EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES
(11-17239)
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.

Target Organism	Heterodera glycines	
Short description	Identification of Heterodera glycines	
Laboratory contact details	Anses Plant Health Laboratory - Nematology Unit Domaine de la Motte au Viconte BP 35327, 35653 Le Rheu, France	
Date and reference of the validation report	2010-07-07 - Report 10/02	
Validation process according to EPPO Standard PM 7/98:	No	
Reference of the test description	N/R OU S., PENG D., LIU X., LI Y., MOENS M. (2008). Identification of Heterodera glycines using PCR with sequence characterised amplified region (SCAR) primers. Nematology, 10(3), 397-403.	
Is the test the same as described in the EPPO DP?		
Is the lab accredited for this test?	No	
Plant species tested (if relevant)		
Matrices tested (if relevant)	Isolated nematodes: one cyst per species	
List of methods used		
Method for extraction / isolation / baiting of target organism from matrix		
Molecular methods, e.g. hybridization, PCR and real time PCR	X	Species specific PCR in duplex with universal primers (SCNFI-SCNRI + D2A-D3B)
Serological methods: IF, ELISA, Direct Tissue Blot Immuno Assay		
Plating methods: selective isolation		
Bioassay methods: selective enrichment in host plants, baiting, plant test and grafting.		
Pathogenicity test		
Fingerprint methods: protein profiling, fatty acid profiling & DNA profiling		

Morphological and morphometrical methods intended for identification		
Biochemical methods: e.g. enzyme electrophoresis, protein profiling		
Other		
Analytical sensitivity (= limit of detection)		
What is smallest amount of target that can be detected reliably?		
Diagnostic sensitivity		
Proportion of infected/infested samples tested positive compared to results from the standard test , see appendix 2 of PM 7/98		
Specify the standard test		
Analytical specificity		
Specificity value	not calculated	
Number of strains/populations of target organisms tested	1	
Number of non-target organisms tested	13	
Cross reacts with (specify the species)	Cross reactions observed with H. schachtii, H. betae/trifolii and H. ciceri (all belonging to the Schachtii group which includes H. glycines)	
Diagnostic Specificity		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test		
Specify the standard test		
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)		
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)		
Test performance study		
Test performance study?	No	
Include brief details of the test performance study and its output.It available, provide a link to published article/report		
Other information		

Any other information considered useful **e.g. robustness, ease of performing the test, etc.**	As the analytical specificity was not suffisient, the other performance criteria were not evaluated.
The following complementary files are available online:	• Populations list and results_Ou et al 2008