

**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>	EUPHRESCO PANTOEAE STEWARTII , , EUPHRESCO
<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-PANTOEAE
<b>Description of the test</b>	
<b>Organism(s)</b>	Pantoea stewartii subsp. stewartii (ERWIST)
<b>Detection / identification</b>	identification
<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>EPPO Diagnostic Protocol name</b>	PM 7/060 Pantoea stewartii (version 2)
<b>Name of the test</b>	PCR (AGES primers)
<b>Other information</b>	
<b>Are the performance characteristics included in the EPPO diagnostic protocol?</b>	no
<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</b>	Not tested

<b>standard test, see appendix 2 of PM 7/98</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 257ATCC 8199; CFBP1719/ 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>Diagnostic Specificity</b>	
<b>Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test</b>	Not tested
<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 x10 <sup>4</sup> 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 %

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