

**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.

<b>Target Organism</b>	Liriomyza huidobrensis	
<b>Short description</b>	Identification of Liriomyza huidobrensis by morphological method	
<b>Laboratory contact details</b>	National Phytosanitary Laboratory Lielvarde 36, 1006 Riga, Latvia	
<b>Date and reference of the validation report</b>	2009-04-14 -	
<b>Validation process according to EPPO Standard PM 7/98:</b>	No	
<b>Reference of the test description</b>	0	
<b>Is the test the same as described in the EPPO DP?</b>	Modified Method is based only on morphological characters as described in PM 7/53 (1)	
<b>Is the lab accredited for this test?</b>	Yes	
<b>Plant species tested (if relevant)</b>		
<b>Matrices tested (if relevant)</b>	Sticky traps, plants, parts of the plants, isolated insects	
<b>List of methods used</b>		
<b>Method for extraction / isolation / baiting of target organism from matrix</b>	X	Visual inspection of the sticky traps, plants, parts of the plants, isolated insects with stereomicroscope
<b>Molecular methods, e.g. hybridization, PCR and real time PCR</b>		
<b>Serological methods: IF, ELISA, Direct Tissue Blot Immuno Assay</b>		
<b>Plating methods: selective isolation</b>		
<b>Bioassay methods: selective enrichment in host plants, baiting, plant test and grafting.</b>		
<b>Pathogenicity test</b>		
<b>Fingerprint methods: protein profiling, fatty acid profiling &amp; DNA profiling</b>		

<b>Morphological and morphometrical methods intended for identification</b>	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)
<b>Biochemical methods: e.g. enzyme electrophoresis, protein profiling</b>		
<b>Other</b>		
<b><u>Analytical sensitivity (= limit of detection)</u></b>		
<b>What is smallest amount of target that can be detected reliably?</b>	one adult male	
<b><u>Diagnostic sensitivity</u></b>		
<b>Proportion of infected/infested samples tested positive compared to results from the standard test , see appendix 2 of PM 7/98</b>	Not done	
<b>Specify the standard test</b>		
<b><u>Analytical specificity</u></b>		
<b>Specificity value</b>	Not done	
<b>Number of strains/populations of target organisms tested</b>		
<b>Number of non-target organisms tested</b>		
<b>Cross reacts with (specify the species)</b>		
<b><u>Diagnostic Specificity</u></b>		
<b>Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test</b>	Not done	
<b>Specify the standard test</b>		
<b><u>Reproducibility</u></b>		
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	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)	
<b><u>Repeatability</u></b>		
<b>Provide the calculated % of agreement for a given level of the pest (see PM 7/98)</b>	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> )	
<b><u>Test performance study</u></b>		
<b>Test performance study?</b>	Yes	
<b>Include brief details of the test performance study and its output. If available, provide a link to</b>	Interlaboratory comparison tests with Finland, Estonian, Lithuanian, Latvian entomologists. Each entomologist tested 4 genitalia slides of <i>Liriomyza huidobrensis</i> and <i>Liriomyza</i>	

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