

Rapid diagnostics of *Xanthomonas arboricola* pv. *pruni* (Xap): development and validation of methodologies for discrimination between Xap isolates and look-a-likes (XAPDIAG)



Xanthomonas arboricola pv. *pruni* (XANTPR) - <https://gd.eppo.int>

Funding

Non-competitive funding mechanism. Each funder only pays for the participation of their own national researchers. Total funding € 145,000

Research consortium

AT-AGES, NL-NVWA, ES-CITA, ES-IVIA, ES-INIA

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Objectives

- The identification and ecological aspects of microbiota in *Prunus*,
- Analysis of the available identification and detection assays based upon DNA targets for Xap,
- the development and evaluation of a highly specific PCR methodology, differentiating Xap isolates from other (pathogenic) *Xanthomonas* strains,
- the characterization of strain diversity in Xap for tracking long or short-distance pathogen dispersal and to identify possible sources of infection,
- to draft a common Xap diagnosis protocol for EPPO.

Goals

The goal of XAPDIAG is to improve the speed and specificity of diagnostic procedures for *Xanthomonas axonopodis* pv. *pruni* (Xap).

Key outputs and results

Beneficiaries of this research are:

- National Plant Protection Organisations (NPPOs), including risk managers, risk assessors and diagnosticians.
 - EPPO and its members (validated diagnostic protocols; information contributing to EPPO PRAs)
 - Stone fruit, almond and ornamental *Prunus* industry and other stakeholders (*Prunus* nurseries and stone fruit and almond industry)
- All these users will benefit from improved sampling and identification techniques for disease diagnosis. The accurate screening of contaminated nursery propagation material has a particular benefit in quarantine programs in order to avoid the long distance spreading of Xap. Research products are therefore directly related to the attainment of more efficient control and eradication programs, as well improving our understanding of the disease biology and epidemiology.
- National and international plant protection organisations will be able to use the newly generated data for more in depth pest risk assessments and possibly following monitoring activities. Know-how on this pest will be available to the public for more targeted prevention measures.