

Introduction to PM 7 Standards on Diagnostics

PM 7/84 (3), PM 7/98 (5), PM 7/147 (1), PM 7/148 (1), PM 7/120 (2), PM 7/149 (1), PM 7/150 (1)

1 | APPROVAL

EPPO Standards are approved by the EPPO Council. However, a fast-track procedure exists for pest-specific Diagnostic Standards and is described in EPPO (2019). The date of approval appears in each individual Standard. In the terms of Article II of the IPPC, EPPO Standards are Regional Standards for the members of the EPPO.

2 | REVIEW

EPPO Standards are subject to periodic review and amendment. The next review date for these EPPO Diagnostics Standards is decided by the EPPO Working Party on Phytosanitary Regulations.

3 | AMENDMENT RECORD

Amendments will be issued as necessary, numbered and dated. The dates of amendment appear in each individual Standard (as appropriate).

4 | SCOPE

EPPO Diagnostic Protocols are intended to be used by NPPOs in their capacity as bodies responsible for the application of phytosanitary measures to detect and identify the regulated pests of the EPPO and/or European Union lists. In 1998, the EPPO started a new programme to prepare diagnostic protocols for the regulated pests of the EPPO region (including the EU). The work is conducted by the EPPO Panel on Diagnostics and Quality Assurance and other specialist Diagnostics Panels. The objective of the programme is to develop an internationally agreed diagnostic protocol for most of the EPPO list of pests recommended for regulation (EPPO, 2020). The protocols are based on the many years of experience of

EPPO experts. The first drafts are prepared by an assigned expert author(s). They are written according to a 'common format and content of a diagnostic protocol' agreed by the Panel on Diagnostics and Quality Assurance, modified as necessary to fit individual pests. As a general rule, the protocol recommends a particular means of detection or identification which is considered to have advantages (of reliability, ease of use, etc.) over other methods. The following general provisions apply to all diagnostic protocols:

- Laboratory procedures should be adequate for the handling of quarantine pests (including positive controls), with particular reference to waste disposal facilities, and should respect the conditions of appropriate licences issued by the NPPO. Quality control standards should be applied to avoid administrative and other errors, especially concerning labelling and documentation.
- Laboratory tests may involve the use of chemicals or apparatus which present a certain hazard. In all cases, local safety procedures should be strictly followed.
- Use of names of chemicals or equipment in these EPPO Standards implies no approval of them to the exclusion of others that may also be suitable.
- Laboratory procedures presented in the protocols may be adjusted to the standards of individual laboratories, provided that they are adequately validated or that proper positive and negative controls are included.

REFERENCES

- EPPO (2020) EPPO Standards PM 1/2 (29) EPPO A1 and A2 lists of quarantine pests. https://www.eppo.int/media/uploaded_image_s/ACTIVITIES/plant_quarantine/pm1-002-29-en.pdf [last accessed 01 November 2020].
- EPPO (2019) Procedure for preparation and approval of EPPO Standards. *EPPO Bulletin* 49, 159–163.
- IPPC (2015) *Glossary of Phytosanitary Terms*. ISPM no. 5. IPPC Secretariat, FAO, Rome (IT). Available at https://www.eppo.int/media/uploaded_images/RESOURCES/eppo_standards/pm1/pm1-002-29-en.pdf [last accessed 01 November 2019]

5 | DEFINITIONS

The definitions for the terms in EPPO Diagnostic Standards are now described in OEPP/EPPO Standard PM 7/76 (5) *Use of EPPO Diagnostic Protocols*, *EPPO Bulletin* 48, 373–377.

6 | OUTLINE OF REQUIREMENTS

EPPO Standards of series PM 7 include general Standards on diagnostics and diagnostic protocols for individual pests. The diagnostic protocols provide all the information necessary for a named pest to be detected and positively identified. Each protocol begins with some short general information on the pest (its appearance, relationship with other organisms, host range, effects on host, geographical distribution and identity) and then gives details on detection and identification (including comparison with similar species, requirements for a positive diagnosis). Lists of institutes or individuals where further information on that organism can be obtained and references (on the diagnosis, detection/extraction method, test methods) are provided as well.

7 | EXISTING EPPO STANDARDS IN THIS SERIES

One hundred and fifty EPPO Standards on Diagnostic Protocols, including 14 general Standards, have now been approved and published (including the new and revised Standards published here). Each Standard is numbered in the style PM 7/4 (1), meaning an EPPO Standard on Phytosanitary Measures (PM), in series no. 7 (Diagnostic Protocols), in this case Standard no. 4, first version.

Some of the Standards result from a different drafting and consultation procedure. They are the output of the DIAGPRO Project of the Commission of the European Union (no. SMT 4-CT98-2252). This project involved four ‘contractor’ diagnostic laboratories (in England, the Netherlands, Scotland and Spain) and 50 ‘intercomparison’ laboratories in many European countries (within and outside the European Union), which were involved in test performance studies for tests in the draft protocols. The DIAGPRO project was set up in full knowledge of the parallel activity of the EPPO Working Party on Phytosanitary Regulations in drafting diagnostic protocols and covered regulated pests which were for that reason not included in the EPPO programme. The DIAGPRO protocols have been approved by the Council of EPPO as EPPO Standards in series PM 7.

They will in future be subject to review by EPPO procedures, on the same terms as other members of the series. The full list of Diagnostic Standards (Series PM7) is available at https://www.eppo.int/RESOURCES/eppo_standards/pm7_diagnostics with direct links to the Standards in the *EPPO Bulletin*. The Standards are also available in the EPPO Global Database (<https://gd.eppo.int/standards/PM7/>).

The Standards published in the present issue of the *EPPO Bulletin* are listed below:

PM 7/84 (3) Basic requirements for quality management in plant pest diagnosis laboratories, PM 7/98 (5) Specific requirements for laboratories preparing accreditation for a plant pest diagnostic activity, PM 7/147 (1) Guidelines for the production of biological reference material, PM 7/148 Guidelines for the management of nematode collections used for the production and maintenance of reference material (1), PM 7/120 (2) *Pseudomonas syringae* pv. *actinidiae*, PM 7/149 (1) *Anoplophora glabripennis* and *Anoplophora chinensis*, PM 7/150 (1) ‘*Candidatus* Phytoplasma phoenicium’.