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	Detection of Phytophthora ramorum by plating infected plant material and morfological evaluation the culture	
Date, reference of the validation report	2009-03-31 - F16_S08	
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)	Phytophthora ramorum (PHYTRA)	
Detection / identification	detection	
Method(s)	Isolation Morphological	
Method: Isolation		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	yes	
EPPO Diagnostic Protocol name	PM 7/066 Phytophthora ramorum (version 1)	
Name of the test	Isolation from plant material with P5ARP [H]	
Is the test modified compared to the reference test	yes slight modification in composition of semi- selective medium	
Other information		
Other details on the test	Pieces of surface sterilized infected material are plated on semi-selective media (P5ARP)	
Method: Morphological		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	yes	

EPPO Diagnostic Protocol name	PM 7/066 Phytophthora ramorum (version 1)	
Other information		
Other details on the test	Morphological identification using a microscope and checklist (F03_S03) with most important morphological characters of the fungus.	
Are the performance characteristics included in the EPPO diagnostic protocol?	no	
Performance Criteria :		
Organism 1.:	Phytophthora ramorum(PHYTRA)	
Analytical sensitivity		
What is smallest amount of target that can be detected reliably?	Two plated pieces of freshly infected leaf material out of 20 plated pieces	
Diagnostic sensitivity		
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100%. All samples that were also analysed with real-time PCR gave identical results, i.e. there were no false negatives	
Standard test(s)	real-time PCR	
Analytical specificity - inclusivity		
Number of strains/populations of target organisms tested	One in our own validation scheme but the test gave correct results with several isolates from proficiency tests.	
Specificity value		
Analytical specificity - exclusivity		
Number of non-target organisms tested	5 (Phytophthora multivora, P. kernoviae, P. hedraiandra, P. syringae, P. lateralis)	
Specificity value	none known	
Diagnostic Specificity		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	100%. All samples that were also analysed with real-time PCR gave identical results, i.e. there were no false positives.	
Specify the test(s)	real-time PCR	
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%	
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%	
Test performance study		
Test performance study?	no	
Other information		
Any other information considered useful	Participation in proficiency tests, including a published one (EPPO Bulletin, 38: 191-197, (2008))	

Robustness and selectivity have also been established.
--

Creation date: 2012-12-07 00:00:00 - Last update: 2021-05-05 23:16:44