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	Globodera sp.	
Short description	DNA extraction from nematodes juveniles by crushing between slide and coverslip	
Laboratory contact details	Anses Plant Health Laboratory - Nematology Unit Domaine de la Motte au Viconte BP 35327, 35653 Le Rheu, France	
Date and reference of the validation report	2009-08-10 - Validation report ref. 09/10	
Validation process according to EPPO Standard PM 7/98:	Yes	
Reference of the test description	protocol c	not included in appendix Modified DNA extraction lescribed in Harris et al. (1990) Journal of gy 22(4), 518-524
Is the test the same as described in the EPPO DP?	No not included in PM7/40	
Is the lab accredited for this test?	Yes	
Plant species tested (if relevant)		
Matrices tested (if relevant)	isolated n	ematodes
List of methods used		
Method for extraction / isolation / baiting of target organism from matrix		
Molecular methods, e.g. hybridization, PCR and real time PCR	Х	DNA extraction method
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		

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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?	1 J2 of Globodera		
Diagnostic sensitivity			
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98			
Specify the standard test			
Analytical specificity			
Specificity value	not applicable		
Number of strains/populations of target organisms tested			
Number of non-target organisms tested			
Cross reacts with (specify the species)			
Diagnostic Specificity			
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	not applicable		
Specify the standard test			
Reproducibility			
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)			
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		
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 useful e.g. robustness, ease of performing the test, etc.	
The following complementary files are available online:	• validation report ref. 09/10