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 - Nematology Unit Domaine de la Motte au Viconte BP 35327, 35653 Le Rheu, France	
Short description of the test	Identification of Globodera pallida and G. rostochiensis by species specific PCR (Vejl 2002)	
Date, reference of the validation report	2010-07-13 - Validation report ref. 10/03	
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?		
Description of the test		
Organism(s)	Globodera pallida (HETDPA) Globodera rostochiensis (HETDRO)	
Detection / identification	identification	
Method(s)	Molecular Conventional PCR	
Method: Molecular Conventional PCR		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	no	
As or adapted from an IPPC diagnostic protocol	no	
Reference of the test	Vejl et al. (2002). Identification of PCN species (Globodera rostochiensis, G. pallida) by using of ITS-1 region's polymorphism. Rostlinna Vyroba 48, 486-489. not included in PM7/40	
Other information		
Are the performance characteristics included in the EPPO diagnostic protocol?	no	
Performance Criteria :		
Organism 1.:	Globodera pallida(HETDPA)	
Analytical sensitivity		
What is smallest amount of target that can be detected reliably?	1 J2	

Analytical specificity - inclusivity		
Number of strains/populations of target organisms tested	11 G. pallida populations for details see annex 2 from validation report	
Specificity value	100% for G. pallida	
Analytical specificity - exclusivity		
Number of non-target organisms tested	7 nematode species populations different from G. pallida or G. rostochiensis (see Annex 2 from validation report)	
Specificity value	Globodera tabacum (all groups/ sub-species) detected as G. rostochiensis	
Cross reacts with	Globodera tabacum tabacum	
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for G. pallida (1 J2)	
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for G. pallida (1 J2)	
Organism 2.:	Globodera rostochiensis(HETDRO)	
Analytical sensitivity		
What is smallest amount of target that can be detected reliably?	1 J2	
Analytical specificity - inclusivity		
Number of strains/populations of target organisms tested	4 G. rostochiensis populations for details see annex 2 from validation report	
Specificity value		
Analytical specificity - exclusivity		
Number of non-target organisms tested	7 nematode species populations different from G. pallida or G. rostochiensis (see Annex 2 from validation report)	
Specificity value	Specificity value: 78% for G. rostochiensis (4 non target species populations among 18 identified as G. rostochiensis) Globodera tabacum (all groups/ sub-species) detected as G. rostochiensis	
Cross reacts with	Globodera tabacum tabacum	
<u>Reproducibility</u>		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	83% for G. rostochiensis (1 J2)	
Repeatability	•	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	87.5% for G. rostochiensis (1 J2)	
Test performance study		

Test performance study?	no	
Other information		
	The full report is available upon request to the laboratory.	

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