

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	Liriomyza huidobrensis	
Short description	Identification of Liriomyza huidobrensis by morphological method	
Laboratory contact details	National Phytosanitary Laboratory Lielvarde 36, 1006 Riga, Latvia	
Date and reference of the validation report	2009-04-14 -	
Validation process according to EPPO Standard PM 7/98:	No	
Reference of the test description	0	
Is the test the same as described in the EPPO DP?	Modified Method is based only on morphological characters as described in PM 7/53 (1)	
Is the lab accredited for this test?	Yes	
Plant species tested (if relevant)		
Matrices tested (if relevant)	Sticky traps, plants, parts of the plants, isolated insects	
List of methods used		
Method for extraction / isolation / baiting of target organism from matrix	X	Visual inspection of the sticky traps, plants, parts of the plants, isolated insects with stereomicroscope
Molecular methods, e.g. hybridization, PCR and real time PCR		
Serological methods: IF, ELISA, Direct Tissue Blot Immuno Assay		
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	X	Morphological identification using stereomicroscope, biological microscope, reference material and checklist (IN.E.019) with most important morphological characters of the <i>Liriomyza huidobrensis</i> , same morphological characters as described in PM 7/53 (1)
Biochemical methods: e.g. enzyme electrophoresis, protein profiling		
Other		
<u>Analytical sensitivity (= limit of detection)</u>		
What is smallest amount of target that can be detected reliably?	one adult male	
<u>Diagnostic sensitivity</u>		
Proportion of infected/infested samples tested positive compared to results from the standard test , see appendix 2 of PM 7/98	Not done	
Specify the standard test		
<u>Analytical specificity</u>		
Specificity value	Not done	
Number of strains/populations of target organisms tested		
Number of non-target organisms tested		
Cross reacts with (specify the species)		
<u>Diagnostic Specificity</u>		
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	Not done	
Specify the standard test		
<u>Reproducibility</u>		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% (4 genitalia slides, each of them with one adult male genitalia of <i>Liriomyza huidobrensis</i> or <i>Liriomyza bryoniae</i> . 6 entomologists checked genitalia slides on six different days)	
<u>Repeatability</u>		
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% (4 genitalia slides, each of them with one adult male genitalia of <i>Liriomyza huidobrensis</i> or <i>Liriomyza bryoniae</i> . 2 replicates of <i>Liriomyza huidobrensis</i> and 2 replicates of <i>Liriomyza bryoniae</i>)	
<u>Test performance study</u>		
Test performance study?	Yes	
Include brief details of the test performance study and its output. If available, provide a link to	Interlaboratory comparison tests with Finland, Estonian, Lithuanian, Latvian entomologists. Each entomologist tested 4 genitalia slides of <i>Liriomyza huidobrensis</i> and <i>Liriomyza</i>	

published article/report	bryoniae. Result: success rate 100%.
<u>Other information</u>	
Any other information considered useful e.g. robustness, ease of performing the test, etc.	