EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES
(11-17239)

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.

Target Organism	Plum pox virus	
Short description	Detection of Plum pox virus in plant extract by FLASH-PCR	
Laboratory contact details	Federal State Organization "All-Russian Plant Quarantine Center" Pogranichnaya str.32, Ramensky region, Moscow obl., 140150 Bykovo, Russian Federation	
Date and reference of the validation report	2011 - none	
Validation process according to EPPO Standard PM 7/98:	Yes	
Reference of the test description	N/R	
Is the test the same as described in the EPPO DP?		
Is the lab accredited for this test?	Yes	
Plant species tested (if relevant)	P. cerasifera, P. armeniaca, P. domestica, P. persica	
Matrices tested (if relevant)	Leaves and subcortical tissues from twigs	
List of methods used		
Method for extraction / isolation / baiting of target organism from matrix	X	Commercial RNA extraction kit - "Proba-NK" made by "AgroDiagnostika" (Russia)
Molecular methods, e.g. hybridization, PCR and real time PCR	X	FLASH-PCR for detection of Plum pox virus
Serological methods: IF, ELISA, Direct Tissue Blot Immuno Assay		
Plating methods: selective isolation		
Bioassay methods: selective enrichment in host plants, baiting, plant test and grafting.		
Pathogenicity test		
Fingerprint methods: protein profiling, fatty acid profiling & DNA profiling		

Morphological and morphometrical methods intended for identification		
Biochemical methods: e.g. enzyme electrophoresis, protein profiling		
Other		
Analytical sensitivity (= limit of detection)		
What is smallest amount of target that can be detected reliably?	Dilution 1/78125 of isolate PV-0001 (DSMZ, Germany) in buffer	
Diagnostic sensitivity		
Proportion of infected/infested samples tested positive compared to results from the standard test , see appendix 2 of PM 7/98	Same results	
Specify the standard test	Conventional RT-PCR (P1/P2 EPPO DP 7/32)	
Analytical specificity		
Specificity value	Same results	
Number of strains/populations of target organisms tested	4 strains of Plum pox virus and 4 isolates of Plum pox virus (PV-0001, PV-0209, PV-0305, PV-0430 DSMZ, Germany)	
Number of non-target organisms tested	9 non-target organisms	
Cross reacts with (specify the species)	Cross reaction was not observed	
Diagnostic Specificity		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test		
Specify the standard test		
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% coincidence	
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% coincidence	
Test performance study		
Test performance study?	No	
Include brief details of the test performance study and its output.It available, provide a link to published article/report		
Other information		
Any other information considered	you can find attached full validation report in Russian	

useful **e.g. robustness, ease of performing the test, etc.**	
The following complementary files are available online:	• 2011. Validation FLASH PCR PPV