

**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.

<b>Laboratory contact details</b>	Anses Plant Health Laboratory - Nematology Unit Domaine de la Motte au Viconte BP 35327, 35653 Le Rheu, France
<b>Short description of the test</b>	Species specific identification by conventional PCR test
<b>Date, reference of the validation report</b>	2010-07-13 - Evaluation comparative de différents outils moléculaires pour l'identification de <i>Globodera pallida</i> et <i>G. rostochiensis</i> (ref. 10/03)
<b>Validation process according to EPPO Standard PM7/98?</b>	yes
<b>Is the lab accredited for this test?</b>	yes
<b>Was the validated data generated in the framework of a project?</b>	
<b>Description of the test</b>	
<b>Organism(s)</b>	<i>Globodera pallida</i> (HETDPA) <i>Globodera rostochiensis</i> (HETDRO)
<b>Detection / identification</b>	identification
<b>Method(s)</b>	Molecular Conventional PCR
<b>Method: Molecular Conventional PCR</b>	
<b>Reference of the test description</b>	
<b>As or adapted from an EPPO diagnostic protocol</b>	yes
<b>EPPO Diagnostic Protocol name</b>	PM 7/040 <i>Globodera rostochiensis</i> and <i>Globodera pallida</i> (version 2)
<b>Name of the test</b>	Multiplex PCR test (Bulman & Marshall, 1997)
<b>Is the test modified compared to the reference test</b>	yes primers concentration was reduced
<b>Other information</b>	
<b>Are the performance characteristics included in the EPPO diagnostic protocol?</b>	yes
<b>Performance Criteria :</b>	
<b>Organism 1.:</b>	<b><i>Globodera pallida</i>(HETDPA)</b>
<b>Analytical sensitivity</b>	

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

