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	EUPH DNA Barcoding , , EUPHRESCO
Short description of the test	DNA Barcoding - Optimizing and validating DNA barcoding protocols for Nematode
Date, reference of the validation report	2016-06-30 - Final_report_DNA barcoding.doc
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?	Euphresco
If yes, please specify	EUPHRESCO DNA Barcoding - Optimizing and validating DNA barcoding protocols for plant pests
Description of the test	
Organism(s)	Aphelenchoides fragariae (APLOFR) Meloidogyne chitwoodi (MELGCH) Ditylenchus dipsaci (DITYDI) Bursaphelenchus xylophilus (BURSXY) Aphelenchoides besseyi (APLOBE)
Detection / identification	identification
Method(s)	Molecular Sanger seq
Method: Molecular Sanger seq	
Reference of the test description	
Other information	
Are the performance characteristics included in the EPPO diagnostic protocol?	**yes**
Performance Criteria :	
Organism 1.:	**Aphelenchoides fragariae(APLOFR)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	See report
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	89% (100% after re-analysing the consensus sequence data provided by TPS participants)

Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	See report
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	See report
Specificity value	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
Organism 2.:	**Meloidogyne chitwoodi(MELGCH)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	See report
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100%
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	See report
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	See report
Specificity value	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
Organism 3.:	**Ditylenchus dipsaci(DITYDI)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	See report
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100%
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	See report
Specificity value	
Analytical specificity - exclusivity	

Number of non-target organisms tested	See report
Specificity value	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
Organism 4.:	**Bursaphelenchus xylophilus(BURSXY)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	See report
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100%
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	See report
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	See report
Specificity value	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
Organism 5.:	**Aphelenchoides besseyi(APLOBE)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	See report
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	89% (100% after re-analysing the consensus sequence data provided by TPS participants)
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	See report
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	See report
Specificity value	
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%

Test performance study	
Test performance study?	yes
Brief details of the test performance study and its output.It available, link to published article/report	Test performance study involving 11 laboratories (9 of which provided data). See report for more information.
The following complementary files are available online:	• EUPHRESCO DNA Barcoding - report

Creation date: 2020-07-01 15:01:44 - Last update: 2025-06-12 20:42:06