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	National Instituite of Biology, Department of Biotechnology and Systems Biology Vecna pot 121, 1000 Ljubljana, Slovenia
Short description of the test	Detection and identification of tomato spotted wilt tospovirus by ImmunoStrip LFD Agdia in symptomatic tomato leaves (prevalidation study)
Date, reference of the validation report	2020-12-14 - TSWV V1.0
Link to other validation data	- TSWV V1.0 Detection and identification of tomato spotted wilt tospovirus by ImmunoStrip LFD Agdia in symptomatic tomato leaves (TPS) - TSWV V1.0 Detection and identification of tomato spotted wilt tospovirus by AgriStrip LFD Bioreba in symptomatic tomato leaves (TPS) - TSWV V1.0 Detection and identification of tomato spotted wilt tospovirus by AgriStrip LFD Bioreba in symptomatic tomato leaves (prevalidation study)
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?	Other_project
If yes, please specify	VALITEST
Description of the test	
Organism(s)	Tomato spotted wilt virus / Orthotospovirus tomatomaculae (TSWV00)
Detection / identification	detection and identification
Method(s)	Serological Lateral Flow Device
Method: Serological Lateral Flow Device	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/139 Tospoviruses (genus Orthotospovirus) (version 1)
Name of the test	Lateral flow devices
As or adapted from an IPPC diagnostic protocol	no

Is the test modified compared to the reference test	no
Kit	
Is a kit used	yes
Manufacturer name	AGDIA
Specify the kit used	ImmunoStrip® for Tomato spotted wilt virus (TSWV) (ISK 39300)
Kit used following the manufacturer's instructions?	yes
Other information	
Performance Criteria :	
Organism 1.:	**Orthotospovirus tomatomaculae(TSWV00)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	100x dilution of the isolate TSWV-PV-0182, 1,000x dilution of the isolate TSWV-PV-0389 and 10,000x dilution of the isolate TSWV-PV-1175
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	13 TSWV isolates (5 isolates from DSMZ collection and 8 isolates from other collections)
Specificity value	100%
Analytical specificity - exclusivity	
Number of non-target organisms tested	10 other tospovirus species, represented with 17 isolates (ANSV00 isolate PV-1027; CaCV isolate PV-0864; CSNV00 isolate PV-0529 and NIB V 038; GRSV00 isolate PV-0205; INSV00 isolates PV-0281, PV-0280, PV-0485, PV-1123, and PV-1189; IYSV isolate PV-0528; MSMV isolate VE440; TCSV00 isolates PV-0390 and PV-0391; TYRV00 isolates PV-0526, and PV-0535, WSMoV isolate PV-0283).
Specificity value	76%
Cross reacts with	Alstroemeria necrotic streak virus Groundnut ringspot orthotospovirus Tomato chlorotic spot orthotospovirus
Test performance study	
Test performance study?	no
Brief details of the test performance study and its output.It available, link to published article/report	Preparation for test performance study organized in the framework of the VALITEST project

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