

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	Anses Plant Health Laboratory - Nematology Unit Domaine de la Motte au Viconte BP 35327, 35653 Le Rheu, France
Short description of the test	Identification of <i>Bursaphelenchus xylophilus</i> by nested PCR (Takeuchi et al. 2005)
Date, reference of the validation report	2011-05-01 - Validation report may 2011
Validation process according to EPPO Standard PM7/98?	yes
Is the lab accredited for this test?	no
Was the validated data generated in the framework of a project?	
If yes, please specify	
Description of the test	
Organism(s)	<i>Bursaphelenchus xylophilus</i> (BURSXY)
Detection / identification	identification
Matrix(ces) tested	Specimen Isolated nematodes
Plant species tested	
Method(s)	Molecular Conventional PCR
Method: Molecular Conventional PCR	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	no
New test being considered for inclusion in the next version of the EPPO diagnostic protocol?	
As or adapted from an IPPC diagnostic protocol	no
Reference of the test	Takeuchi Y, Kansaki N & Futai K (2005) A nested PCR-based method for detecting the pinewood nematode, <i>Bursaphelenchus xylophilus</i> , from pinewood. <i>Nematology</i> 7(5), 775-782. Not included in appendix of PM7/4 (2).
Is the test modified compared to the reference test	

Kit	
Is a kit used	
Other information	
Reaction type	Nested
Other details on the test	
Are the performance characteristics included in the EPPO diagnostic protocol?	
Performance Criteria :	
Organism 1.:	Bursaphelenchus xylophilus(BURSXY)
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	5 nematodes
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	
Standard test(s)	
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	7 populations
Specificity value	100%
Analytical specificity - exclusivity	
Number of non-target organisms tested	15 populations
Specificity value	cross reactions with some populations of <i>B. mucronatus</i> and <i>B. sp</i> from France and China
Cross reacts with	<i>Bursaphelenchus sp.</i> <i>Bursaphelenchus mucronatus</i>
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	
Specify the test(s)	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for 5 individuals
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for 5 individuals
Test performance study	
Test performance study?	no

Brief details of the test performance study and its output. It available, link to published article/report	
Other information	
Any other information considered useful	The full report is available upon request to the laboratory. French version only

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