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	Bacteriology. Instituto Valenciano de Investigaciones Agrarias CV-315, km. 10.7, 46113 Moncada, Spain
Short description of the test	Extraction of Erwinia amylovora from plant material followed by isolation in CCT medium
Date, reference of the validation report	2012-03-01 - Not specified
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?	
Description of the test	
Organism(s)	Erwinia amylovora (ERWIAM)
Detection / identification	detection
Method(s)	Extraction Isolation
Method: Extraction	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/020 Erwinia amylovora (version 1)
Name of the test	Antioxidant maceration buffer (Gorris et al., 1996)
Is the test modified compared to the reference test	no
Other information	
Other details on the test	Extraction in antioxidant buffer followed by isolation in CCT medium
Method: Isolation	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/020 Erwinia amylovora (version 1)

Name of the test	Isolation on CCT medium (Ishimaru & Klos, 1984)
As or adapted from an IPPC diagnostic protocol	no
Is the test modified compared to the reference test	no
Other information	
Other details on the test	isolation in CCT medium
Performance Criteria :	
Organism 1.:	**Erwinia amylovora(ERWIAM)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	10-10^2 CFU/mL plant extract after isolation in CCT
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	Proportion of true positives /total number of samples: 0.90 (in samples from 1 to 10^6 CFU/mL of plant extract and healthy samples in ring test 2010)
Standard test(s)	Not specified
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	Not relevant
Specificity value	
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	Proportion of true negatives/total number of samples: 1.00 (in samples from 1 to 10^6 CFU/mL of plant extract and healthy samples in ring test 2010)
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% when tested with different operators 100% in IVIA assays
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% in IVIA assays
Test performance study	
Test performance study?	yes
Brief details of the test performance study and its output.It available, link to published article/report	14 laboratories from Europe, Morocco, USA and New Zealand) analysed 12 samples each (from 1 to 10^6 CFU/mL plant extract and healthy samples). Details about ring test protocol available.
Other information	
Any other information considered useful	The antioxidant buffer allows multiplication of E. amylovora in presence of cellular compounds of the host plant, that are toxic to the bacteria (Gorris et al, 1996. A sensitive and specific detection of E.

	amylovora, based on the ELISA-DASI enrichment method with monoclonal antibodies. Acta Horticulturae 411, 41-45).

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