

ACTIVITIES OF THE EUFRIN WORKING GROUP

« SUSTAINABLE FRUIT PRODUCTION TO MINIMIZE RESIDUES »

PESTICIDES AND RESIDUES IN EUROPE
STRATEGIES & TECHNIQUES STUDIED ON FRUITS TO REDUCE
THE RISKS



Franziska ZAVAGLI, Ctifl, zavagli@ctifl.fr
coordinator of the EUFRIN WG
“Sustainable fruit production to minimize residues”



RATE OF CONFORMITY OF RESIDUES CONTINUES TO GROW ON FRUITS, VEGETABLES, CEREALS (EFSA 2007 / 2009)

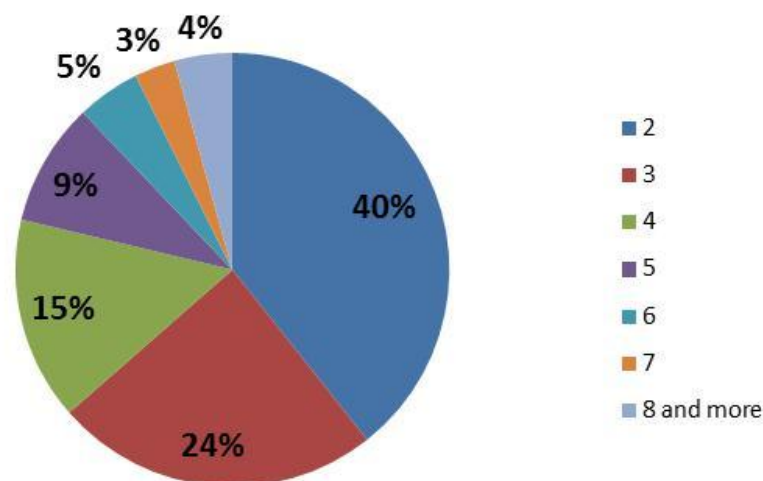
- Number of participating EU and EFSA-States : 29

	Rate of conformity(*)	% > MRL (*)	% without residues (**)	% multiple residues (*)(**)
2007	95,8 %	4,2 %	58,0 %	26 %
2008	96,5 %	3,5 %	62,1 %	27 %
2009	97,4 %	2,6 %	61,4 %	25,1 %

(*) national monitoring programme : $\pm$ 68.000 samples

(**) EU coordinated programme : $\pm$ 11.000 samples

Distribution of the samples with multiple residues in 2007





FOCUS ON APPLES PURCHASED FROM NATIONAL RETAIL OUTLETS (EXAMPLES)

*Crunch apples ...
not pesticides*

*Croquez des pommes
... pas des pesticides !*



France Nature et
environnement

	No residues	> MRL	With residues	2-5 compounds
UK	0 %	0 %	100 %	86 %
EU (F, G, SP)	30 %	0 %	70 %	50 %
Outside EU (NZ, Chile, South Africa)	10 %	0 %	90 %	81 %

	No residues	> MRL	With residues	2-8 compounds
Germany	26 %	1/407	74 %	50 %
EU (I, F, NL, Aust., SP, B)	28 %	0 %	72 %	47 %
Outside EU (NZ, Chile, Arg., Brazil, South Africa)	46 %	1/103	54 %	34 %

UK : Health and Safety
Executive : PRiF (pesticide
residues in food) – Pesticide
Residues Monitoring
Programme report of the
expert committee. July 2012.
53 samples **between July
and December 2011.**

Germany :
Verbraucherschutzministeri-
um – Pestizidreport NRW
(Nordrhein-Westfalen.
August 2012. 739 samples
between 2009 - 2012



WORKING GROUP MEMBERS

Austria – Versuchstation für Obst und Weinbau (Haidegg)

Belgium – Pcfruit Kerkom

Denmark – Aarhus University

France - Ctifl

Germany – ESTEBURG – Obstbauzentrum Jork

Italy – Univ. de Bologna ; Obstbau Versuchszent. Laimburg ; I. Agr. San Michele all'Adige *

Netherlands – Applied Plant Research (Randwijk, Wageningen UR)

Norway – Institut pour la recherche agronomique et envir. (Bioforsk) *

Poland – Research institute of horticulture (Skierniewice)

Romania – Univ. of Agronomic sciences and veterinary medicine (Bucarest)

Slovenia – Faculty of Agriculture and Life Sciences (Maribor)

Spain – IRTA (Catalonia)

Sweden – Swedish Board of Agriculture Plant Protection Division *

Switzerland – Research station Agroscope ACW (Wädenswil)

UK – East Malling Research station

* IOBC new contact



ANNUAL MEETING (1,5 DAY)

Year	Place	Nb. of partakers	Nb. of presentations or topics
2009	Paris (Ctifl)	8	5
2009	Bologna (University)	15	12
2010	Maribor (Faculty of Agriculture and Life Sciences	12	9
2011	Wädenswil (Research station Agroscope ACW)	12	21
2012	Wageningen (Applied Plant Research –Randwijk)	12	15



ACTIVITIES EXAMPLES OF THE EUFRIN WG MEMBERS

Country	Members	Topics
Austria	Versuchstation für Obst und Weinbau (Haidegg)	Enclosing orchards by nets
Belgium	Pcfruit Kerkom	- Window trials to determinate pre-harvest interval - Apple scab sanitation and spray schedule - Biological control - Hot water postharvest treatments - Washing process and purification of grading water
Denmark	Aarhus University	• Pesticide residues survey • Comparison of spraying schedules • UV-light against rots
Germany	ESTEBURG – Obstbauzentrum Jork	- Long-term strategy trial - Cleaning process
Italy	Univ. de Bologna	- Postharvest treatments (natural substances, biological agents, hot water...) - sanitizing treatments of water
	Obstbau Versuchszent. Laimburg	- Wash-off process - Organic farming



ACTIVITIES EXAMPLES OF THE EUFRIN WG MEMBERS

Country	Members	Topics
Netherlands	Applied Plant Research (Randwijk, Wageningen UR)	• Strategy trials against apple scab • Development of a prototype for residue removal • Red currant protection
Poland	Research institute of horticulture (Skierniewice)	- Apple scab : plant extracts, bacterial isolates, ... - Hot water treatments - Biological fungicides on blackcurrant and blueberry
Slovenia	Faculty of Agriculture and Life Sciences (Maribor)	• “zero residues” programme compared to IPM • Copper / apple scab, fireblight, peach diseases
Spain	IRTA (Catalonia)	Fruit.Net project (apples, pears, peach, citrus)
Switzerland	Research station Agroscope ACW (Wädenswil)	- Low-Input apple production trial - Exclosing nets on cherries
UK	East Malling Research station	- “Zero Residue” project on apples - IPDM on raspberry and strawberry crops⁷

FRANCE : ECOPHYTO PROJECT

- Objectives of the Ministry of Agriculture : reduce “50 %” the use of pesticides until 2018 on crops and non agricultural areas
- 2011/2012 : ECOPHYTO experimentation proposals for national funding
- 6 years National apple network coordinated by Ctifl : 6 localizations with different climates, soils, pest & diseases pressure, varieties
- Principles : combine as much as possible different alternatives techniques and optimise the chemical strategies to reduce the use of pesticides and limit the risk to find residues on fruits. System evaluation. Agronomic, environmental and economic indicators.



DARWIN



Prophylaxie
against apple
scab



Enclosing orchards



Introduction of
beneficial
insects



LOOKING FOR INNOVATIVE METHODS : RAIN PROTECTION



Ctifl Centre de Lanxade

Principle : plastic cover (1.40 or 1.60 m wide) used on cherries on the row under the hail nets or combined with the hail nets (0.70 m)

