

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	Species specific identification by conventional PCR test
Date, reference of the validation report	2010-07-13 - Evaluation comparative de différents outils moléculaires pour l'identification de Globodera pallida et G. rostochiensis (ref. 10/03)
Validation process according to EPPO Standard PM7/98?	yes
Is the lab accredited for this test?	yes
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	yes
EPPO Diagnostic Protocol name	PM 7/040 Globodera rostochiensis and Globodera pallida (version 2)
Name of the test	Multiplex PCR test (Bulman & Marshall, 1997)
Is the test modified compared to the reference test	yes primers concentration was reduced
Other information	
Are the performance characteristics included in the EPPO diagnostic protocol?	yes
Performance Criteria :	
Organism 1.:	Globodera pallida(HETDPA)
Analytical sensitivity	

What is smallest amount of target that can be detected reliably?	1 J2
<u>Analytical specificity - inclusivity</u>	
Number of strains/populations of target organisms tested	11 populations for G. pallida (details see validation report - annex 2)
Specificity value	91% for G. pallida (1 non target species detected among 11 others)
<u>Analytical specificity - exclusivity</u>	
Number of non-target organisms tested	7 populations (details see validation report - annex 2)
Specificity value	G. tabacum ""virginiae"" detected as G. pallida.
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)	96% (1J2 stage tested) for G. pallida
<u>Repeatability</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for G. pallida
Organism 2.:	Globodera rostochiensis(HETDRO)
<u>Analytical sensitivity</u>	
What is smallest amount of target that can be detected reliably?	1 J2
<u>Analytical specificity - inclusivity</u>	
Number of strains/populations of target organisms tested	4 populations for G. rostochiensis (details see validation report - annex 2)
Specificity value	100% for G. rostochiensis
<u>Analytical specificity - exclusivity</u>	
Number of non-target organisms tested	7 populations (details see validation report - annex 2)
Specificity value	no cross reaction for G. rostochiensis
<u>Reproducibility</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% (1J2 stage tested) for G. rostochiensis
<u>Repeatability</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% for G. rostochiensis
Test performance study	
Test performance study?	no
Other information	
Any other information considered useful	The full report is available upon request to the laboratory.

