

TÜRKIYE-EU COOPERATION SCHEME ON HAZELNUTS, COLLABORATION ON PLANT HEALTH IN HAZELNUTS, 20 December 2023

Bruxelles, 20/12/2023

copa***cogeca**
european farmers european agri-cooperatives

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* **Main pests, diseases and weeds**

* **Plant protection products**

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Main pests, diseases and weeds:

Major /minor objectives
New threats



Objectives

- Acarine gall-mite . *Phytoptus avellanae*
- Mite . *Panonychus ulmi*,
Tetranychus urticae,
Eotetranychus carpini



Objectives

- Beetle larvae . *Capnodis tenebrionis*, *Cerambyx sp.*, *Melolontha melolontha*
- Coccidae bug . *Eulecanium coryli*
- Green shield bug . *Palomena prasine*
- Bug
Gonocerus Acuteangulatus



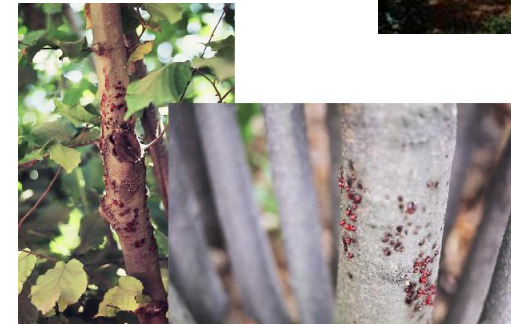
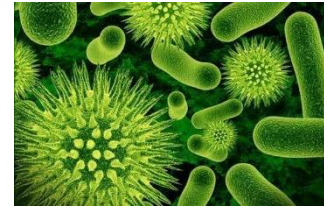
Objectives

- Leopard moth . *Zeuzera pyrina*
- Nut Weevil, Curculionidae beetle . *Curculio nucum*
- Tortrix moth . *Archips rosanus*,
Archips xylosteana
- Yellow/green aphid . *Myzocallis corylii*, *Corylobium avellanae*



Objectives

- Bacterial disease .
Xanthomonas spp.
Pseudomonas avellanae
- Cytospora disease .
Cytospora corylicola +
Fungal complex
- Bud rot, “Borró sec”,
Cryptosporiopsis
tarraconensis



Objectives

- Other fungi (*Oidium*, *Monilinia*, *Fusarium*, *Lateritium*, Canker...) .
- Powdery mildew .
Erysiphe corylacearum



New threats

- Brown marmorated stink bug. *Halyomorpha halys*
- Black twig borer.
Xylosandrus compactus



New threats

- Japanese beetle
Popillia japonica



Plant protection products:

General overview
Objective overview
Detailed lists



General overview

Use	Number of active ingredients
Acaricide	4-5
Insecticide	7
Bactericidal	1-4
Fungicide	4
Herbicide	7-10
TOTAL	23-29



General overview - objectives

Classification	Colour
Good control	Green
Moderate control	Yellow
Difficult control	Orange
Ineffective control	Red



General overview - objectives

OBJECTIVE	Number of active ingredients
Mite	4-5
Acarine gall-mite	1-2
Leopard moth	3-5
Tortrix moth	1-3
Nut Weevil, Curculionidae beetle	2-3
Beetle larvae	1
Yellow/green aphid	2-3
Green shield bug	1
Coccidae bug	1
Bacterial disease	4-5
Cytospora disease	1-5
Powdery mildew	2
Other fungi (Oidium, Monilinia, Canker...)	3-4
Weed	7-10



Detailed list – insecticides

ACTIVE INGREDIENT	Leopard moth <i>Zeuzera pyrina</i>	Tortrix moth <i>Archips spp.</i>	Nut Weevil, Curculionidae beetle <i>Curculio nucum</i>	Beetle larvae <i>Capnodis spp, Melolontha spp.</i>	Yellow/green aphid <i>Myzocallis coryli</i>	Green shield bug <i>Palomena prasina</i>	Coccidae bug <i>Eleucanium spp.</i>
(E,Z)-2,13-Octadecadien-1-yl acetate + (E,Z)-3,13-Octadecadien-1-yl acetate	1						
<i>Bacillus thuringensis</i>	1	1					
Chlorantraniliprole	1	1	1	1			
Deltamethrin	1				1		
Lambda-Cyhalothrin	1	1	1		1	1	
Pyriproxyfen							1
Spirotetramat					1		
Etofenprox			1			1	
Emamectina B.		1				1	
Spinosad	1	1					



Detailed list – acaricides

ACTIVE INGREDIENT	Mite <i>Tetranychus urticae</i>	Acarine gall-mite <i>Phytoptus avellanae</i>
Fenpyroximate	1	
Hexithiazox	1	
Paraffin Oil	1	
Sulfur	1	1
Clofentezine	1	1



Detailed list – bactericidal / fungicides

ACTIVE INGREDIENT	Bacterial disease <i>Xanthomonas arboricola</i>	Cytospora disease <i>Cytospora corylicola</i>	Bud rot, <i>Cryptosporiopsis tarraconensis</i>	Powdery mildew <i>Erysiphe corylacerarum</i>	Other fungi (Oidium, Monilinia, Canker...)
Cupric compounds	1	1			
Sulfur				1	1
Potassium hydrogen carbonate				1	1
Pyraclostrobin + Boscalid					1



Detailed list – herbicides

2,4 D	1
Carfentrazone-ethyl	1
Diflufenican + Glyphosate	1
Diflufenican + Oxyfluorfen	0-1
Fluroxypyr	0-1
Glyphosate	1
MCPA	0-1
Oxyfluorfen	1
Pyraflufen-ethyl	1
Pendimethalin	1



Main active substances used in hazelnut

Active substance	Pest - target	Expiration of approval - EU	Candidates for Substitution
Lambda-Cyhalothrin	- Bugs (<i>Halyomorpha halys</i>) - Wood-boring beetles (<i>Agrilus viridis</i>)	31/03/2024	yes
Pendimethalin	- Weeds	30/11/2024	yes
Etofenprox	- Bugs (<i>Halyomorpha halys</i>) - Nut weevil (<i>Curculio nucum</i>)	31/12/2023	yes
Oxyfluorfen	- Weeds	31/12/2024	yes
Deltamethrin	- Bugs (<i>Halyomorpha halys</i>) - Nut weevil (<i>Curculio nucum</i>) - Japanese beetle (<i>Popillia japonica</i>)	31/10/2023	no
Propaquizafop	- Weeds	30/11/2023	no
Boscalid+Pyraclostrobin*	- Gray necrosis (<i>Fusarium lateritium</i>)	*31/01/2024	no



Thiophanate-methyl

* **Thiophanate-methyl** is not approved in EU.

This was the only active substance against *Gloeosporium coryli*.

Actually there are no products allowed against this pest.



Main pests, diseases and weeds in the EU hazelnut orchards

- * Specific pests and diseases in EU hazelnut orchards are more or less the same in IT, FR, ES
- * Differences in incidence and severity between member States (major/minor problems)
- * New threats by globalisation: *Halyomorpha halys*, Black twig borer (*Xylosandrus compactus*)...



Plant protection products in the EU hazelnut orchards

- * Hazelnut as minor crop in EU (simplified approval process for plant protection products)
- * COPA-COGECA analyzed ALL plant protection products (PPP) in hazelnut (“traffic light” scheme: green-yellow-orange-red)
- * Few differences between member States
- * In general, good control for weeds



Plant protection products in the EU hazelnut orchards

- * Dramatic situation for control main pests and diseases:
 - * Some disease have no PPP (Spain: Bud rot, *Cryptosporiopsis tarraconensis*)
 - * Only 4 bactericidal/fungicidal. None offers good control
 - * 11 insecticide/acaricide. Only 5 offer good control
 - * 14 main pests/diseases:
 - * an average of 2,2 PPP available per pest/disease
 - * 6 main pests/disease have only one PPP, but ineffective or poor control
 - * Only 5 have any PPP with good control, but each pest/disease have only one PPP that offers good control (PPP resistance !)
 - * 9 pests/diseases without any effective control system



Plant protection products in the EU hazelnut orchards

It would be important

- * MALATHION has been banned in the EU since 2008
 - => endocrine disruptor and carcinogen
 - => effectiveness on bedbugs and barnacles 100%
- * Gamma-cyhalothrin has been banned in the EU since 2022



General overview

- * Climate change will rise pest and disease problems
- * Nowadays there is already a negative impact on productivity in EU hazelnut orchards
- * “Farm to fork” objectives?
- * Commission should improve PPP approval process in order to provide new tools to hazelnut sector (following EU environmental requirements)
- * From our perspective, reciprocity should be the basis of sanitary (SPS) and trade policies
- * Commission should promote other non-chemical controls tools



General overview

- * There's only one global hazelnut market
- * We should satisfy increasing consumption, strengthening EU production
- * Plant health management is important to ensure farm viability





Thank you for your attention!



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