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.

	Biotechnology and Systems Biology Vecna pot 121, 1000 Ljubljana, Slovenia	
	Validation report on the testing of begomoviruses capable of infecting tomatoes and plants of the family Cucurbitaceae by PCR.	
i	2023-09-29 - Testing of begomoviruses capable of infecting tomatoes and plants of the family Cucurbitaceae by PCR	
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?	EURL	
	EURL-Virology (European Union Reference Laboratory for pests of plants on viruses, viroids and phytoplasmas)	
Description of the test		
Organism(s)	Begomovirus (1BEGOG)	
Detection / identification	detection	
ן ר	Molecular Extraction DNA RNA Molecular Conventional PCR Molecular Conventional PCR (2) Molecular Conventional PCR (3)	
Method: Molecular Extraction DNA RNA		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	yes	
EPPO Diagnostic Protocol name	PM 7/152 Begomoviruses (version 1)	
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	BIONOBILE	
Specify the kit used	QuickPick™ SML Plant DNA	
Kit used following the manufacturer's instructions?	no Plant material (~200 mg) is homogenized in 1 mL of lysis buffer (from a QuickPick™ SML Plant DNA kit, Bio-Nobile) using a tissue homogenizer (FastPrep®-24, MP Biochemicals).	
Other information		
Method: Molecular Conventional PCR		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	yes	
EPPO Diagnostic Protocol name	PM 7/152 Begomoviruses (version 1)	
Name of the test	Conventional PCR Wyatt and Brown (1996)	
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	INVITROGEN	
Specify the kit used	Platinum™ Taq DNA Polymerase	
Kit used following the manufacturer's instructions?	yes	
Other information		
Reaction type	Simplex	
Method: Molecular Conventional PCR (2)		
Reference of the test description		
As or adapted from an EPPO diagnostic protocol	yes	
New test being considered for inclusion in the next version of the EPPO diagnostic protocol?	no	
EPPO Diagnostic Protocol name	PM 7/152 Begomoviruses (version 1)	
Name of the test	Conventional PCR Li et al. (2004)	
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	INVITROGEN	
Specify the kit used	Platinum™ Taq DNA Polymerase	

Simplex			
Reaction type Method: Molecular Conventional PCR (3) Reference of the test description As or adapted from an EPPO diagnostic protocol? EPPO Diagnostic Protocol name Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol? EPPO Diagnostic Protocol name PM 7/152 Begomoviruses (version 1) Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol no Is the test modified compared to the reference test Kit Is a kit used Yes Manufacturer name INVITROGEN Specify the kit used Platinum Taq DNA Polymerase yes Other information Reaction type Simplex Performance Criteria: Organism 1: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? Analytical Sensitivity What is a material. Maximum dilution of target was all above the reference chan'thy test Lie di al. (2004): 10^-2 test Saison and Gentit (2015): unclituted test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie di al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 - WnCSV test Lie dial. (2004): 66.7% test Saison and Gentit (2015): validated test Wyatt and Brown (1996): unclinted test Wya	Kit used following the manufacturer's instructions?	yes	
Method: Molecular Conventional PCR (3) Reference of the test description As or adapted from an EPPO diagnostic protocol? EPPO Diagnostic Protocol name Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol? EPPO Diagnostic Protocol name PM 7/152 Begomoviruses (version 1) Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol Is the test modified compared to the reference test Kit Is a kit used yes Manufacturer name INVITROGEN Specify the kit used Platinum** Tag DNA Polymerase Kit used following the manufacturer's instructions? yes Other Information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChayMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic sturt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV sets Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3. TYLCTHV (2015): undiluted test Wyatt as the yellow in the Brown (1996): 10^-3. TYLCTHV (2015): undiluted test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Other information		
Reference of the test description As or adapted from an EPPO diagnostic protocol? New test being considered for inclusion in the next version of the EPPO diagnostic protocol? EPPO Diagnostic Protocol name PM 7/152 Begomoviruses (version 1) Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol? Is the test modified compared to the reference test Kit Is a kit used yes Manufacturer name INVITROGEN Specify the kit used Platinum* Taq DNA Polymerase Kit used following the manufacturer's instructions? Other Information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: "ChayMV test Li et al. (2004): 10^3 - TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: "ChayMV test Li et al. (2004): 10^3 - TYLCTHV test Li et al. (2004): 10^3 - TYLCTHV test Li et al. (2004): 10^3 - TYLCTHV test Li et al. (2004): 10^5 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	Reaction type	Simplex	
As or adapted from an EPPO diagnostic protocol New test being considered for inclusion in the next version of the EPPO diagnostic protocol EPPO Diagnostic Protocol name	Method: Molecular Conventional PCR (3)		
New test being considered for inclusion in the next version of the EPPO diagnostic protocol?	Reference of the test description		
next version of the EPPO diagnostic protocol? PM 7/152 Begomoviruses (version 1) Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol no Is the test modified compared to the reference test no Kit Ves Manufacturer name INVITROGEN Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? yes Other information Simplex Reaction type Simplex Performance Criteria: Degenowirus(1BEGOG) Analytical sensitivity Begomovirus(1BEGOG) What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomatory yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^2 test Saison and Gentit (2015): 10^3 -1 Test Wyatt and Brown (1996): 10^3 -3 WmCSV test Li et al. (2004): 10^2 test Saison and Gentit (2015): 10^3 -1 Test Wyatt and Brown (1996): 10^3 -3 WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^3 -1 Test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity No of targets tested: 36 Specificity value test	-	yes	
Name of the test Conventional PCR Saison and Gentit (2015) As or adapted from an IPPC diagnostic protocol Is the test modified compared to the reference test Kit Is a kit used yes Manufacturer name INVITROGEN Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? yes Other information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is made and the properties of the		no	
As or adapted from an IPPC diagnostic protocol Is the test modified compared to the reference test Kit Is a kit used Manufacturer name Specify the kit used Platinum' Taq DNA Polymerase Kit used following the manufacturer's instructions? Other information Reaction type Simplex Performance Criteria: Organism 1: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: -Cha'MV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3. YMCSV test Li et al. (2004): 10^-1 test Wyatt and Brown (1996): 10^-3. YMCSV test Li et al. (2015): 10^-1 test Wyatt and Brown (1996): undiluted Set Wyatt and Brown (1996): 10^-3. YMCSV test Li et al. (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	EPPO Diagnostic Protocol name	PM 7/152 Begomoviruses (version 1)	
Is the test modified compared to the reference test Kit Is a kit used Manufacturer name Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? Wes Other information Reaction type Simplex Performance Criteria: Organism 1: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: -ChaYMV (tomato yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): 10 PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Name of the test	Conventional PCR Saison and Gentit (2015)	
reference test Kit Is a kit used yes Manufacturer name INVITROGEN Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? yes Other information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^3 -TYLCTHV test Li et al. (2004): 10^2 test Saison and Gentit (2015): 10^-3 -TYLCTHV test Li et al. (2004): 10^1 -1 test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^2 -1 test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^2 -1 test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^2 -1 test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^2 -1 test Wyatt and Brown (1996): 10^3 -TYLCTHV test Li et al. (2004): 10^3 -TYLCTHV test Li et al.	_	no	
Manufacturer name Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? Ves Other information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: -ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit		no	
Manufacturer name Specify the kit used Platinum™ Taq DNA Polymerase Kit used following the manufacturer's instructions? Performation Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: ChayMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Kit		
Specify the kit used Kit used following the manufacturer's instructions? Other information Reaction type Simplex Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: ChayMv (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChayMv test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Is a kit used	yes	
Kit used following the manufacturer's instructions? Other information Reaction type Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected: -ChayMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChayMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Manufacturer name	INVITROGEN	
Simplex	Specify the kit used	Platinum™ Taq DNA Polymerase	
Reaction type Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? Via the concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-1 test Wyatt and Brown (1996): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Kit used following the manufacturer's instructions?	yes	
Performance Criteria: Organism 1.: Begomovirus(1BEGOG) Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Other information		
Organism 1.: Analytical sensitivity What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Reaction type	Simplex	
Analytical sensitivity What is smallest amount of target that can be detected reliably? What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Performance Criteria :		
What is smallest amount of target that can be detected reliably? Tested concentrations: dilutions of ChaYMV (chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity	Organism 1.:	Begomovirus(1BEGOG)	
(chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): undiluted Analytical specificity - inclusivity Number of strains/populations of target organisms tested Specificity value test Li et al. (2004): 66.7% test Saison and Gentit	Analytical sensitivity		
Number of strains/populations of target organisms tested No of targets tested: 36 Specificity value test Li et al. (2004): 66.7% test Saison and Gentit		(chayote yellow mosaic virus), TYLCTHV (tomato yellow leaf curl Thailand virus) and WmCSV (watermelon chlorotic stunt virus) in tomato or zucchini leaf material. Maximum dilution of target DNA detected: -ChaYMV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): undiluted test Wyatt and Brown (1996): 10^-3 -TYLCTHV test Li et al. (2004): 10^-2 test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996): 10^-3 -WmCSV test Li et al. (2004): no PCR product test Saison and Gentit (2015): 10^-1 test Wyatt and Brown (1996):	
organisms testedtest Li et al. (2004): 66.7% test Saison and Gentit	Analytical specificity - inclusivity		
•		No of targets tested: 36	
	Specificity value		

Analytical specificity - exclusivity		
Number of non-target organisms tested	No of non-targets tested (healthy plant material and other viruses): 69	
Specificity value	test Li et al. (2004): 100% test Saison and Gentit (2015): 100% test Wyatt and Brown (1996): 100%	
Reproducibility		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	Percentage of identical results is 100% for all three PCRs. No. of target samples tested: 5 No. of nontarget samples tested: 2 No. of operators: up to 4 No. of PCR instruments: up to 5 No. of different days: up to 9	
Repeatability		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	Repeatability for all three PCRs is 100% in both tested samples (ChaYMV and TYLCTHV at the limit of detection).	
Test performance study		
Test performance study?	no	
Other information		
Any other information considered useful	Full validation report is available on the EURL webpage: https://eurlplanthealth.nl/groups/view/5f6 c0e2e-3a3a-4c35-9413-4094af29c30d/virology-publ ic/files/0d7e84a7-39d0-467f-9033-8a4a1e93c997	

Creation date: 2023-11-21 11:26:58 - Last update: 2023-11-21 16:10:14