Pesticide Residue Control Results

"National summary report"

Country *Cyprus*

Year: *2010*

National competent authority/organisation:

Pesticides Residues Laboratory of the State General Laboratory of Ministry of Health

Web address where the national annul report is published:

www.moh.gov.cy/sgl

1. Objective and design of the National Control Programme

The Ministry of Health is the competent authority for the enforcement of the Pesticide Residues (PR) Legislation and the execution of the national monitoring and surveillance programs. The enforcement of Legislation and sampling is allocated to the Department of Medical and Public Health Services (MPHS). The Pesticide Residue Lab (PR-SGL) of the State General Laboratory is the Official Laboratory for the Monitoring & Surveillance of PR in Food of Plant and Animal Origin. The PR-SGL Lab and the MHPS design and implement the monitoring program for both local market and imports. The PR-SGL Lab in cooperation with the Department of Agriculture (DA) of Ministry of Agriculture, Natural recourses and Environment (MANRE) design the control plan for the exports.
The sampling is focused at the key points of food chain: market, import, processing, primary storage producers, etc.

The sampling regime is based on a combination of "at random" sampling and target oriented sampling focusing towards problematic pesticides/food combination. This combination is, in a way, bias towards problematic products and might end up with higher violation rates. Nevertheless it can provide higher degree of consumer protection and cost-effectiveness. Main criteria used in the sampling design are: EU coordinated program, violations from previous years, information from RASFF, consumption rate especially for children and the needs of exports control.

The increase of the number of compounds monitored is a continuous process. The number of compounds of the MRM method for the plant origin products increased within 2010, from 247 to 275 and the validation of the single method for the determination of bromide ions for leafy vegetables and tomatoes has been completed. A new LCMSMS system has been introduced in the laboratory within the 2010 which led to the increase of the parameters examined for the majority of the combinations food item/ pesticides. The increase of the pesticides included in the monitoring programme is mainly defined by the requirements of the EU coordinated programme. It should be noted though that the laboratory capacity and the costs of the analysis are the main factors which influence the inclusion of new pesticides in the national monitoring. Therefore the requirements of the community programme in relation to the analysis of bromide ions for tomatoes and lettuce has been completed only partially whereas the analysis of glyphosate in cereals could not be performed. Efforts have been made for the implementation of the single method for the determination of glyphosate but no sufficient results have been achieved.

2. **Key findings, interpretation of the results and comparability with the previous years results**

In **2010** a total of **690** samples were analysed, **528** were samples of plant origin and **162** were samples of animal origin. Sampling rate was **86** samples /100 000 inhabitants.

Plant Origin samples

In **59.1%** of plant origin samples residues were detected. The number of plant origin products (fresh and dry) other than processed was **492** out of which the number of fruits, vegetables and cereals tested were 185, 250 and 52 respectively. **31.9%** out of the 492 samples were imported ones (63,1% of them were from Third Countries) and **14** samples were of organic farming. The percentage of the 492 samples above MRLs was **8,7%** and the **4.9%** were considered as real legal violations.

Ten (10) samples of baby food based on fruits and vegetables and six (6) samples of orange juices were also analysed under the national monitoring programme. No pesticides were detected in these samples.

In order to enhance the monitoring of pesticides residues in food, a survey has been carried out for the analysis of seed oils. Twenty samples have been analysed, 10 samples for organochlorine pesticides and 10 samples for organophosphorous, pyrethroids and endosulphan. Only 2 samples found to be positive with traces of DDT at levels lower than 0.01mg/kg.

The most frequently found pesticides in plant origin samples were

Cypermethrin in **14%** and **Chlorpyrifos** in **12%** of the samples**.**

Animal Origin Samples

Within 2010, 162 samples of animal origin have been analysed for pesticides residues: 50 eggs samples, 55 milk samples and 57 samples of meat. 93 samples have been analysed for organochlorines and 69 samples were analysed for various pesticides covering the requirements of the Community Monitoring Plan. In 19,8% of the samples, traces of organochlorine pesticides, mostly DDT, were detected at levels less than 0.01mg/kg.

3. **Non-compliant samples: possible reasons and actions taken**

In 2010, 8,7% of the samples of plant origin (43 samples in total out of 492 samples fresh and dry other than processed) were found non-compliant with the EU MRL whereas the 4,9% of the samples (24 samples in total) were considered as legal violations (meaning that they were found non-compliant with the legal limits taking into account the measurement uncertainty). The following follow-up actions were taken in cases of non-compliant samples.

Number of non-compliant samples	Action taken	Note
19	*Warnings*	
18	*Warnings and administrative sanctions*	
6	*RASFF notification*	*Sample code:* *Border rejection notification:2010-AEB (no distribution of the sample)* *Border rejection notification:2010-AGJ (no distribution of the sample)* *Border rejection notification:2010.CER (no distribution of the sample)* *Information notification: 2010.0280 (sample withdrawal from the market)* *Information notification: 2010.0435 (sample withdrawal from the market)* *Information notification: 2010.0403 (sample withdrawal from the market)*

Product	Residue	Reason for MRL non compliance (legal violations)	Note
Pomegranates	Prochloraz	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.AEB
Lettuce	Chorothalonil	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Basil	Chorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	
Red Peppers	Carbendazim	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0280
Green Peppers	Carbendazim	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0435
Red Peppers	Methamidophos	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.0403
Strawberries	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table Grapes	Captan	GAP not respected: use of pesticide non-authorised on the specific crop	
Wheat	Diazinon	GAP not respected: use of non-authorised pesticide on all crops	
Apples	Fenthion	GAP not respected: use of non-authorised pesticide on all crops	
Beans with pods	Indoxacarb	GAP not respected: use of pesticide non-authorised on the specific crop	
Cucumber	Methomyl	GAP not respected: use of non-authorised pesticide on all crops	
Spinach	Carbofuran	GAP not respected: use of non-authorised pesticide on all crops	
Spinach	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Spinach	Chlorpyrfos	GAP not respected: use of pesticide non-authorised on the specific crop	
Corriander	Parathion methyl	GAP not respected: use of non-authorised pesticide on all crops	
Table Grapes	Cypermethrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Vine Leaves	Azoxystrobin	Other (please specify in the "Note" column)	Import product from TC, EU GAP not respected, RASFF notification 2010.CER
Vine Leaves	Chlorpyrfos		

4. **Quality assurance**

The PR Lab of the SGL is accredited by the Greek Accreditation body ESYD since 2002 according to EN 45001, from June 2003 according to ISO/IEC 17025 and from July 2006 according to ISO/IEC 17025/2005. The PR-Lab applies Quality Control procedures, which are in line with provisions of "Method validation and Quality Control Procedures for Pesticides Residues Analysis in Food and Feed"

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
CY	State General Laboratory of Ministry of Health	SGL_CYPRUS_FP	2002	ESYD- Greece	PT2010: C4, SRM 5, A05, FV12