

# Annual CIPAC/FAO/WHO Report Form on the Quality Control of Pesticides

Country/Name and Address of the Institution (contact person):

Contact person:  
Benaki Phytopathological Institute  
Laboratory of Chemical Control of Pesticides  
7 Ekalis street  
Kifissia Athens  
14561, Greece  
(Contact person: H. Karasali)

E-mail: E. Karassali@bpi.gr

## 1 - Essential Information

Reporting period/year:	Number of samples analyzed (1)	Number of non-compliance (2)	Uses (3) (optional)
May 2011- May 2012	932	1	Agricultural use: 932
			Public Health use: -
			Home and Garden use: -
			Other uses (please specify): -

(1) Any sample, including those of active inspection and registration control samples.

(2) Non-compliance with FAO/WHO or national pesticide specifications.

The reason of non-compliance:

One sample was not in compliance with FAO specifications (active ingredient content)

(3) If possible, please indicate the use/destination of the pesticide analyzed. If the pesticide has various uses, it should be included only in one category and should be explained under item 2 (comments).

## 2 - Any comments and/or background information

During the reporting period 932 samples containing 61 different a.i. from all pesticide classes and formulation types were analyzed. 336 of these samples were analyzed as part of the monitoring programme. Methods used for the determination of active ingredient content are CIPAC and in-house

methods. GC-FID and HPLC –UV are the main techniques used for the analysis of pesticides. LC-MS-MS and GC-MS-MS techniques were used for the identification of illegal and counterfeit pesticides, for parallel import pesticides and spraying solutions. Optical microscopy was also employed for the inspection of parallel import pesticides containing microspheres.

596 samples were treated seeds and analyzed for floating dust (Heubach test) and loading.

The Laboratory of Quality Control of Pesticides, of Benaki Phytopathological Institute is the Central Official Laboratory in Greece, designated for the quality control of plant protection products. Analysis of environmental samples (soil and sediment) with LC-MS-MS, GC-MS-MS and GC-ECD, for the determination of pesticide residues is also one of its responsibilities. The laboratory is also responsible for the evaluation of identity, physical and chemical properties, method of analysis (ppps, residues) and fate and behaviour for registration purposes under national and EU legislation.

The laboratory is accredited in accordance to ELOT EN ISO/IEC 17025:2005, by the Hellenic Accreditation System SA (<http://www.esyd.gr/portal/p/esyd/en/showOrgInfo.jsp?id=18480>, last audit: 31-01-2012) in:

1. Determination of the active ingredient content of plant protection products by HPLC-UV technique (according to the CIPAC methods of the current issue).
2. Determination of the active ingredient content of plant protection products by GC-FID technique (according to the CIPAC methods of the current issue).
3. Determination of the emulsion characteristics and the re-emulsion ability (according to CIPAC).

The Laboratory was inspected in 8<sup>th</sup> May 2012 by the Food and Veterinary Office (FVO) of the European Commission. The results of the inspection will be published online in due time.

### **Personel**

#### **Laboratory staff**

- ▶ Two researchers
- ▶ Two technicians (for sample preparation of pesticides)
- ▶ One environmentalist for the determination of pesticide residues in environmental samples.

### **Evaluation**

#### **Staff for the evaluation for granting authorizations of plant protection products**

- ▶ Four Chemists
- ▶ One Environmentalist

**Number of reports for evaluation purposes****a) Chemical Control**

Registration Reports For Greek Authorization (including supplementary R.R.)	Registration Reports (including all running projects) for South Member State Evaluation	Monographs of Pesticides and Biocides (including all running projects) for EU Evaluation	Greek Comments (on DARs, CA's Reports, Equivalence Reports, SMS Registration Reports, etc.)	Equivalence Reports with RMS Greece
62	16	20	16	3

**b) Fate and behaviour in the environment**

Registration Reports For Greek Authorization (including supplementary R.R.)	Registration Reports (including all running projects) for South Member State Evaluation	Monographs of Pesticides and Biocides (including all running projects) for EU Evaluation	Greek Comments (on DARs, CA's Reports, Equivalence Reports, SMS Registration Reports, etc.)	Equivalence Reports with RMS Greece
50	16	20	12	-

The laboratory also participates in the following research projects:

1. 'Development of Benaki Phytopathological Institute as a Centre of Excellence in Plant Health and Crop Protection' (Project acronym: BPI Plant-Heal 230010 (Regpot, FP7).
2. 'Establishment of an Impact Assessment Procedure as a tool for the sustainability of agro-ecosystem: The case of Mediterranean olives' (SAGE 10- Life 09+Env.).
3. 'Development of nanoemulsions as new plant protection products to reduce environmental impacts' (National Hellenic Research Foundation).

The laboratory has contracts with Universities and the private sector:

1. Analysis of pesticide residues in empty pesticide containers after triple rinsing (collaboration with the private sector).
2. Analysis of pesticide residues in empty pesticide containers after triple rinsing with LC-MS/MS. (collaboration with Agricultural University of Athens).
3. 'Determination of floating dust of treated seeds –Heubach test.

4. Evaluation of Physical compatibility of pesticides in aqueous tank mixtures (collaboration with the private sector)

### **3. CIPAC Activities**

During the reporting period the laboratory was participated in one collaborative trial organized by Federal Agency for the Food Safety –AFSCA (Gembloux-Belgium) for the determination of active ingredient content and physical properties.