

Grundstoffe Zulassungen: 5 Jahre von regulatorischen Aufwand um Kupfer Substitutionsprodukte zu legalisieren bei Pflanzenschutzmitteln EG Verordnung 1107/2009

- Grundstoffen (Art. 23) Regulierung
- Genehmigungsverfahren
- Ergebnisse, Konkrete Beispiele
- Pilot Dateien (Dossiers)
- Schlussfolgerung



Institut Technique de
L'Agriculture Biologique



Technische Institut von ökologischen Landbau

Über 24 Personen

6 Standorten in Frankreich

VERORDNUNGEN

VERORDNUNG (EG) Nr. 1107/2009 DES EUROPÄISCHEN PARLAMENTS UND DES RATES

vom 21. Oktober 2009

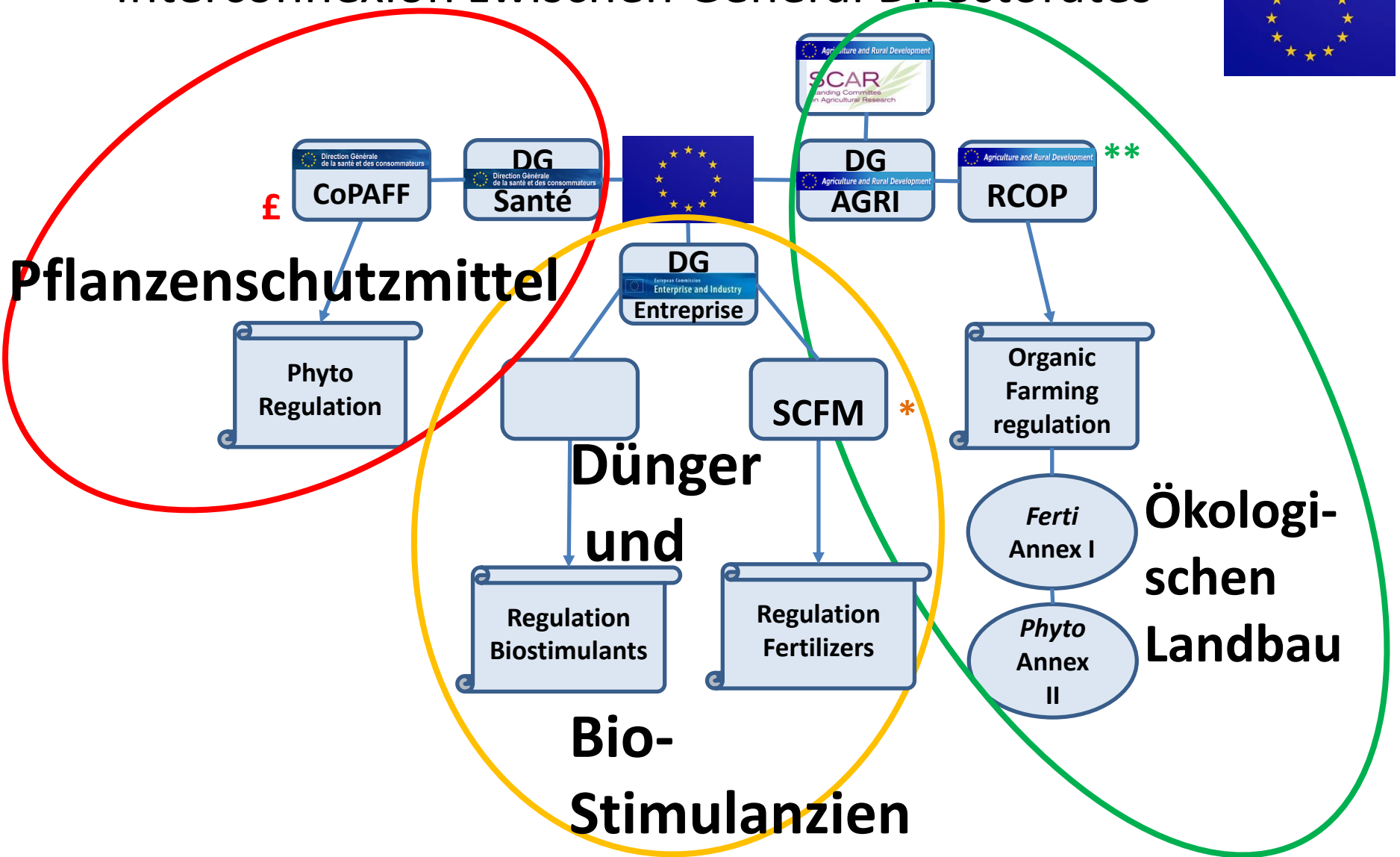
über das Inverkehrbringen von Pflanzenschutzmitteln und zur Aufhebung der Richtlinien
79/117/EWG und 91/414/EWG des Rates

Artikel 23. Grundstoffe

+ Def Verordnung (EG) Nr. 178/2002

"Basic Substances: An approval opportunity for Low Concern Natural Products under EU pesticide regulation ", PA Marchand, *Pest Management Science*, 2015, 71 (9), 1197-1200, DOI: 10.1002/ps.3997 <http://onlinelibrary.wiley.com/doi/10.1002/ps.3997/abstract>

Interconnexion zwischen General Directorates



- *: standing committee for fertilizing materials
- ** : regulatory committee of organic production
- £: standing committee of plant, animal, feed, food

Künftige Verordnung



EG-
Verordnung
Dünger
(2003/2003)
223/2012

EG-Verordnung
Biostimulants
2017

EG-Verordnung
Pflanzenschutzmitteln
1107/2009

Artikel 14.
Expectations

(Fert)

Artikel X.
Biostimulants

(BSt)

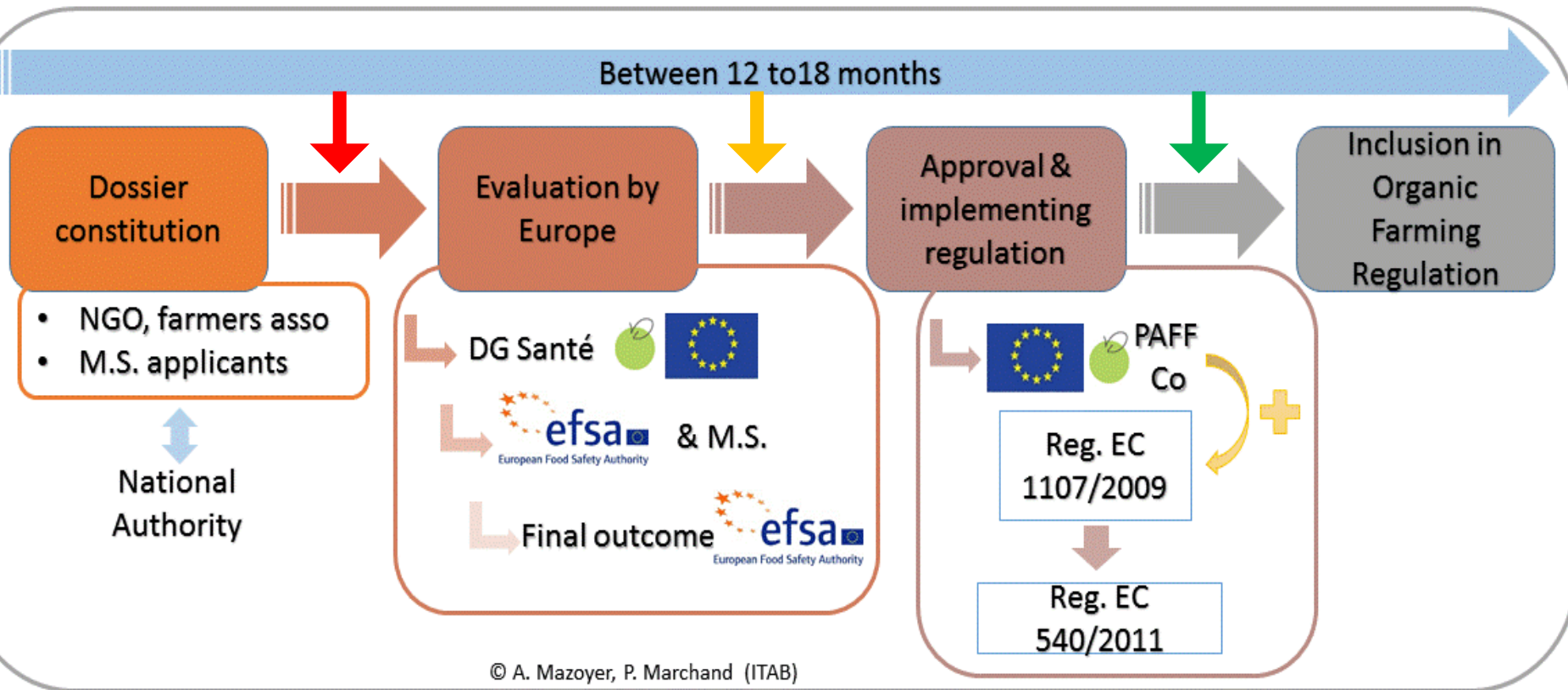
Artikel 23.
Grundstoffe
(BS)

Artikel 22.
Stoffe mit
geringem
Risiko (LRS)

PPP
a.s.

Vollständige Zustimmung Schaltung eines Naturproduktes, als **Grundstoffe (BS)**

Admissibility **Questions** **Transfer in OF**



© A. Mazoyer, P. Marchand (ITAB)

Natürliche Substanzen wie Grundstoffe auf EG-Verordnung 1107/2009

- Regulierung
- **Pilotprojekt (Dossiers)**
 - **Equisetum** Schachtelhalm
- **Heute : Genehmigungen !**

Natürliche Substanzen wie Grundstoffe auf EG-Verordnung 1107/2009 (+)

- Meer salz
- Talkum
- Brennnessel (*Urtica*)
- Schafgarbe (*Achillea Millefolium* L.)
- ...

Natürliche Substanzen wie basischen Substanzen auf EG-Verordnung 1107/2009

Convention
MEDDE-ITAB
2010-2012

- Regulierung
- Pilotprojekt (Dossiers),
- Hilfe für Dateien Verfassung,
- **Konkrete Beispiele!**



Schachtelhalm Ziele und Maßnahmen

Fungizid gegen Schorf (Apfelbaum) und Mehltau (Traube)

Crop and/or situation (a)	Member State	Example product name as available on the market	F G I (b)	Target (c)	Product**		Application				Application rate per treatment			PHI (days) (m)	Remarks (*)
					Type (d-f)	Conc of a.i. g/kg (i)	Method kind (f-h)	Growth stage and season** (j)	Number min max (k)	Interval between applications (min)	Σ a.i./hl min max (g/hl)	Water l/ha min max	Σ a.i./ha min max (g/ha) (l)		
Fruit trees Apple fruit Malus pumila Peach-tree Prunus persica	France	Homogenate of <i>Equisetum arvense</i> L.	F	Foliar fungi like scab disease <i>Venturia inaequalis</i> , Powdery mildews: <i>Podosphaera leucotricha</i> Peach leaf curl <i>Taphrina deformans</i>	Dispersible Concentrate (DC)***	0.02	folar application spraying	From green tip to cluster tightening Spring	2- 6	7 days	0.285 to 0.5	100 to 300	0.285 to 1.5	None	Plant homogenate extracted with hot water and filtered to be used 24 h after preparation
Grapevine <i>Vitis vinifera</i>			G	Downy mildews: <i>Plasmopara viticola</i> , Powdery mildews <i>Erysiphe necator</i>			Root Feeding application and folar application spraying	From 1 st shoots to cluster tightening Spring	6	3-4 days	0.5	300	1.5	15 days	
Cucumber roots <i>Cucumis sativus</i>			F	Powdery mildews: <i>Podosphaera xanthi</i> Root fungi like common root rot, seedling blight <i>Pythium</i> spp.			folar application spraying	From three weeks after sowing (9th leaf unfolded on main stem) to 9 or more primary side shoots visible Summer	2	14 days	0.285	300	0.855	15 days	
Tomato <i>Lycopersicon esculentum</i>				early blight: <i>Alternaria solani</i> / <i>Septoria</i> blight <i>Septoria lycopersici</i>											

Ernte

Ziel

Anwendung

Bedingungen

Stufen

Verzögerung

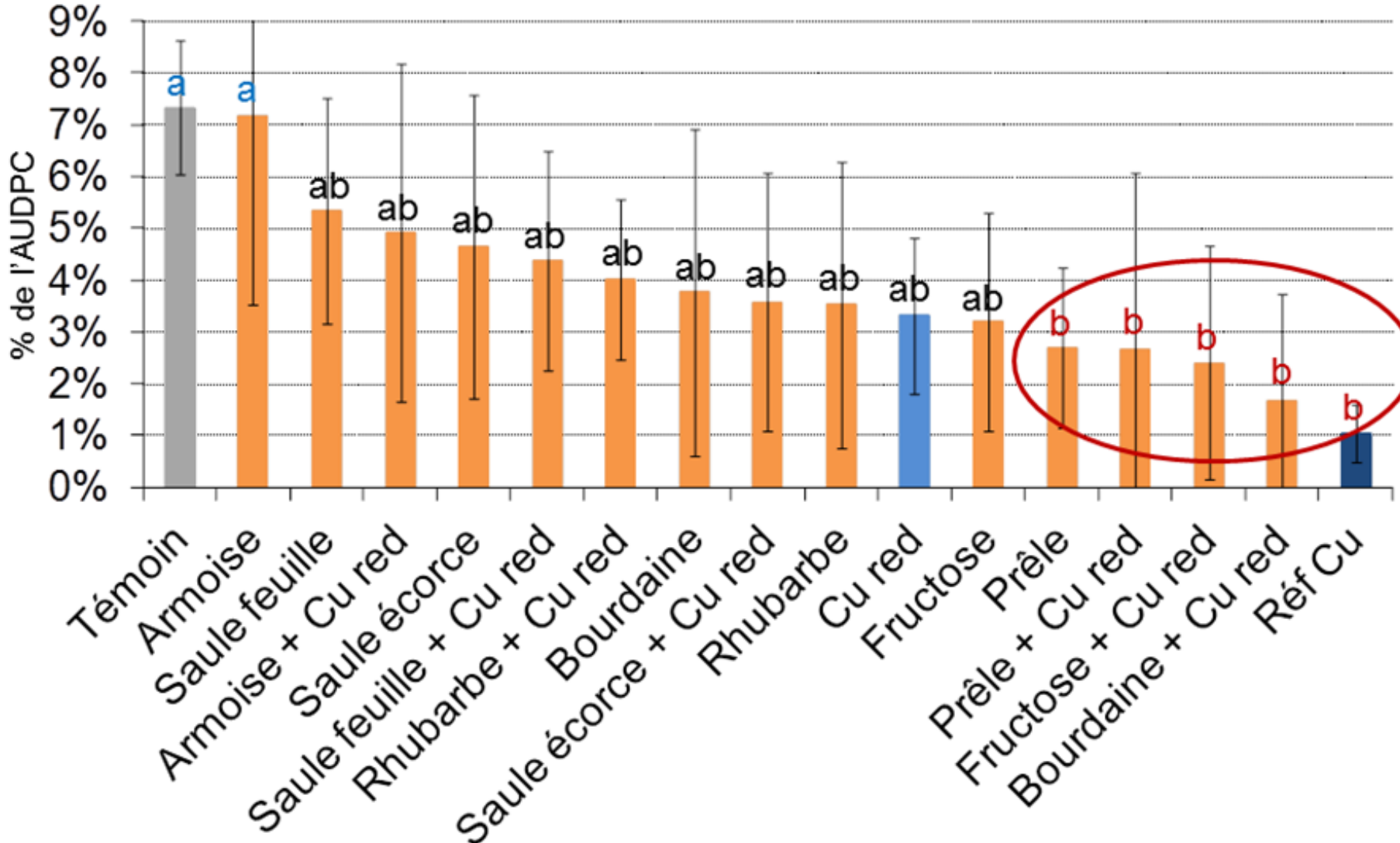
** The product cannot be applied in case of hot temperature. It is used in case of rainy period

*** The product is a plant homogenate extracted with hot water and filtered (decoction)

Schachtelhalm und anderen...

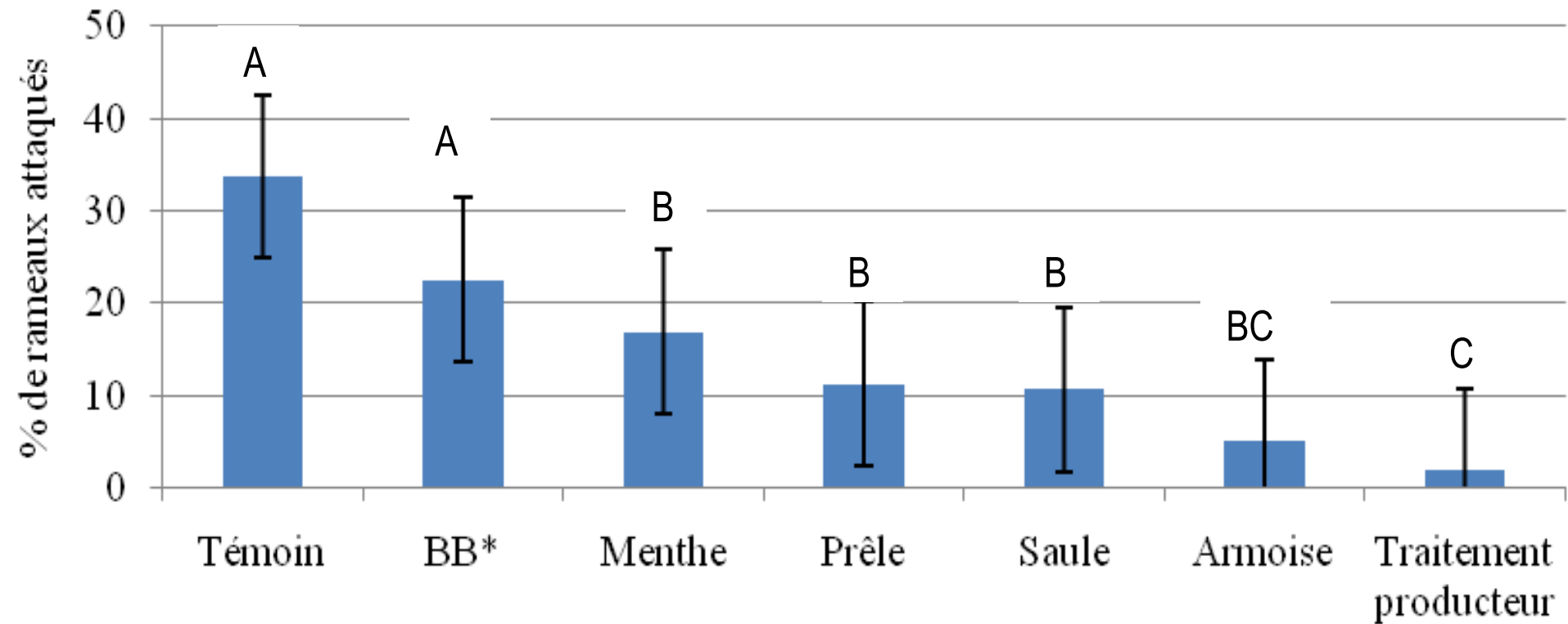
Fungizid gegen Mehltau (Traube)

Résultats - Vignes en pot - 2011



Schachtelhalm und anderen...

Fungizid gegen Mehltau (Traube)



Silberweide Antipilzaktivität

Ernte

Crop and/or situation (a)	Member State for use	Example product name as available on the market	F G I (b)	Target (c)	Product**		Application				Application rate per treatment			Total rate	PHI (days) (m)	Remarks (*)
					Type (d-f)	Conc of a.i. g/kg (i)	Method kind (f-h)	Growth stage and season** (j)	Number min max (k)	Interval between applications (min)	g a.i./hl min max (g/hl)	Water l/ha min max	g a.i./ha min max (g/ha) (l)	g a.i./ha min max (g/ha) (l)		
Peach-tree <i>Prunus persica</i>	France £	Homogenate of <i>Salix alba</i>	F	Foliar fungi like <i>Taphrina deformans</i>	Dispersible concentrate (DC)***	2.22	Foliar application spraying	From 1 st shoots to cluster tightening	2 to 6	7 days	200	500	1000	2000 to 6000	None	Plant Homogenate extracted with hot water, filtered and diluted by 3, to be used 24 h after preparation
Spring																
From green tip to cluster tightening																
Apple fruit <i>Malus pumila</i>			F	Foliar fungi like scab disease <i>Venturia inaequalis</i> Powdery mildews: <i>Podosphaera leucotricha</i>				Spring			100 to 300	200 to 600	400 to 3600			
Grapevine <i>Vitis vinifera</i>			F	Downy mildews: <i>Plasmopara viticola</i> , Powdery mildews <i>Erysiphe necator</i>				From 1 st shoots to cluster tightening								
								Spring								

Ziel

Anwendung

Stufen

Verzögerung

Bedingungen

* e.g. The product cannot be applied in case of hot temperature. It is used in case of rainy period
 ** e.g. The product is a plant homogenate extracted with hot water and filtered (infusion)
 £ Regulatory approval of basic substances is for all Europe.



Zucker Frass-Stimulans

Ernte

Crop and/or situation (a)	Member State	Example product name as available on the market	F G I (b)	Target (c)	Product**		Application				Application rate per treatment			Total rate	PHI (days) (m)	Remarks (*)
					Type (d-f)	Conc of a.i. g/kg (i)	Method kind (f-h)	Growth stage and season* (j)	Number min max (k)	Interval between applications (min)	g a.i./hl min max (g/hl)	Water l/ha min max	g a.i./ha min max (g/ha) (l)			
Apple fruit <i>Malus pumila</i>	France	Solution of SUCROSE	F	fruits borer like Codling moth: <i>Cydia pomonella</i>	Water Soluble Powder (SP)***	998 to 1000	foliar application spraying early in the morning before 9 AM (solar time)*	Spring and Summer	7 to 10	15 days*	1	600 to 1000	6 to 10	42 to 100	None	Cold Water Solution prepared just before application
Sweet Maize (Sweet corn) <i>Zea mays</i>			F	Corn borer: <i>Ostrinia nubilalis</i> Hbn.,			From the BBCH stage 12 to 51	3 to 4	15 days*	200		2	6 to 8			

Ziel

Anwendung

* e.g. The product cannot be applied in case of hot temperature. It is used in case of rainy period

** e.g. The product is a plant homogenate extracted with hot water and filtered (decoction)

Stufen

Verzögerung

Bedingungen



Lecithin Antipilzaktivität

Crop and/or situation (a)	Member State for use	Example product name as available on the market	F G I (b)	Target (c)	Product		Application				Application rate per treatment			Total rate	PHI (days) (m)
					Type (d-f)	Conc of a.i. g/kg (l)	Method kind (f-h)	Growth stage and season** (j)	Number min max (k)	Interval Between applications (min)	g a.i./hl min max (g/hl)	Water l/ha min max	g a.i./ha min max (g/ha) (l)	kg a.i./ha min max (g/ha) (l)	

Ernte

Ziel

Anwendung

Ornamentals, especially roses				powdery mildew and other fungal diseases					3 to 12	5 days	100 to 1000	100 to 365	300 to 4380	
Grapevine <i>Vitis vinifera</i>			F	Powdery mildews: <i>Plasmopara viticola</i> , <i>Erysiphe necator</i>			From BBCH 11 to BBCH 85							30

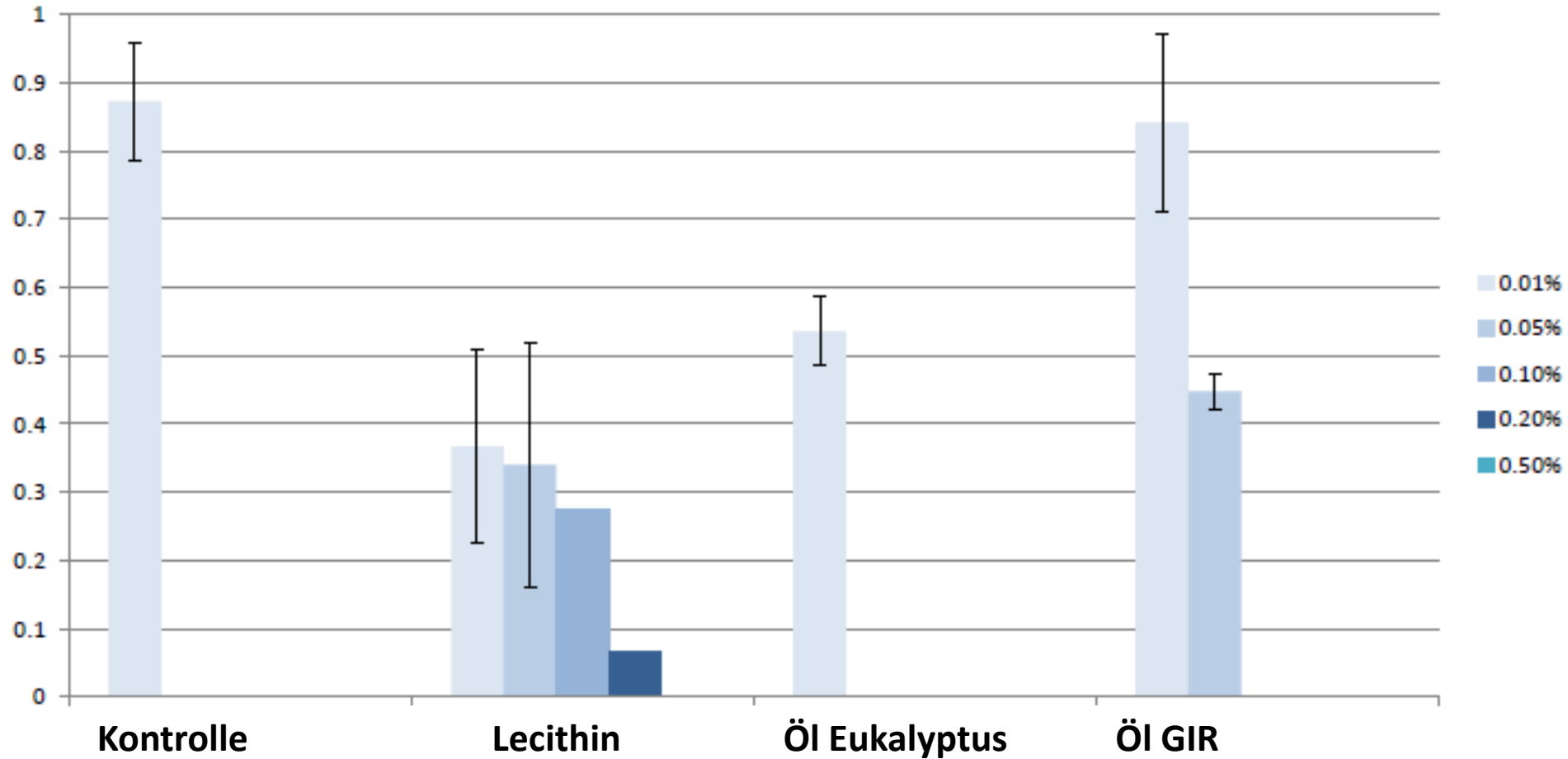
Stufen

Verzögerung



Lecithin

Fungizid gegen Mehltau (Traube)



Natürliche Substanzen wie Grundstoffe auf EG-Verordnung 1107/2009

Zugelassene Substanzen	Statut	Plant Product	Pflanzen Produkt	Action (I, F, H)	Extraction Décoct 100° Infusion 80° Mélange 25°	Usage GB	Crop chain	Avis
	Reg Ex 762 2015	CaOH ₂	CaOH ₂	F	S	Canker	Fruit trees	EN-488 EN-655
	Reg Ex 462 2014	Horsetail	Schachtelhalm	F	D	D Mildew	Fruit trees	
						P Mildew	Vegetable	
						Alternaria	Vegetable	
						Scab	Grapewine	
		Horsetail	Schachtelhalm	F	-	D Mildew		
						P Mildew	Vegetable	
	Alternaria					Roses		
	Scab							
Reg Ex 563 2014	Chitosan	Chitosan	F	D	Mildew	Grapewine	EN-426	
					Fungi	Vegetables		
					Fungi	Cereals		
					Fungi	Potatoes		
Reg Ex 916 2014	Sucrose	Zucker	I	-	codling moth	Arboriculture	EN-616	
					Corn borer	Maize		
Reg Ex 1107 2015	White Willow	Weiss Weide	F	I	Mildew	Fruit trees	EN-609	
					Leaf curl			
					Mildew	Grapewine		

Natürliche Substanzen wie Grundstoffe auf EG-Verordnung 1107/2009 (2)

Aç	Statut	Plant Product	Pflanzen Produkt	Action (I, F, H)	Extraction Décoct 100° Infusion 80° Mélange 25°	Usage GB	Crop chain	Avis
	Reg Ex 1108 2015	Vinegar	Essig	F	M	Bacteria	Cuting tools	EN-641
						Fungi	Machines	
		Vinegar	Essig	F	M	Comon bunt	Cereals	EN-641
						Alternaria	Vegetable	
	Reg Ex 1392 2015	Fructose	Fruktose	I	-	codling moth	Vegetable	EN-684
	Reg Ex 560 2016	Whey	Molke	F	S	Mildew	Grapewine Vegetable	EN-879
Reg Ex XXX 2016	Sunflower oil	Sonenblumen Eöl	I	S	Insects	Général	EN-1032	
			F		Vers taigne	Leaks		
					Fungi	Tomato		
Reg Ex 1116 2015	Lecithin	Lecithin	F	M	Mildew	Grapewine	EN-643	
					Mildew	Vegetable		
					Scab	Fruit trees		
					Fungi	Flowers		

Natürliche Substanzen wie Grundstoffe auf EG-Verordnung 1107/2009 (3)

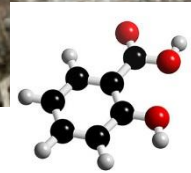
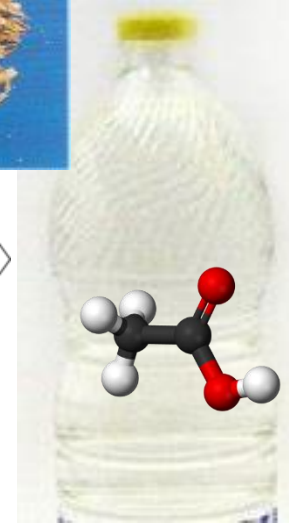
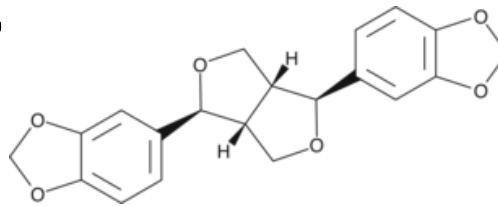
	Statut	Plant Product	Pflanzen Produkt	Action (I, F, H)	Extraction Décoct 100° Infusion 80° Mélange 25°	Usage GB	Crop chain	Avis
Approuvée	Reg Ex 2069 2015	Sodium hydrogen carbonate	Natriumhydrog encarbonat	H	P			-
				F	S		Wheat Barley	EN-719
							Vegetable	

"Basic substances under EC 1107/2009 phytochemical regulation: experience with non-biocide and food products as biorationals" P A Marchand, *Journal of Plant Protection Research*, 2016, 56(3), 312-318, DOI: 10.1515/jppr-2016-0041

[http://www.plantprotection.pl/PDF/56\(3\)/JPPR_56\(3\)_RC2_Marchand.pdf](http://www.plantprotection.pl/PDF/56(3)/JPPR_56(3)_RC2_Marchand.pdf)



• **Vielen Dank für
Ihre
Aufmerksamkeit**



Nov. 2016

