

Diseases and pests in viticulture

How can we increase the resilience of grapevines to pests and diseases and support the productivity of the sector in sustainable ways?

Nineteen Focus Group experts from different wine-growing regions in the EU discussed this question. They made an inventory of the main pests and diseases affecting grapevines, including their geographical distribution, and looked into Integrated Pest Management (IPM) Strategies to combat them. The experts specifically considered how promoting functional biodiversity can help to create a more resilient vineyard system, as it can help to both prevent and fight pests and diseases. They also shared their ideas on how expected climatic changes will impact the distribution and occurrence of pests and diseases.

Viticulture is a relevant sector of EU agriculture in terms of economic revenues and job creation. It has also shaped the landscape, and is associated with regional culture and identity of wine growing regions. Wine is the main export item of the EU within the food sector.

This EIP-AGRI Focus Group identified needs from the sector and possible gaps in knowledge on particular issues concerning the management of pests and diseases in grape production which may be solved by further research. They also proposed priorities for relevant innovative actions / projects including practical ideas for EIP-AGRI Operational Groups.

"Insecticides have been showing limited efficacy in the previous years, so vineyard managers in my region became interested in testing pheromone mating disruption (MD) against the grapevine moth L. botrana in the area."

- Andrea Lucchi (Italy), expert from the EIP-AGRI Focus Group on Diseases and pests in viticulture -



European

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Ideas for Operational Groups

- Identify and test appropriate IPM and precision viticulture practices, with locally adapted strategies and specific regional implementation requirements.
- Test and select locally adapted varieties and heterogeneous planting materials fitting local conditions and market demands.
- > Develop local strategies for a proper use of cover-crops.
- > Test ways to enhance both functional and vine biodiversity in vineyards to increase vineyard resilience
- Define strategies, based on local conditions and requirements, to increase vineyard resilience, to cope with climate change effects on pest and disease pressure.

Research needs

- > Selection and breeding of locally adapted grape varieties and heterogeneous planting materials.
- Develop ways to improve planting material health, including research on rootstocks and nursery management.
- > Adapting IPM and precision viticulture for small-sized and geographically scattered vineyards.
- > Management strategies to control powdery mildew.
- Methods to manage soil organic matter, soil fertility and the soil microbiome to improve plant health and reduce the impact of pest and diseases.

- Effects of climate change on vine pests and diseases.
- Develop strategies to manage Grapevine Trunk Diseases.

More ideas for Operational Groups and research needs available in the Focus Group report

More information	
Focus Group webpage	Inspirational ideas:
Focus Group report	 <u>Dealing with pests from the air</u> (France) <u>Combining research and practice to trigger change in French wine</u> production (France)
<u>www.winetwork.eu</u>	- <u>Fighting grapevine trunk diseases</u> (Spain)
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