

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	Detection of <i>Bursaphelenchus xylophilus</i> using real time PCR in extracts from wood chips or from cultures of nematodes performed on mycelium
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?	no
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	detection
Matrix(ces) tested	Wood extracts from wood chips and isolated nematodes
Plant species tested	<i>Pinus</i> sp.
Method(s)	Molecular real time PCR
Method: Molecular real time 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?	no
As or adapted from an IPPC diagnostic protocol	no
Reference of the test	Cleardetection kit
Is the test modified compared to the reference test	no
Kit	
Is a kit used	yes

Manufacturer name	CLEAR DETECTIONS
Specify the kit used	RT-N-D-0401 ClearDetections Real-Time PCR Diagnostic kit: Bursaphelenchus xylophilus
Kit used following the manufacturer's instructions?	yes
Other information	
Performance Criteria :	
Organism 1.:	Bursaphelenchus xylophilus(BURSXY)
Analytical sensitivity	
What is the smallest amount of target that can be detected reliably?	5 individuals
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	91%
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 from China and Portugal
Specificity value	99%
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	99%
Cross-reacts with	Bursaphelenchus macromucronatus
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	99%
Specify the test(s)	Comparison with samples of known status
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 12 participating laboratories from 10 countries. Only 11 sets of data were considered for the analysis and calculation of performance criteria.
The following complementary files are available online:	
	<ul style="list-style-type: none"> • VALITEST BX1 report

