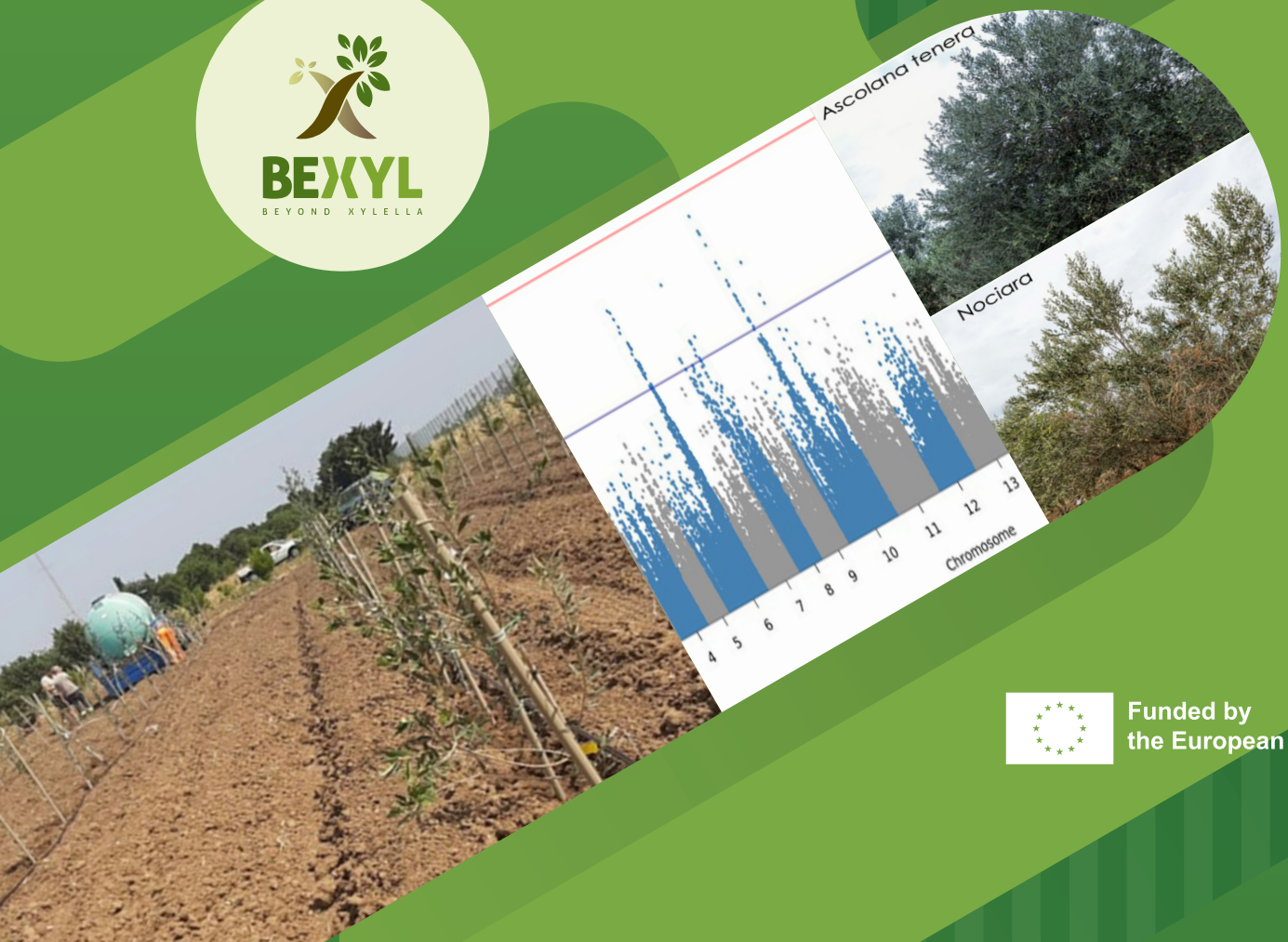
Beyond *Xylella*, Integrated Management Strategies for Mitigating *Xylella fastidiosa* impact in Europe

Practice abstract 16

New resistant olive/almond selections to *Xylella fastidiosa*



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New resistant olive/almond selections to *Xylella fastidiosa*

***Xylella fastidiosa* (*Xf*)** threatens olive and almond production across the Mediterranean, while effective curative field treatments are unavailable. **BeXyl** addressed this challenge by identifying resistant germplasm to support breeding programmes and future **resilient orchards.**



How did BeXyl make a difference?

Large-scale screening under natural epidemic conditions. BeXyl evaluated hundreds of olive and almond genotypes under greenhouse and field conditions. In olive, more than 400 olive cultivars and selections were monitored for up to ten years in Apulia orchards infected by ***Xf subsp. pauca***, providing a unique opportunity to assess resistance under real epidemic pressure. This was complemented by greenhouse evaluations and almond germplasm screening by several **BeXyl** partners.

Identification of new resistant germplasm. Beyond confirming the resistance of 'Leccino' and 'Fs17', **BeXyl** identified additional resistant olive cultivars, including 'Cipressino', 'Ascolana Tenera' and 'Leccio del Corno'. Promising olive selections (S215, S105, GM9 and GM25) and advanced breeding lines (F10P30, F12P98, F8P17, F6P43, F8P9 and F6P5) are currently under agronomic evaluation. In almond, resistant cultivars and breeding lines included 'Lauranne', 'Usha', 'Bab al Hawa', 'Harmon', 44-1, 44-18, 'Varyo', 'Marinada', 'Mare de Deu' and 'Soleta'.

Accelerating the development of future cultivars. The newly identified resistant material is being incorporated into breeding programmes and genetic studies, expanding the diversity of resistance sources and providing valuable parents for the next generation of olive and almond varieties.

Impact: BeXyl has significantly expanded the portfolio of olive and almond germplasm with demonstrated resistance to Xf. These resources provide breeders and growers with new material to develop resilient orchards, reduce disease losses and support sustainable crop production while decreasing reliance on chemical vector control.

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