

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	National Reference Centre, National Plant Protection Organization P.O. Box 9102, 6700 HC Wageningen, Netherlands
Short description of the test	Detection of <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> from symptomatic plant material by plating
Date, reference of the validation report	2010-04-01 - BAC-2010-03 Methodevalidatie van de uitplaattoets voor <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> uit bladstengel van tomaat
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?	
If yes, please specify	
Description of the test	
Organism(s)	<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> (CORBMI)
Detection / identification	detection
Matrix(ces) tested	Leaves, Shoots Petioles and sectioned stems
Plant species tested	<i>Solanum lycopersicum</i>
Method(s)	Isolation
Method: Isolation	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
New test being considered for inclusion in the next version of the EPPO diagnostic protocol?	
EPPO Diagnostic Protocol name	PM 7/042 <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> (version 2)
Name of the test	Dilution plating on semi selective media (CMMIT, SCMF or SCM) - plant tissue
As or adapted from an IPPC diagnostic protocol	no

Is the test modified compared to the reference test	
Other information	
Other details on the test	Isolation plating on two semi-selective media : FSCM and CMM1
Are the performance characteristics included in the EPPO diagnostic protocol?	
Performance Criteria :	
Organism 1.:	Clavibacter michiganensis subsp. michiganensis(CORBMI)
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	1.0x10 ³ cfu/ml for CMM1 and 9.0x10 ² cfu/ml for FSCM
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100%
Standard test(s)	Isolation on the conventional media SCM and D2ANX
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	20 cmm strains (see details in the full validation report)
Specificity value	95%
Analytical specificity - exclusivity	
Number of non-target organisms tested	20 related strains (see details in the full validation report)
Specificity value	Cross reaction was only observed for Pseudomonas corrugata on the FSCM medium, resembling the colony morphology of cmm on this medium. However, Pseudomonas corrugata could not grow on the CMM1 medium.
Cross reacts with	Pseudomonas corrugata
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	95%
Specify the test(s)	Isolation on the conventional media SCM and D2ANX
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
Repeatability	
Provide the calculated % of agreement for a	100%

given level of the pest (see PM 7/98)	
Test performance study	
Test performance study?	no
Brief details of the test performance study and its output. It available, link to published article/report	
Other information	
Any other information considered useful	For the selectivity two different varieties of <i>Solanum lycopersicum</i> were included in this validation (Money maker and Saint Pierre). For both varieties comparable growth results were acquired.
The following complementary files are available online:	<ul style="list-style-type: none"> • Method validation of the isolation method for <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> from infected plant material. Plant Protection Service (in Dutch)

Creation date: 2012-05-15 00:00:00 - Last update: 2021-09-07 14:23:19