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	Detection of Meloidogyne chitwoodi and M. fallax by PCR RFLP
Date, reference of the validation report	2010-09-01 - validation report - september 2010
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)	Meloidogyne fallax (MELGFA) Meloidogyne chitwoodi (MELGCH)
Detection / identification	detection
Method(s)	Molecular PCR-RFLP
Method: Molecular PCR-RFLP	
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	Zijlstra et al. (1995). Differences between ITS regions of isolates of root-knot nematodes Meloidogyne hapla and M. chitwoodi . Phytopathology 85, 1231-1237. Not included in PM7/41 (Zijlstra et al. 1997 included)
Other information	
Are the performance characteristics included in the EPPO diagnostic protocol?	**no**
Performance Criteria :	
Organism 1.:	**Meloidogyne fallax(MELGFA)**
<u>Analytical sensitivity</u>	

What is smallest amount of target that can be detected reliably?	1 J2 for M. fallax
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	1 population for M. fallax (for details see annex 1 of validation report)
Specificity value	100% for M. fallax
Analytical specificity - exclusivity	
Number of non-target organisms tested	29 nematodes populations (see Annex 1 of validation report)
Specificity value	100% - no cross reaction
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	87% for 1 J2 and 100% for 2 J2 for M. fallax;
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	50% for 1 J2 and 100% for 2 J2 for M. fallax;
Organism 2.:	**Meloidogyne chitwoodi(MELGCH)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	1 J2 for M. chitwoodi
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	4 populations for M. chitwoodi (for details see annex 1 of validation report)
Specificity value	100% for M. chitwoodi
Analytical specificity - exclusivity	
Number of non-target organisms tested	29 nematodes populations (see Annex 1 of validation report)
Specificity value	100% - no cross reactions
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	66% for 1 J2 and 100% for 2 J2 of M. chitwoodi
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	25% for 1 J2 and 100% for 2 J2 of M. chitwoodi
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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