

Diagnostics
Diagnostic**PM 7/131 (1) Guidelines on the main tasks of Reference Laboratories for official plant pest diagnostics****Specific scope**

This Standard describes the main tasks of Reference Laboratories for official plant pest diagnostics.

Specific approval and amendment

Approved as an EPPO Standard in 2017-09.

1. Introduction

In many countries diagnostics for regulated pests are performed in more than one laboratory. These are laboratories of the NPPO, of governmental agencies/institutes working for the NPPO and other laboratories authorized by the NPPO to perform diagnostic activities for regulated pests (see EPPO, 2016). In recent years, national Reference Laboratories have been established in countries to coordinate and harmonize activities of laboratories performing official plant pest diagnostics. European Union Reference Laboratories (EURL) have been established in the animal health sector (EU, 2004) and a similar system is currently being established in the plant health sector. The EPPO Working Party on Phytosanitary Regulations consequently suggested that guidelines describing the tasks of Reference Laboratories should be established for official plant pest diagnostics to ensure harmonization across the EPPO region.

A list of tasks was developed in a Workshop for Heads of plant pest diagnostics laboratories and has been the basis for the development of this Standard.

2. Tasks of Reference Laboratories

The area of competence of the Reference Laboratory should be defined. It may be restricted to, for example, groups of pests, specific pests or specific crops, but may also be broader and cover any official plant pest diagnostics. The tasks below are for the area of competence as defined.

2.1. Tasks identified as essential

- To establish official diagnostic protocols to be used in laboratories performing official plant pest diagnostics

- To perform validation of tests when validation data is not available
- To collaborate with other laboratories for the development of diagnostic protocols, in particular where possible through the involvement of Reference Laboratory scientific staff in the EPPO and IPPC diagnostic programme
- To provide confirmation of a diagnostic result, when required
- To provide training when required for staff of other laboratories performing official plant pest diagnostics
- If necessary, and technically possible, to organize proficiency tests and, if required, report the results to the NPPO
- To participate in proficiency tests
- To provide information to other laboratories performing official plant pest diagnostics on new developments in diagnostics
- Where relevant, to assist actively in the diagnosis of outbreaks of plant pests by analysing samples for characterization and taxonomic studies
- To provide information on where reference material is available and if relevant to provide such material.

2.2. Tasks considered beneficial but not essential for all Reference Laboratories

- To provide technical-scientific support to the NPPO (e.g. contribution to pest risk analysis, establishment of monitoring plans and contingency plans, training of inspectors) or others as required
- Participation in research projects (e.g. projects on epidemiological studies)
- To establish, or be part of, a network for international cooperation (e.g. with laboratories in other countries, in particular for emerging pests).

3. Feedback on this Diagnostic Protocol

If you have any feedback concerning this Diagnostic Protocol, or any of the tests included, or if you can provide additional validation data for tests included in this protocol that you wish to share please contact diagnostics@eppo.int

4. Protocol revision

An annual review process is in place to identify the need for revision of diagnostic protocols. Protocols identified as needing revision are marked as such on the EPPO website. When errata and corrigenda are in press, this will also be marked on the website.

5. Acknowledgements

This Standard was prepared by the EPPO Panel on Diagnostics and Quality Assurance.

References

- EPPO (2016) PM 7/130 (1) Guidelines on the authorization of laboratories to perform diagnostic activities for regulated pests. *EPPO Bulletin*, **46**, 538–540.
- EU (2004) Regulation (EC) no 882/2004 of the European Parliament and of the Council of 29 April 2004.