

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.

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| Laboratory contact details | Council for Agricultural Research and Economics– Research Centre for Plant Protection and Certification Via Carlo Giuseppe Bertero, 22, 00156 Rome, Italy |
| Short description of the test | Interlaboratory validation of <i>Ceratocystis platani</i> Real-Time PCR EvaGreen on wood of <i>Platanus x</i> <i>acerifolia</i> |
| Date, reference of the validation report | 2025-04-21 - Interlaboratory validation of <i>Ceratocystis platani</i> real-time PCR EvaGreen in wood of <i>Platanus x acerifolia</i> (corresponding Pilotti M) |
| 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? | Euphresco |
| If yes, please specify | Euphresco project 2015-A-118 “Identification and early detection of <i>Cryphonectria parasitica</i> and <i>Ceratocystis platani</i> occurring on trees in Europe, CERACRY |
| Description of the test | |
| Organism(s) | <i>Ceratocystis platani</i> (CERAFP) |
| Detection / identification | detection |
| Matrix(ces) tested | Wood |
| Plant species tested | <i>Platanus x hispanica</i> |
| 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 |
| EPPO Diagnostic Protocol name | PM 7/014 <i>Ceratocystis fimbriata</i> f. sp. <i>platani</i> (version 2) |
| Name of the test | Real-time PCR (Pilotti et al., 2012) Test version 1: intercalating dye (EvaGreen) |
| Kit | |

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| Is a kit used | no |
| Other information | |
| Reaction type | Simplex |
| Performance Criteria : | |
| Organism 1.: | Ceratocystis platani(CERAFP) |
| Analytical sensitivity | |
| What is the smallest amount of target that can be detected reliably? | 3 fg per PCR reaction |
| Diagnostic sensitivity | |
| Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98 | 100% evaluated with four different mastermixes (see Brunetti et al., 2022) |
| Standard test(s) | Comparison with samples of known status |
| Diagnostic Specificity | |
| Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test | 100% evaluated with four different mastermixes (see Brunetti et al., 2022) |
| Specify the test(s) | Comparison with samples of known status |
| Reproducibility | |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98) | 100% evaluated on the LOD by nine participant laboratories |
| Test performance study | |
| Test performance study? | no |
| Other information | |
| Any other information considered useful | Test performance study as organized in the framework of the Euphresco project 2015-A_118 (CERACRY) involving 9 laboratories from 4 countries |
| The following complementary files are available online: | |
| | • Brunetti et al 2022 |

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