

**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 PCR RFLP from Burgermeister et al, 2009.
Date, reference of the validation report	2019-12-10 - Bx1
Validation process according to EPPO Standard PM7/98?	yes
Is the lab accredited for this test?	yes
Was the validated data generated in the framework of a project?	Other_project
If yes, please specify	VALITEST
Description of the test	
Organism(s)	<i>Bursaphelenchus xylophilus</i> (BURSXY)
Detection / identification	identification
Matrix(ces) tested	Specimen
Plant species tested	
Method(s)	Molecular PCR-RFLP
Method: Molecular PCR-RFLP	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
New test being considered for inclusion in the next version of the EPPO diagnostic protocol?	no
EPPO Diagnostic Protocol name	PM 7/004 <i>Bursaphelenchus xylophilus</i> (version 3)
Name of the test	ITS RFLP PCR (Burgermeister et al., 2009)
As or adapted from an IPPC diagnostic protocol	
Is the test modified compared to the reference test	no
Kit	
Is a kit used	no

Other information	
Reaction type	Simplex
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?	not applicable
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	86%
Standard test(s)	Comparison with samples of known status
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	2 populations of Bursaphelenchus xylophilus either from China or Portugal
Specificity value	100%
Analytical specificity - exclusivity	
Number of non-target organisms tested	One population for each of the following species: B. macromucronatus, B. doui, B. hoffmani, B. kolymensis, B. mucronatus, B. sexdentati
Specificity value	100%
Cross reacts with	
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	not applicable
Specify the test(s)	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	
Test performance study	
Test performance study?	yes
Brief details of the test performance study and its output.It available, link to published article/report	Test performance study organised in the framework of the VALITEST project in 2019, including 15 participating laboratories from 13 countries. Only 14 sets of data were considered for

	the analysis and calculation of performance criteria.
Other information	
Any other information considered useful	
The following complementary files are available online:	<ul style="list-style-type: none">• VALITEST BX1 report

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