

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 | ILVO Institute for Agricultural and Fisheries Research Burg. Van Gansberghelaan 96, 9820 Merelbeke - Melle, Belgium |
| Short description of the test | Detection of pospiviroids by means of one-step real-time PCR method |
| Date, reference of the validation report | 2018-02-12 - |
| 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? | |
| Description of the test | |
| Organism(s) | Pospiviroid (1POSPG) |
| Detection / identification | detection |
| Matrix(ces) tested | Leaves, Seeds leaves and seeds |
| Plant species tested | Chrysanthemum sp., Solanum lycopersicum |
| Method(s) | Molecular real time RT PCR |
| Method: Molecular real time RT PCR | |
| Reference of the test description | |
| As or adapted from an EPPO diagnostic protocol | no |
| As or adapted from an IPPC diagnostic protocol | no |
| Reference of the test | Botermans et al. 2013 Monger et al. 2010 |
| Other information | |
| Other details on the test | one-step real-time PCR procedure according to Botermans et al. 2013 and Monger et al 2010 |
| Are the performance characteristics included in the EPPO diagnostic protocol? | no |
| Performance Criteria : | |
| Organism 1.: | Pospiviroid(1POSPG) |

| Analytical specificity - inclusivity | |
|--|---|
| Number of strains/populations of target organisms tested | <p>25 Potato spindle tuber viroid pospiviroid Solanum jasminoides - Belgium GBVdC_PSTVd_03 Potato spindle tuber viroid pospiviroid Solanum jasminoides - import Italy GBVdC_PSTVd_07 Potato spindle tuber viroid pospiviroid Tomato - the Netherlands GBVdC_PSTVd_08 Potato spindle tuber viroid pospiviroid Solanum jasminoides in vitro - Belgium GBVdC_PSTVd_09 Potato spindle tuber viroid pospiviroid Tomato - CRA-W (stam A) - Belgium GBVdC_PSTVd_04 Tomato chlorotic dwarf viroid pospiviroid Tomato - CRA-W (10/00085/VI) - Belgium GBVdC_TCDVd_01 Tomato chlorotic dwarf viroid pospiviroid Tomato - the Netherlands (mixed infection with PepMV) GBVdC_TCDVd_02 Tomato chlorotic dwarf viroid pospiviroid Surfinia Hot Pink - Belgium GBVdC_TCDVd_03 Tomato apical stunt viroid pospiviroid Solanum rantonetti (Lycianthes rantonetti - Belgium GBVdC_TASVd_01 Tomato apical stunt viroid pospiviroid Tomaat - Tunesië (menginfectie met PepMV) GBVdC_TASVd_02 Tomato apical stunt viroid pospiviroid Solanum jasminoides - België GBVdC_TASVd_03 Tomato apical stunt viroid pospiviroid Tomato - Italy (CRA-PAV, F. Fagioli) GBVdC_TASVd_04 Chrysanthemum stunt viroid pospiviroid Petunia Mirage Yellow - Belgium GBVdC_CSVd_03 Chrysanthemum stunt viroid pospiviroid Chrysanthemum cv Reagan - Belgium GBVdC_CSVd_03 Chrysanthemum stunt viroid pospiviroid chrysanthemum - Belgium GBVdC_CSVd_03 Chrysanthemum stunt viroid pospiviroid Chrysanthemum - Belgium GBVdC_CSVd_03 Columnea latent viroid pospiviroid Tomato - France (via CRA-W) GBVdC_CLVd_01 Citrus exocortis viroid pospiviroid Solanum jasminoides - Belgium GBVdC_CEVd_02 Chrysanthemum chlorotic mottle viroid Pelamoviroid (Avsunviroidae) Chrysanthemum - Germany (DSMZ) GBVdC_CChMVd_01 Pepper chat fruit viroid Pospiviroid bell pepper - the Netherlands (stam NVWA 3259237) GBVdC_PCFVd_02 Mexican papita viroid Pospiviroid Solanum cardiophyllum - the Netherlands (stam OG1) GBVdC_MPVd_01 Hop stunt viroid Hostuviroid (pospiviroidae) Hop - Nederland (Ko Verhoeven, stam 4912347) GBVdC_HSVd_01 Hop stunt viroid Hostuviroid (pospiviroidae) Hop - Italië (CRA-PAV, F. Faggioli) GBVdC_HSVd_01 Iresine viroid Pospiviroid Celosia - the Netherlands (stam 4416011) GBVd_IrVd_01 Dahlia latent viroid Dahlia - the Netherlands (stam 3294243) GBVd_DLVd_01</p> |
| Specificity value | |
| Reproducibility | |
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98) | 100% |
| Repeatability | |

| | |
|---|--|
| Provide the calculated % of agreement for a given level of the pest (see PM 7/98) | 100% |
| Test performance study | |
| Test performance study? | yes |
| Brief details of the test performance study and its output. It available, link to published article/report | Detection in seeds: Olivier et al. (2015; EJPP; DOI 10.1007/s10658-015-0803-8) |

Creation date: 2018-03-05 00:00:00 - Last update: 2021-05-12 17:31:41