

**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.

<b>Laboratory contact details</b>	EUPHRESKO PANTOEA STEWARTII , , EUPHRESKO
<b>Short description of the test</b>	Conventional PCR (AGES primers) from corn seed macerate
<b>Date, reference of the validation report</b>	2011-05-31 -
<b>Validation process according to EPPO Standard PM7/98?</b>	yes
<b>Is the lab accredited for this test?</b>	no
<b>Was the validated data generated in the framework of a project?</b>	Euphresco
<b>If yes, please specify</b>	EUPH-PANTOEA
<b>Description of the test</b>	
<b>Organism(s)</b>	Pantoea stewartii subsp. stewartii(ERWIST)
<b>Detection / identification</b>	identification
<b>Matrix(ces) tested</b>	Pure culture PCR can be performed for identification of isolates/strains and symptomatic plant parts; for asymptomatic part or seed detection, in the framework of the test performance study, this PCR was not the most sensitive but the evaluation of this PCR was performed with DNA extraction.
<b>Plant species tested</b>	Zea mays
<b>Method(s)</b>	Molecular Conventional PCR
<b>Method: Molecular Conventional PCR</b>	
<b>Reference of the test description</b>	
<b>As or adapted from an EPPO diagnostic protocol</b>	yes
<b>New test being considered for inclusion in the next version of the EPPO diagnostic protocol?</b>	
<b>EPPO Diagnostic Protocol name</b>	PM 7/060 Pantoea stewartii (version 2)
<b>Name of the test</b>	PCR (AGES primers)
<b>As or adapted from an IPPC diagnostic protocol</b>	

<b>Is the test modified compared to the reference test</b>	
<b>Kit</b>	
<b>Is a kit used</b>	
<b>Other information</b>	
<b>Reaction type</b>	
<b>Other details on the test</b>	
<b>Are the performance characteristics included in the EPPO diagnostic protocol?</b>	<b>no</b>
<b>Performance Criteria :</b>	
<b>Organism 1.:</b>	<b>Pantoea stewartii subsp. stewartii(ERWIST)</b>
<b>Analytical sensitivity</b>	
<b>What is smallest amount of target that can be detected reliably?</b>	10 <sup>2</sup> CFU/mL on pure culture
<b>Diagnostic sensitivity</b>	
<b>Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98</b>	Not tested
<b>Standard test(s)</b>	
<b>Analytical specificity - inclusivity</b>	
<b>Number of strains/populations of target organisms tested</b>	Inclusivity tested with 15 target strains: 100% (bacterial suspension concentrations about 10 <sup>7</sup> bact./mL) <i>Pantoea stewartii</i> subsp. <i>stewartii</i> : CFBP 3167/ NCPPB 2295/ICMP 257/ATCC 8199; CFBP 1719/ ICPB SS104; CFBP 2502 / NCPPB 449 CFBP 3157/ NCPPB 1553; CFBP 3166 / ICMP 5930; CFBP 3393/ LMG 2716/ PDDCC 270; CFBP 3394/ LMG 2717/ PDDCC 722; CFBP 3395/ LMG 2718/ ATCC 8200; CFBP 3396/ LMG 2719/ PDDCC 5929; CFBP 3445/ NCPPB 3379; CFBP 3517; CFBP 3168; CFBP 3165; CFBP 3169; NCPPB 3253
<b>Specificity value</b>	Inclusivity + exclusivity= 96,7% on 30 target and no-target strains
<b>Analytical specificity - exclusivity</b>	
<b>Number of non-target organisms tested</b>	Exclusivity was performed by one lab on a list of 100 non-target strains and obtained 99% with the cross reaction of <i>P. indologenes</i>
<b>Specificity value</b>	Yes with <i>Pantoea stewartii</i> subsp. <i>indologenes</i>
<b>Cross reacts with</b>	
<b>Diagnostic Specificity</b>	
<b>Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test</b>	Not tested
<b>Specify the test(s)</b>	

<b>Reproducibility</b>	
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	
<b>Repeatability</b>	
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	100%
<b>Test performance study</b>	
<b>Test performance study?</b>	yes
<b>Brief details of the test performance study and its output. It available, link to published article/report</b>	Based on the test performance study with 5 laboratories involved, in the framework of EUPH05 <i>Pantoea stewartii</i> ssp. <i>stewartii</i> , EUPHRESCO Final Report 2010-2011 Analytical sensitivity: 70% of agreement at $7 \times 10^4$ CFU/mL Diagnostic sensitivity (10 samples/2repeats/soak/lab): 70 % Diagnostic specificity (5 samples/2repeats/soak/lab): 76 % (cross reaction with <i>Pantoea stewartii</i> subsp. <i>indologenes</i> ) Qualitative Repeatability: 95 % Accuracy: <90% Qualitative Reproducibility: 58 %
<b>Other information</b>	
<b>Any other information considered useful</b>	

Creation date: 2016-05-09 00:00:00 - Last update: 2021-05-18 16:54:20