

Activities of the EUFRIN Working Group

« Sustainable fruit production to minimize residues »

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coordinator of the EUFRIN WG
“Sustainable fruit production to minimize residues”

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

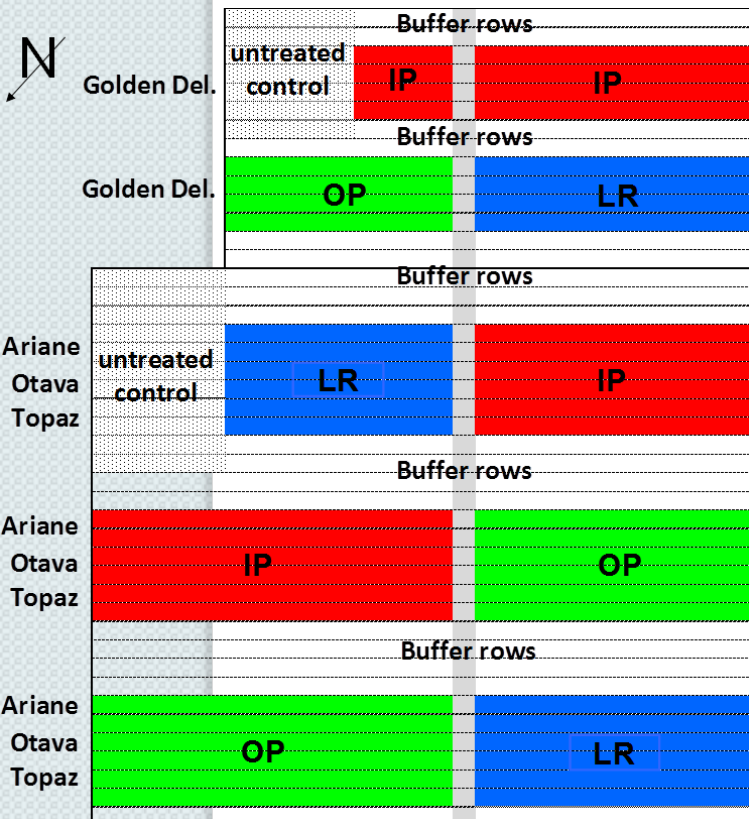
ANNUAL MEETING (1,5 day)



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
2013	Graz (Versuchstation für Obst und Weinbau Haidegg)	11	17

TOPICS 2013 : apples projects

Low-residue disease control Wädenswil (CH)



number	strategy	description
1	No insecticides; no fungicides from BBCH 74 onwards	<ul style="list-style-type: none"> no insecticides after blossom fungicide application stops at BBCH 74 (mildew fungicides until shoot growth stops)
2	No fungicides from BBCH 74 onwards	<ul style="list-style-type: none"> fungicide application stops at BBCH 74 (mildew fungicides until shoot growth stops) integrated pest control
3	Ecological plant protection starting mid July	<ul style="list-style-type: none"> integrated plant protection (fungicides) until mid July, afterwards ecological products only ecological insecticides after blossom
4	Precaution	<ul style="list-style-type: none"> preventive plant protection until BBCH 70 few residue relevant pesticides after blossom; from summer onwards use of ecological pesticides only
5	Standard without storage fungicides	<ul style="list-style-type: none"> integrated plant protection captan containing storage fungicides only
6	Standard	<ul style="list-style-type: none"> integrated plant protection
7	Standard + fruit mummies removed	<ul style="list-style-type: none"> integrated plant protection fruit mummies removed before bud break
8	Anti-resistance	<ul style="list-style-type: none"> integrated plant protection resistance management optimized

Strategy trial 2009 – 2013 Esteburg Jork (D)

TOPICS 2013 : plastic rain cover



Plastic covering of **sweet cherries** as an alternative to fungicide spraying.
Bioforsk (N)

Rain cover : a innovative way to protect against **apple scab** ?
Ctifl (F)



TOPICS 2013 : exclusion netting



Pollination, quantity of bees, fire blight risks in apple orchards. **Haidegg (AU)**

Trials against codling moth and cherry fruit fly. **Wädenswil (CH)**



TOPICS 2013 : what can be done in the packing house ?



**Development of a prototype for
residues removal : effect of
brushes, soap and hot water
Wageningen (NL)**



**Mechanical brushing to reduce
pesticide residues
Esteburg - Jork (D)**



TOPICS 2013 : berries



Project 2012 – 2014 : development and testing of innovative strategies to reduce the number and concentration of residues on red currant. **Wageningen (NL)**

Integrated pest management (IPM) for strawberry production in **Sweden.**



Other type of work done by the EUFRIN WG members

Country	Members	Topics
Netherlands	Applied Plant Research (Randwijk, Wageningen UR)	Storage diseases on apples and pears : <ul style="list-style-type: none"> - Prediction method - Life cycle of pathogens - How to control pathogens ? - No residues or as less as possible
Slovenia	Faculty of Agriculture and Life Sciences (Maribor)	What would be the consequences of total ban of use of copper products in organic or integrated peach production in terms of disease control ?
Spain	IRTA (Catalonia)	<ul style="list-style-type: none"> * Fruit.Net project (apples, pears, peaches) * Field trials related to the pre-harvest interval requirements

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Country	Members	Topics
Belgium	Pcfruit Kerkom	<ul style="list-style-type: none"> - Alternatives to control <i>Neofabraea</i>. <p><u>Post harvest</u> : hot water treatments, biological products by dipping, shower or nebulisation in cold storage rooms.</p> <p><u>Pre harvest</u> : Myco-Sin.</p> <ul style="list-style-type: none"> - Alternatives to control apple scab. - Mycorrhiza against replant diseases.
Germany	ESTEBURG – Obstbauzentrum Jork	Apple skin defects due to Myco-Sin treatments
France	Ctifl	Biological control of rosy aphids