

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>Monilinia fructicola</i> in fruits by real-time PCR
Date, reference of the validation report	2010-12-07 - MOVA no. 2006.molbio.001
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>Monilinia fructicola</i> (MONIFC)
Detection / identification	detection
Matrix(ces) tested	Fruits fruits
Plant species tested	<i>Prunus</i> sp.
Method(s)	Molecular real time PCR
Method: Molecular real time PCR	
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 7/018 <i>Monilinia fructicola</i> (version 2)
Name of the test	Real-time PCR (van Brouwershaven et al.)
As or adapted from an IPPC diagnostic protocol	
Is the test modified compared to the reference test	no
Kit	
Is a kit used	

Other information	
Reaction type	
Other details on the test	IR van Brouwershaven, ML Bruil, GCM van Leeuwen, LFF Kox 2010. A real-time (Taqman) PCR assay to differentiate <i>Monilinia fructicola</i> from other brown rot fungi of fruit crops. Plant Pathology 59, 548-555
Are the performance characteristics included in the EPPO diagnostic protocol?	no
Performance Criteria :	
Organism 1.:	Monilinia fructicola(MONIFC)
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	0.6 pg of <i>Monilinia</i> spp. DNA
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	
Standard test(s)	
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	12 isolates of <i>Monilinia fructicola</i>
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	16 non-target organisms (incl. three other <i>Monilinia</i> spp)
Specificity value	no cross reaction observed
Cross reacts with	
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	
Specify the test(s)	
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
Brief details of the test performance study	

and its output.It available, link to published article/report	
Other information	
Any other information considered useful	

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