

**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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| <b>Laboratory contact details</b>                                      | Federal State Organization "All-Russian Plant Quarantine Center"<br>Pogranichnaya str.32, Ramensky region, Moscow obl., 140150 Bykovo, Russia |
| <b>Short description of the test</b>                                   | Detection of Erwinia amylovora in plant extract by Conventional PCR, targeting plasmid pEA29  |
| <b>Date, reference of the validation report</b>                        | 2014-01-01 - none   |
| <b>Validation process according to EPPO Standard PM7/98?</b>           | yes   |
| <b>Is the lab accredited for this test?</b>                            | yes   |
| <b>Was the validated data generated in the framework of a project?</b> |   |
| <b>Description of the test</b>   |   |
|  |   |
| <b>Organism(s)</b>   | Erwinia amylovora (ERWIAM)  |
| <b>Detection / identification</b>                                      | detection   |
| <b>Method(s)</b>   | Molecular Extraction DNA RNA<br>Molecular Conventional PCR  |
| <b>Method: Molecular Extraction DNA RNA</b>                            |   |
| <b>Reference of the test description</b>                               |   |
| <b>Kit</b>   |   |
| <b>Is a kit used</b>   | yes   |
| <b>Manufacturer name</b>   | AGRODIAGNOSTICA   |
| <b>Specify the kit used</b>  | PREP-GS kit   |
| Kit used following the manufacturer's instructions?                    |   |
| <b>Other information</b>   |   |
| <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 7/020 Erwinia amylovora (version 2)  |
| <b>Name of the test</b>  | PCR (Stoger et al. 2006)  |

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| Is the test modified compared to the reference test                               | no  |
| <b>Other information</b>  |   |
| Are the performance characteristics included in the EPPO diagnostic protocol?     | no  |
| <b>Performance Criteria :</b>   |   |
| Organism 1.:  | <b>Erwinia amylovora(ERWIAM)</b>  |
| <b>Analytical sensitivity</b>   |   |
| What is smallest amount of target that can be detected reliably?                  | 2,6 cfu/μl // $1,2 \times 10^2$ /ml   |
| <b>Analytical specificity - inclusivity</b>                                       |   |
| Number of strains/populations of target organisms tested                          | 126 strains: 1 strain of Erwinia amylovora CFBP 1430 + 99 strains isolated in different regions of Russian Federation + 26 strains isolated in Kazakhstan, Kyrgyzstan, Poland and Moldova |
| Specificity value   |   |
| <b>Analytical specificity - exclusivity</b>                                       |   |
| Number of non-target organisms tested   | 92 strains including other Erwinia species  |
| Specificity value   | No cross reaction observed  |
| <b>Reproducibility</b>  |   |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98) | for samples with level of infection $10^4$ and $10^3$ - 100 %, for samples with level of infection $10^2$ - 50 %, when tested with different operators                                    |
| <b>Repeatability</b>  |   |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98) | for samples with level of infection $10^4$ and $10^3$ - 100 %, for samples with level of infection $10^2$ - 22,2 %  |
| <b>Test performance study</b>   |   |
| Test performance study?   | no  |
| <b>Other information</b>  |   |
| Any other information considered useful   | Primers, probe, MasterMix and Internal control were made by Russian companies. You can find attached full validation report in Russian  |
|   |   |
| The following complementary files are available online:                           | <ul style="list-style-type: none"> <li>• <a href="#">2014. Validation of Conventional PCR (according to Stoege et al., 2006) for detection of E.a. in plant extract</a></li> </ul>        |