

Phytosanitary procedures
Procédures phytosanitaires**PM 3/60 (1) Testing growing medium and plants in growing medium****Specific scope**

This Standard gives guidance on testing growing medium and plants in growing medium, to determine if they satisfy the requirements of EPPO Standard PM 3/54.

Specific approval and amendment

First approved in 2001-09.

Revised in 2013-09.

Many quarantine pests may be present in the growing medium attached to or associated with plants with roots. Phytosanitary Procedure PM 3/54 *Growing plants in growing medium prior to export* (EPPO, 1994) indicates how the risk of introducing such quarantine pests may be reduced by ensuring that the quality of the growing medium is adequate and that the growing conditions do not facilitate contamination. The present phytosanitary procedure presents how testing growing medium and plants in growing medium, can be used to determine if they satisfy the requirements of EPPO Standard PM 3/54.

The testing method to ensure that the growing medium has been properly handled relies on the principle that any growing medium that contains non-disinfested soil, or that has been in contact with soil, will almost always contain plant-parasitic nematodes.¹ The plant-parasitic nematodes are not necessarily quarantine pests, but their very presence is an indication that other, less easily detected quarantine pests may also be present.

If the test of the growing medium shows the presence of any plant-parasitic nematodes, the growing medium and the associated plant have failed the test and the procedures in Phytosanitary Procedure PM 3/54 have not been properly followed. If no plant-parasitic nematodes are found, it is advisable to test the roots of the plant. The presence of endoparasitic nematodes in the roots is evidence that the plants have either been collected from the wild or have been in conditions of potential contamination with quarantine pests.

The methods for testing for the presence of nematodes are given in PM 7/119 *Nematode extraction* (EPPO, 2013).

References

- EPPO (1994) PM 3/54 (1) *Growing plants in growing medium prior to export Bulletin OEPP/EPPO Bulletin* **24**, 326–327.
EPPO (2013) PM 7/119 (1) *Nematode extraction Bulletin OEPP/EPPO Bulletin* **43**, 471–495.

¹Many nematode species occur frequently in growing medium but they are mostly saprophagous or fungal feeders and do not necessarily derive from soil. For the purposes of this test and according to the extraction method used, 'plant-parasitic nematodes' can be considered to be any member of the order *Tylenchida*, sub-order *Tylenchina*, or the genera *Trichodorus* and *Paratrichodorus* in the order *Triplonchida*. Other taxonomic groups contain a few plant-parasitic species but they are not suitable for the method, either because they are not recovered by the methods used (e.g. *Dorylaimida*) or because they also contain numerous similar saprophagous species (e.g. *Aphelenchida*).

CORRIGENDUM

Corrigendum – PM 3/60 Testing growing medium and plants in growing medium

The EPPO Standard *PM 3/60 Testing growing medium and plants in growing medium* (EPPO, 2013) references *EPPO Standard PM 3/54 Growing plants in growing medium prior to export* (EPPO, 1994). However, EPPO Standard PM 3/54 was withdrawn from publication in 2020 following the adoption of ISPM 40 *International movement of growing media in association with plants for planting* (IPPC, 2017). Readers of this Standard should therefore refer to ISPM 40 instead of the EPPO Standard PM 3/54.

It should also be noted that the version number of EPPO Standard PM 3/60 as published in 2013 was incorrect. It is in fact version 2 (not version 1). The title should therefore be *PM 3/60 (2) Testing growing medium and plants in growing medium*. The EPPO Secretariat apologizes for this error.

REFERENCES

- EPPO (2013) PM 3/60 Testing growing medium and plants in growing medium, *EPPO Bulletin* 44, 13
- EPPO (1994) Phytosanitary procedure No 54: Growing plants in growing medium prior to export, *EPPO Bulletin*, 24, 326–327.
- IPPC (2017) ISPM 40 International movement of growing media in association with plants. Available at <https://www.ippc.int/fr/core-activities/standards-setting/ispms/>