

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 - Bacteriology, Virology and GMO Unit 7 rue Jean Dixm�ras, 49044 Angers, France
Short description of the test	Detection of Begomoviruses by molecular conventional PCR in leaves
Date, reference of the validation report	2016-03-16 - Report EILV 19-BEGO - final ver2
Validation process according to EPPO Standard PM7/98?	no
Is the lab accredited for this test?	no
Was the validated data generated in the framework of a project?	Euphresco
If yes, please specify	Begomoval
Description of the test	
Organism(s)	Begomovirus(1BEGOG)
Detection / identification	detection
Matrix(ces) tested	Leaves
Plant species tested	
Method(s)	Molecular Conventional PCR
Method: Molecular Conventional 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	Accotto, GianPaolo, Jes�s Navas-Castillo, Emanuela Noris, Enrique Moriones, and Diamantina Louro. 2000. "Typing of Tomato Yellow Leaf Curl Viruses in Europe." <i>European Journal of Plant Pathology</i> 106 (2):179-186. doi: 10.1023/a:1008736023293
Is the test modified compared to the reference test	no

Kit	
Is a kit used	no
Other information	
Reaction type	Simplex
Other details on the test	Use of Platinum Taq DNA Polymerase kit (Invitrogen)
Are the performance characteristics included in the EPPD diagnostic protocol?	
Performance Criteria :	
Organism 1.:	Begomovirus(1BEGOG)
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	
Standard test(s)	
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	25 target samples (16 different species)
Specificity value	79,9%
Analytical specificity - exclusivity	
Number of non-target organisms tested	5 non target samples (5 different species)
Specificity value	100%
Cross reacts with	
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	
Specify the test(s)	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	92,2% (evaluated based on the results of 9 laboratories on 30 samples analysed in duplicates)
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	97,3% (evaluated based on the results of 9 laboratories on 30 samples analysed in duplicates, each diluted sample was sent in duplicate)
Test performance study	
Test performance study?	yes
Brief details of the test performance study	Test performance study organised in the

and its output.It available, link to published article/report	framework of the Euphresco project Begomoval involving 9 laboratories
Other information	
Any other information considered useful	
The following complementary files are available online:	<ul style="list-style-type: none"> • Test performance study (TPS) of molecular polyvalent detection methods for Begomoviruses

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