## 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	Netherlands Institute for Vectors, Invasive plants and Plant health P.O. Box 9102, 6700 HC Wageningen, Netherlands
Short description of the test	Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp.
Date, reference of the validation report	2020-06-30 - PPV1
Link to other validation data	- PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Serological detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp PPV1 Molecular detection of plum pox virus (PPV) in symptomatic and asymptomatic leaves of Prunus spp.

	in symptomatic and asymptomatic leaves of Prunus spp.	
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)	Plum pox virus / Potyvirus plumpoxi (PPV000)	
Detection / identification	detection	
Method(s)	Serological DAS-ELISA	
Method: Serological DAS-ELISA		
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	
Is the test modified compared to the reference test	no	
Kit		
Is a kit used	yes	
Manufacturer name	BIOREBA	
Specify the kit used	ELISA Plum pox virus	
Kit used following the manufacturer's instructions?	no PPV Complete kit 96 (cat. no. 150577) was used. DAS-ELISA was performed according to EPPO standard PM7/125 (1) ELISA tests for viruses. Consequently, the buffers used were not the recommended buffers by the companies.	
Other information		
Other details on the test	PPV Complete kit 96 (cat. no. 150577)	
Performance Criteria :		
Organism 1.:	Potyvirus plumpoxi(PPV000)	
<u>Analytical sensitivity</u>		
What is smallest amount of target that can be detected reliably?	PPV-infected Nicotiana benthamiana extracts could be diluted up to at least 10x times in PPV free Prunus sp. extract and still show a positive signal	

<u>Diagnostic sensitivity</u>		
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	NA	
Standard test(s)	NA	
Analytical specificity - inclusivity		
Number of strains/populations of target organisms tested	PPV strain An, C, CR, D, EA, M, Rec, T	
Specificity value	100%	
Analytical specificity - exclusivity		
Number of non-target organisms tested	PNRSV0, CVA000, ACLSV0, LCHV10, PDV000, CGRMV0, NSPAV0, APMV00, CHALV0, PBNSPA, APV300	
Specificity value	100%	
Diagnostic Specificity		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	NA	
Specify the test(s)	NA	
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	NA	
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	NA	
Test performance study		
Test performance study?	yes	
Brief details of the test performance study and its output.It available, link to published article/report	Preliminary study to see if the test is suitable for the PPV test performance study organized in the framework of the VALITEST project	
The following complementary files are available online:	VALITEST PPV TPS REPORT	

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