

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	Netherlands Institute for Vectors, Invasive plants and Plant health P.O. Box 9102, 6700 HC Wageningen, Netherlands
Short description of the test	Detection of <i>R. solanacearum</i> by IF in <i>Pelargonium</i> sp.
Date, reference of the validation report	2011-10-13 - BAC-2010-01
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)	<i>Ralstonia solanacearum</i> species complex (RALSSO)
Detection / identification	detection
Matrix(ces) tested	Shoots From <i>P. zonale</i> stems
Plant species tested	<i>Pelargonium zonale</i>
Method(s)	Serological IF
Method: Serological IF	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/097 Indirect immunofluorescence test for plant pathogenic bacteria (version 1)
Kit	
Is a kit used	no
Other information	
Other details on the test	IF using the antiserum Loewe 073566-C.4732
Performance Criteria :	
Organism 1.:	<i>Ralstonia solanacearum</i> species complex(RALSSO)
Analytical sensitivity	

What is the smallest amount of target that can be detected reliably?	5.9 x 10 ³ cfu/ml for P. zonale extracts
<u>Diagnostic sensitivity</u>	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	100% (12 out 12)
Standard test(s)	Fatty acid analysis and conventional PCR
<u>Analytical specificity - inclusivity</u>	
Number of strains/populations of target organisms tested	32 (Table 2 and Table 4)
Specificity value	100%
<u>Analytical specificity - exclusivity</u>	
Number of non-target organisms tested	20 (Table 4)
Specificity value	100% - no cross reaction
<u>Diagnostic Specificity</u>	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	100% (20 out 20)
Specify the test(s)	Fatty acid analysis and conventional PCR
<u>Reproducibility</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
<u>Repeatability</u>	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100%
<u>Test performance study</u>	
Test performance study?	no
<u>Other information</u>	
Any other information considered useful	Selectivity studied based on three cultivars, namely Pelargonium zonale guido, Pelargonium peltatum balkon rood en Pelargonium grandiflorum cyntia. No matrix effect found
The following complementary files are available online:	<ul style="list-style-type: none"> • Validation sheet IF for detection of R. solanacearum in Pelargonium sp. extracts

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