## 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                                       | Anses Plant Health Laboratory - Nematology Unit<br>Domaine de la Motte au Viconte BP 35327, 35653<br>Le Rheu, France    |
|--|---|
| Short description of the test                                    | Detection of Bursaphelenchus xylophilus in wood extract with PCR RFLP Burgersmeister et al. 2005                        |
| Date, reference of the validation report                         | 2011-05-01 - Evaluation d'outils moléculaires<br>d'identification de Bursaphelenchus xylophilus sur<br>individus isolés |
| 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?  | no  |
|  |   |
| Description of the test  |   |
|  |   |
| Organism(s)  | Bursaphelenchus xylophilus (BURSXY)   |
| Detection / identification                                       | detection   |
| Method(s)  | Molecular PCR-RFLP  |
| Method: Molecular PCR-RFLP                                       |   |
| Reference of the test description                                |   |
| As or adapted from an EPPO diagnostic protocol                   | yes   |
| EPPO Diagnostic Protocol name                                    | PM 7/004 Bursaphelenchus xylophilus (version 3)   |
| Name of the test   | ITS RFLP PCR (Burgermeister et al., 2009)   |
| As or adapted from an IPPC diagnostic protocol                   | no  |
| Other information  |   |
| Performance Criteria :   |   |
| Organism 1.:   | Bursaphelenchus xylophilus(BURSXY)  |
| Analytical sensitivity   |   |
| What is smallest amount of target that can be detected reliably? | 5 nematodes   |
| Diagnostic sensitivity   |   |
|  |   |

| -   |   |
|---|---|
| Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98 | not performed   |
| Standard test(s)  | not relevant  |
| Analytical specificity - inclusivity  |   |
| Number of strains/populations of target organisms tested  | 7 populations (see table1)  |
| Specificity value   | 100%  |
| Analytical specificity - exclusivity  |   |
| Number of non-target organisms tested   | 15 populations (see table1)   |
| Specificity value   | 100% - no cross reaction  |
| Diagnostic Specificity  |   |
| Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test        | not performed   |
| Specify the test(s)   | not relevant  |
| Reproducibility   |   |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98)   | 100% for 5 individuals  |
| Repeatability   |   |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98)   | 100%  |
| Test performance study  |   |
| Test performance study?   | no  |
| Other information   |   |
| Any other information considered useful   | See table 2. The full report is available upon request to the laboratory. French version only |
|   |   |
| The following complementary files are available online:   | <u>Table 1 Specificity_PCR</u>  |

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