

Exploring Citrus Diversity: A Technical Visit to INRAE Corsica

In March 2025, two scientists from Malta's Rural Affairs Department visited INRAE Corsica, one of Europe's leading agricultural research centres. The visit took place as part of the ERASMUS+ programme and focused on learning modern techniques used to study, identify and preserve citrus varieties.

From Orchard to Laboratory

During the visit, participants toured citrus orchards, greenhouses and specialised laboratories where a wide range of citrus species and varieties are conserved. Researchers explained how citrus plants are characterised using both traditional methods—such as observing fruit shape, colour and taste—and advanced laboratory techniques.

Understanding Citrus at a Deeper Level

In the laboratory, scientists demonstrated how leaf, bark and fruit samples can be analysed to confirm the identity of citrus plants. These methods help distinguish between closely related varieties, detect hybrids and ensure that citrus collections are accurately labelled.

Fruit quality was another key focus. Measurements of sweetness, acidity, colour and essential oils help researchers understand how different citrus varieties can be best used, whether for fresh consumption, juice production or other uses such as essential oils.

Preparing for the Future

The visit also highlighted the use of digital tools to measure plant features and tests to assess how citrus plants respond to stress conditions like drought or soil salinity. This knowledge is essential for adapting agriculture to climate change.

Overall, the visit strengthened collaboration between Malta and INRAE Corsica and provided valuable skills that will support the development of Malta's National Genebank. By improving knowledge of citrus diversity, this work helps protect traditional varieties and supports more sustainable citrus production in the future.

