

EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES
Summary sheet of validation data for a diagnostic test

The EPPO Standard PM 7/98 *Specific requirements for laboratories preparing accreditation for a plant pest diagnostic activity* describes how validation should be conducted. It also includes definitions of performance criteria.

Laboratory contact details	ILVO Institute for Agricultural and Fisheries Research Burg. Van Gansberghelaan 96, 9820 Merelbeke - Melle, Belgium
Short description of the test	Morphological identification of Thrips palmi
Date, reference of the validation report	2011-05-19 - F16_I11
Validation process according to EPPO Standard PM7/98?	no
Is the lab accredited for this test?	yes
Was the validated data generated in the framework of a project?	
Description of the test	
Organism(s)	Thrips palmi (THRIPL)
Detection / identification	identification
Method(s)	Extraction Morphological
Method: Extraction	
Reference of the test description	
Other information	
Other details on the test	Visual inspection of the microscopic slides with microscope
Method: Morphological	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/003 <i>Thrips palmi</i> (version 1)
Is the test modified compared to the reference test	no
Other information	
Other details on the test	Morphological identification using microscope and checklists F03_I05 (adults) or F03_I06 (2nd instar 1 / 3 larvae) with most important morphological characters of T. palmi. The morphological characters for the adults are described in PM 7/3

	(1) and used in the checklist. The morphological characters for the 2nd instar larvae in the checklist are based on Masahisa Miyazaki Iwao Kuda (1986)(*) Before the analysis starts there is always a control of an adult or 2nd instar larva (standard reference material from the Netherlands) with checklist F03_I17 (adult) or F03_I16 (2nd instar larva). Checklist F03_I29 is used to determine the stage of the thrips (adult, 1st or 2nd larva).
Are the performance characteristics included in the EPPO diagnostic protocol?	no
Performance Criteria :	
Organism 1.:	Thrips palmi(THRIPL)
<u>Analytical sensitivity</u>	
What is smallest amount of target that can be detected reliably?	1 thrips (adult or larva) 20 microscopic slides were made (9 slides with 1 adult and 11 slides with 1 larva (2nd instar larva)). Four annalists checked the slides. Each annalists was capable to detect the thrips (adult or larva) on the slides and was able to determine whether it was T. palmi or not.
<u>Diagnostic sensitivity</u>	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	Not done
<u>Analytical specificity - inclusivity</u>	
Number of strains/populations of target organisms tested	Not done
Specificity value	
<u>Analytical specificity - exclusivity</u>	
Number of non-target organisms tested	Not done
Specificity value	Not done
<u>Diagnostic Specificity</u>	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	Not done
<u>Reproducibility</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% 10 microscopic slides with one adult or 2nd instar larva. Four annalists checked the slides on four different days.
<u>Repeatability</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% 4 microscopic slides (each one with 1 adult). Five replicates and 4 annalists.
Test performance study	
Test performance study?	yes
Brief details of the test performance study and its output.It available, link to published	PhytoPAS Proficiency test PL0116 (Fapas, May 2009) with 10 participating laboratories, including

article/report	DCP. 3 microscopic slides with 1 adult thrips, 1 slide with T. palmi, 1 slide with T. flavus and 1 slide with T. tabaci. DCP 100% satisfactory.
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