EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION
ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES
(11-17239)
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.

Target Organism	Chrysanthemum stem necrosis tospovirus	
Short description	Screening DAS-ELISA test for Chrysanthemum stem necrosis virus	
Laboratory contact details	ILVO Institute for Agricultural and Fisheries Research Burg. Van Gansberghelaan 96, 9820 Merelbeke - Melle, Belgium	
Date and reference of the validation report	last version - 12/02/2018 - F16_V05	
Validation process according to EPPO Standard PM 7/98:	Yes	
Reference of the test description	N/R similar to PM7/034 (other tospoviruses)	
Is the test the same as described in the EPPO DP?		
Is the lab accredited for this test?	Yes	
Plant species tested (if relevant)	Chrysanthemum	
Matrices tested (if relevant)	stems and leaves	
List of methods used		
Method for extraction / isolation / baiting of target organism from matrix		
Molecular methods, e.g. hybridization, PCR and real time PCR		
Serological methods: IF, ELISA, Direct Tissue Blot Immuno Assay	X	DAS-ELISA; antibody set from DSMZ RT-0529
Plating methods: selective isolation		
Bioassay methods: selective enrichment in host plants, baiting, plant test and grafting.		
Pathogenicity test		
Fingerprint methods: protein profiling, fatty acid profiling & DNA profiling		

Morphological and morphometrical methods intended for identification		
Biochemical methods: e.g. enzyme electrophoresis, protein profiling		
Other		
Analytical sensitivity (= limit of detection)		
What is smallest amount of target that can be detected reliably?		
Diagnostic sensitivity		
Proportion of infected/infested samples tested positive compared to results from the standard test , see appendix 2 of PM 7/98		
Specify the standard test		
Analytical specificity		
Specificity value		
Number of strains/populations of target organisms tested		2 Chrysanthemum PV-0529 (J. Th. J. Verhoeven 'G 25.37') RefV_CSNV-01 Chrysanthemum DCP/4254/2013 RefV_CSNV-02
Number of non-target organisms tested		11 Chrysantenvirus B (CVB) Chrysantenstuntviroïde (CSVd) Tomatenbronsvlekkenvirus (TSWV) Impatiens necrotic sport virus (INSV) Watermelon silver mottle virus (WSMV) Potato virus Y (PVY, not infecting Chrysanthemum but with a high homology to ChSV) CVB, and WSMV and INSV (two other tospovirussen) and the viroïd (CSVd)
Cross reacts with (specify the species)		possible cross reaction with other tospoviruses, incl TSWV
Diagnostic Specificity		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test		
Specify the standard test		
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?	No
Include brief details of the test performance study and its output.It available, provide a link to published article/report	
Other information	
Any other information considered useful e.g. robustness, ease of performing the test, etc.	