



# RIGENESI: Science Diplomacy & Capacity Building for Mediterranean Plant Health Emergencies

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## Issue/challenge

The outbreak of *Xylella fastidiosa* in the Apulia Region of Italy represents one of the most severe plant health emergencies in the Mediterranean, with major impacts on olive production, plant health systems and ecosystems. Addressing this threat requires more than local containment measures. It demands coordinated surveillance, harmonized regulatory implementation and structured contingency planning across countries.

Mediterranean countries face similar quarantine pest risks but operate with differing institutional and technical capacities. This results in uneven preparedness, limited access to diagnostic tools and fragmented communication between policymakers, researchers and phytosanitary authorities. Strengthening institutional capacity while ensuring transparent data sharing and sustained dialogue across countries remains a central challenge for effective regional plant health governance.

## Actions taken

Within the framework of the **Extraordinary Plan for the Regeneration of Olive Growing in Puglia**, Regione Puglia, in partnership with CIHEAM Bari, launched **RIGENESI**, an initiative combining advanced training, applied research and international scientific and institutional dialogue.

- **Research bootcamps:**  
Intensive three-week programmes combining technical training, applied research, field visits and interaction with the Regional Phytosanitary Service. Participants from the Balkans, Maghreb and Mashreq regions receive practical training in surveillance, sampling, laboratory diagnostics (ELISA, real-time PCR, LAMP-PCR), nursery controls, contingency planning and regulatory implementation under EU phytosanitary legislation. Draft contingency frameworks are developed and adapted to national contexts.
- **International scientific and institutional dialogue:**  
High-level conferences and ministerial meetings in the Balkans, Maghreb, Mashreq, Italy and Brussels promote cooperation, exchange of best practices and alignment with international phytosanitary standards.
- **Research outputs and knowledge products:**  
Periodic scientific reports and information briefs consolidate operational data, including over **1.3 million diagnostic tests** conducted between 2013 and 2024, supporting evidence-based decision-making and transparent information exchange.

## Key results

Since its launch in May 2025, **RIGENESI** has delivered concrete and measurable results, including:

- Organization of the **Ministerial Conference on Transboundary Plant Pests and Diseases** (12–13 May 2025, CIHEAM Bari), jointly with FAO, NEPPO and Regione Puglia, involving ministers, donors and institutional stakeholders from across the NENA region.
- Implementation of the **first RIGENESI Research Bootcamp** (3–21 November 2025), with 17 policymakers and phytosanitary professionals from Serbia, Bosnia and Herzegovina, Montenegro, Albania and Kosovo.
- Publication of the **first policy briefing on *Xylella fastidiosa* monitoring (2013–2024)**, consolidating long-term surveillance data into decision-support tools.

These activities have resulted in:

- strengthened Euro-Mediterranean scientific cooperation and institutional dialogue on plant health emergencies;
- enhanced technical and institutional capacities of policymakers and phytosanitary authorities;
- improved understanding and implementation of surveillance systems, contingency planning and regulatory measures;
- promotion of more harmonized regional approaches to managing quarantine pests;
- consolidation of *Xylella fastidiosa* management as a **transferable model** for other plant health emergencies.

## Conclusions

The RIGENESI experience demonstrates that **science diplomacy is essential for managing transboundary phytosanitary emergencies**. Effective responses require the integration of technical expertise with institutional coordination and political dialogue. Capacity building is most effective when grounded in operational experience and supported by transparent knowledge sharing.

By sharing the Apulian experience, RIGENESI provides a practical model for Mediterranean countries to strengthen preparedness, improve coordination and enhance regional phytosanitary resilience. Sustained international cooperation and structured knowledge exchange are critical to protecting the Mediterranean's shared agricultural and economic future.

