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	Council for Agricultural Research and Economics–Research Centre for Plant Protection and Certification Via Carlo Giuseppe Bertero, 22, 00156 Rome, Italy
Short description of the test	Interlaboratory validation of Ceratocystis platani Real-Time PCR TaqMan on wood of Platanus x acerifolia
Date, reference of the validation report	2025-04-22 - Interlaboratory validation of Ceratocystis platani real-time PCR TaqMan in wood of Platanus x acerifolia (corresponding Pilotti M)
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?	Euphresco
If yes, please specify	Euphresco project 2015-A-118 “Identification and early detection of Cryphonectria parasitica and Ceratocystis platani occurring on trees in Europe, CERACRY
Description of the test	
Organism(s)	Ceratocystis platani (CERAFP)
Detection / identification	detection and identification
Matrix(ces) tested	Wood
Plant species tested	Platanus x hispanica
Method(s)	Molecular real time PCR
Method: Molecular real time PCR	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/014 Ceratocystis fimbriata f. sp. platani (version 2)
Name of the test	Real-time PCR (Pilotti et al., 2012) Test version 2: dual-labelled probe (Taqman)
Is the test modified compared to the reference test	no

Kit	
Is a kit used	no
Other information	
Performance Criteria :	
Organism 1.:	**Ceratocystis platani(CERAFP)**
Analytical sensitivity	
What is the smallest amount of target that can be detected reliably?	3 fg per PCR reaction
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100% - 100% evaluated with four different mastermixes (see Brunetti et al., 2022)
Standard test(s)	Comparison with samples of known status
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	99% - evaluated with four different mastermixes (see Brunetti et al., 2022)
Specify the test(s)	Comparison with samples of known status
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	99% evaluated on the LOD by nine participant laboratories
Test performance study	
Test performance study?	no
Brief details of the test performance study and its output.It available, link to published article/report	Test performance study as organized in the framework of the Euphresco project 2015-A_118 (CERACRY) involving 9 laboratories from 4 countries
The following complementary files are available online:	• Brunetti et al 2022

Creation date: 2025-04-22 19:19:14 - Last update: 2025-04-22 19:32:29