

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 <i>Globodera pallida</i> and <i>G. rostochiensis</i> 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)	<i>Globodera pallida</i> (HETDPA) <i>Globodera rostochiensis</i> (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 (<i>Globodera rostochiensis</i> , <i>G. pallida</i>) by using of ITS-1 region's polymorphism. <i>Rostlinna Vyroba</i> 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.:	<i>Globodera pallida</i>(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 <i>G. pallida</i> populations for details see annex 2 from validation report
Specificity value	100% for <i>G. pallida</i>
Analytical specificity - exclusivity	
Number of non-target organisms tested	7 nematode species populations different from <i>G. pallida</i> or <i>G. rostochiensis</i> (see Annex 2 from validation report)
Specificity value	<i>Globodera tabacum</i> (all groups/ sub-species) detected as <i>G. rostochiensis</i>
Cross reacts with	<i>Globodera tabacum tabacum</i>
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for <i>G. pallida</i> (1 J2)
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for <i>G. pallida</i> (1 J2)
Organism 2.:	<i>Globodera rostochiensis</i>(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 <i>G. rostochiensis</i> 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 <i>G. pallida</i> or <i>G. rostochiensis</i> (see Annex 2 from validation report)
Specificity value	Specificity value: 78% for <i>G. rostochiensis</i> (4 non target species populations among 18 identified as <i>G. rostochiensis</i>) <i>Globodera tabacum</i> (all groups/ sub-species) detected as <i>G. rostochiensis</i>
Cross reacts with	<i>Globodera tabacum tabacum</i>
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	83% for <i>G. rostochiensis</i> (1 J2)
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	87.5% for <i>G. rostochiensis</i> (1 J2)
Test performance study	

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

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