

◆ **EPPO Standards** ◆

PHYTOSANITARY PROCEDURES

**FUMIGATION TO CONTROL ADULT
*LEPTINOTARSA DECEMLINEATA***

PM 3/50(1) English



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APPROVAL

EPPO Standards are approved by EPPO Council. The date of approval appears in each individual standard.

REVIEW

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

AMENDMENT RECORD

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

DISTRIBUTION

EPPO Standards are distributed by the EPPO Secretariat to all EPPO member governments. Copies are available to any interested person under particular conditions upon request to the EPPO Secretariat.

SCOPE

EPPO Phytosanitary Procedures are intended to be used by National Plant Protection Organizations, in their capacity as bodies responsible for the inspection, testing and treatment of plants and plant products moving in trade, or for the implementation of surveys against quarantine pests.

REFERENCES

OEPP/EPPO (1996) Glossary of Phytosanitary Terms. *EPPO Technical Documents* no. 1026.

CABI/EPPO (1997) Quarantine Pests for Europe, 2nd edition (Ed. by Smith, I.M.; McNamara, D.G.; Scott, P.R.; Holderness, M.), CAB International, Wallingford, UK.

OEPP/EPPO (in preparation) Specific Quarantine Requirements. Available as electronic documents from the EPPO Web Site.

DEFINITIONS

Phytosanitary procedure: Any officially prescribed method for performing inspections, tests, surveys or treatments in connection with plant quarantine.

Inspection: Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/or to determine compliance with phytosanitary regulations.

Survey: An official procedure conducted over a defined period of time to determine the characteristics of a pest population or to determine which species occur in an area.

Test: Official examination, other than visual, to determine if pests are present or to identify pests.

Treatment: An officially authorized procedure for the killing, removal or rendering infertile of pests.

OUTLINE OF REQUIREMENTS

EPPO Phytosanitary Procedures describe the methods to be followed for performing inspections, tests, or treatments of commodities moving in trade, or surveys against quarantine pests. For many quarantine pests, a reference to the relevant EPPO Phytosanitary Procedure is made in the corresponding EPPO Specific Quarantine Requirements. The development of EPPO phytosanitary procedures started many years ago, and these methods have been published in the Bulletin OEPP/EPPO Bulletin under several titles: 'Fumigation standards', 'Quarantine Inspection Procedures' and 'Quarantine Procedures'. All of them are now appearing under the title 'EPPO Phytosanitary Procedures' and are being edited into EPPO Standard format. The numbering of these procedures will continue to follow the sequence described in the Bulletin OEPP/EPPO Bulletin 20(2), 229-233, which corresponds approximately to the chronological order of appearance of the Phytosanitary Procedures.

Phytosanitary procedure

FUMIGATION TO CONTROL ADULT *LEPTINOTARSA DECEMLINEATA*

Specific scope

This standard describes the fumigation to control adult *Leptinotarsa decemlineata*.

Specific approval and amendment

First approved in September 1993.
Edited as EPPO Standard in 1998.

Commodities: potatoes, timber and bulk grains.

Pest: adult *Leptinotarsa decemlineata* (Colorado beetle).

1. Methyl bromide fumigation at atmospheric pressure

(a) for potatoes

Temperature	Initial dosage	Exposure time
> 10°C	15 g m ⁻³	14 h

(b) for timber

> 10°C	50 g m ⁻³	8 h
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(c) for bulk grain

(1) In silos or stores with recirculation systems or where temporary recirculation systems can be used during treatment.

> 10°C	25 g m ⁻³	24 h
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(2) On grain without circulation systems (should only be applied to small quantities of depth not exceeding 2 m)

> 10°C	35 g m ⁻³	24 h
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Note: according to Powell & Mills (1981), the CTP for methyl bromide at 10°C is 166 g h m⁻³.

2. Fumigation at atmospheric pressure with phosphine (generated from aluminium or magnesium phosphide preparations)

Temperature	Initial dosage	Exposure time
> 10°C	5 g m ⁻³	3-5 h

Note: Grain should be allowed to air and be free from gas before moving.

Reference

Powell, D.F., Mills, K.A. (1981) Fumigation as a means of eradicating Colorado beetle in imports of potatoes, grain and timber. *Bulletin OEPP/EPPO Bulletin* **11**, 371-376.