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	ILVO Institute for Agricultural and Fisheries Research Burg. Van Gansberghelaan 96, 9820 Merelbeke - Melle, Belgium
Short description of the test	Morphological identification of D.virgifera in pheromone traps
Date, reference of the validation report	2011-05-19 - F16_I09
Validation process according to EPPO Standard PM7/98?	no
Is the lab accredited for this test?	yes
Was the validated data generated in the framework of a project?	
Description of the test	
Organism(s)	Diabrotica virgifera virgifera (DIABVI)
Detection / identification	identification
Method(s)	Extraction Morphological
Method: Extraction	
Reference of the test description	
Other information	
Other details on the test	Visual inspection of the pheromone traps with stereomicroscope, using a lattice work (A→P, 1→25) to localize the beetles on the trap
Method: Morphological	
Reference of the test description	
As or adapted from an EPPO diagnostic protocol	yes
EPPO Diagnostic Protocol name	PM 7/036 Diabrotica virgifera (version 1)
Is the test modified compared to the reference test	no
Other information	
Other details on the test	Morphological identification using stereomicroscope and checklist (F03_I07) with most 1 / 3 important morphological characters of the

	beetle, same morphological characters as described in PM 7/36 (1). Before the analysis starts there is a control of a beetle (standard reference material from Hungary) with checklist F03_I11
Are the performance characteristics included in the EPPO diagnostic protocol?	**no**
Performance Criteria :	
Organism 1.:	**Diabrotica virgifera virgifera(DIABVI)**
Analytical sensitivity	
What is smallest amount of target that can be detected reliably?	1 individual beetle (In the validation test 10 pheromone traps were used, artificially infected with one D. virgifera each, on different places on the traps. Four annalists checked the traps and noticed the place on the trap (f.e. B23, G8))
Diagnostic sensitivity	
Proportion of infected/infested samples tested positive compared to results from the standard test, see appendix 2 of PM 7/98	Not done
Standard test(s)	Not relevant
Analytical specificity - inclusivity	
Number of strains/populations of target organisms tested	Not done
Specificity value	
Analytical specificity - exclusivity	
Number of non-target organisms tested	Not done
Specificity value	Not done
Diagnostic Specificity	
Proportion of uninfected/uninfested samples (true negatives) testing negative compared to results from a standard test	Not done
Reproducibility	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% (10 pheromone traps (negative traps already used in maize fields), each of them artificially infected with 1 adult of D. virgifera. On each pheromone trap there was a large diversity of other insects, belonging to different orders. Four annalists checked the pheromone traps on four different days)
Repeatability	
Provide the calculated % of agreement for a given level of the pest (see PM 7/98)	100% (10 pheromone traps (negative traps already used in maize fields), each of them artificially infected with 1 adult of D. virgifera. On each pheromone trap there was a large diversity of other insects, belonging to different orders. Five replicates.)
Test performance study	

Test performance study?	yes
Brief details of the test performance study and its output.It available, link to published article/report	Interlaboratory test with 5 participating labs, including DCP. Each lab received 5 artificially infected pheromone traps. Same situation for each lab: the number of the beetles on the traps, as well as the location on the traps was identical. Result: one lab had a success rate of 71% (36,4% false positives and 18,2% false negatives). The other labs and DCP: success rate 100% (false positives and false negatives 0%).

Creation date: 2012-04-10 00:00:00 - Last update: 2021-04-12 22:18:54