EFSA technical stakeholder meeting, Parma 17-18 June 2014

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UPDATED GROUNDWATER CROP INTERCEPTION

Table 1.4. Interception (%) by apples, bushberries, citrus and vines dependent on growth stage.

Crop	Stage				
	BBCH# 0–9	BBCH# 10–69		BBCH# 71–75	BBCH# 76–89
Apples	without leaves 50	flowering ~~65~~ 60		~~foliage~~ ~~development~~ early fruit development ~~70~~ 65	~~full foliage~~ full canopy ~~80~~ 65
	BBCH# 0–9	BBCH# 10–69			BBCH# 71–89
Bushberries	without leaves ~~50~~ 40	flowering ~~65~~ 60		flowering ~~65~~ 60	full foliage ~~80~~ 75
Citrus	all stages 80				
	BBCH# 0–9	BBCH# 11–13	BBCH# 14–19	BBCH# 53–69	BBCH# 71–89
Vines	without leaves 40	first leaves 50	leaf development 60	flowering ~~70~~ 60	ripening ~~85~~ 75

#The BBCH code is indicative (Meier, 2001).

UPDATED GROUNDWATER CROP INTERCEPTION

Table 1.5. Interception by other crops dependent on growth stage.

Crop	Bare – emergence	Leaf development	Stem elongation		Flowering		Senescence Ripening
	BBCH[#]						
	0– 09	**10–19**	**20–39**		**40–89**		**90–99**
Potatoes	0	15	~~50~~ 60		~~80~~ 85		50
Spring cereals	0	~~25~~ 0	BBCH 20–29*	BBCH 30–39*	BBCH 40–69	BBCH 70–89	~~90~~ 80
			~~50~~ 20	~~70~~ 80	90	~~90~~ 80	
Winter cereals	0	~~25~~ 0	BBCH 20–29*	BBCH 30–39*	BBCH 40–69	BBCH 70–89	~~90~~ 80
			~~50~~ 20	~~70~~ 80	90	~~90~~ 80	

[#] The BBCH code is indicative (Meier, 2001).

* BBCH code of 20-29 for tillering and 30-39 for elongation

UPDATED SURFACE WATER CROP INTERCEPTION

Step 2 calculator

Table 2.4.2-1: Step 2: crop interception

crop	no interception	minimal crop cover	intermediate crop cover	full canopy
BBCH-code*	00 – 09	10 – 19	20 – 39	40 – 89
Cereals, spring and winter	0	~~0.25~~ 0	~~0.5~~ 0.2	0.7
Citrus	0	~~0.7~~ 0.8	~~0.7~~ 0.8	~~0.7~~ 0.8
Pome/stone fruit, early and late	0	0.2	0.4	~~0.7~~ 0.65
Vines, early and late	0	0.4	0.5	~~0.7~~ 0.6

*NOTE: indicative, adapted coding, the BBCH-codes mentioned do not exactly match (Meier, 2001).

ADSORPTION VALUE USED FOR MODELLING

- If adsorption is soil property dependent (eg. pH) do not use an average value
- If no dependence use a geometric mean K_{Foc} or K_{Fom}
- If no dependence use an arithmetic mean Freundlich slope (1/n)