

PESTICIDE RESIDUE CONTROL RESULTS

NATIONAL SUMMARY REPORT

Country: HELLAS

Year: 2016

National competent authority

MINISTRY OF RURAL DEVELOPMENT AND FOOD

General Directorate of Agriculture

Directorate of Plant Produce Protection

Department of Plant Protection Products

Web address where the national annual report is published:

<http://www.minagric.gr/index.php/en/citizen-menu/foodsafety-menu>

<http://www.minagric.gr/index.php/el/for-farmer-2/crop-production/fytoprostasiamenu/ypoleimatafyto>

1. Country: Hellas

1.1. Objective and design of the national control programme

National control program of 2016 for pesticide residues (monitoring) as part of the Multi Annual Control Program (EU-MACCP) has been established according to terms and conditions of Articles 26-35 of Regulation (EC) No 396/2005 of the European Parliament and the Council, of 23.02.2005 on Maximum Residue Levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

The monitoring programme was designed and coordinated by the Ministry of Rural Development and Food (Directorate of Plant Produce Protection). The program was based on several risk analysis criteria and parameters: number of samples (domestic and imported) for each product, agricultural produce, cultivation area per culture, expected imports, results from previous years' monitoring programs, dietary intake contribution of each product, sampling location, community control program, pesticides used in practice by the farmers, relevant RASFF notifications for pesticide residues, personnel and analytical capacity of the official laboratories. It aims at ensuring compliance with maximum levels and assessing consumer exposure in order to achieve a high level of protection and application of good agricultural practice in all stages of production and harvest of agricultural products.

The responsibilities of the laboratories involved, regarding the number of samples of each commodity that should be analysed and the areas of sampling were well defined. The responsible for the EU co-ordinated program laboratories were clearly stated. The sampling was carried out by the responsible for sampling regional and local authorities.

Sampling strategy was based on "from the farm to the fork" rationale, taking into account the specificities of each region of the country. The sampling methods, necessary for carrying out such controls of pesticide residues, were those provided for in JMD 91972/2003- Directive 2002/63/EC. Samples were taken by domestic production and imports, proportionally, covering points of collection, storage, packing and trade of products of plant origin.

The official laboratories, analysing samples for pesticide residues are accredited and participate in the Community Proficiency Tests. The methods of analysis used by the laboratories comply with the criteria set out in relevant EU law provisions and other adopted technical guidelines.

In a case of an MRL exceedance, before any administrative and punitive enforcement action is taken, a default analytical uncertainty of 50% is subtracted from the measured value. If this figure still exceeds the MRL, enforcement action relevant to the case is taken.

1.2. Key findings, interpretation of the results and comparability with the previous year results

2287 samples were tested in total.

51,60% of samples contained no detectable residues, 44,47% of samples contained residues at or below the Mrl and 3,94% of samples contained residues exceeding EU Mrls (without taking account of the MU). The non compliant samples were 53 (2,32%)

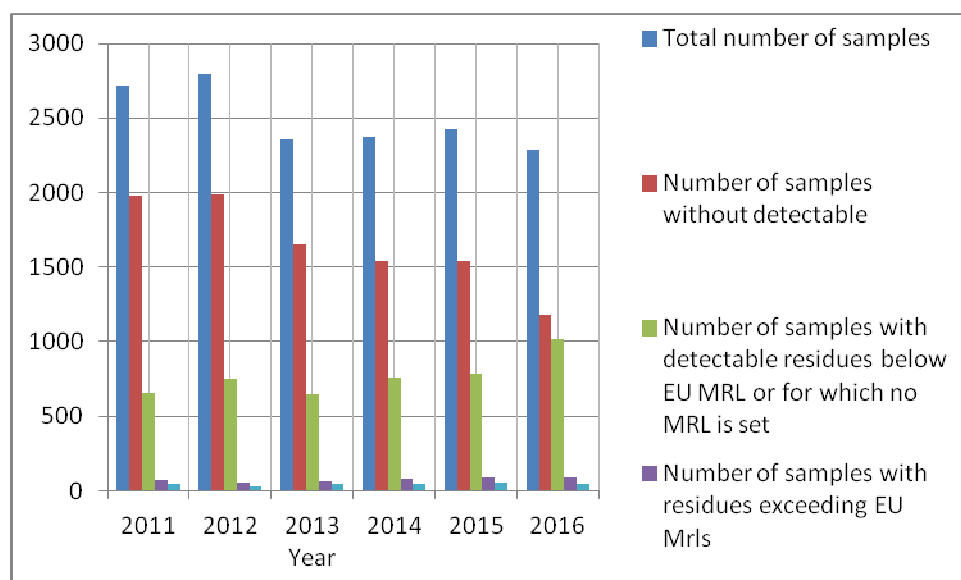
These results compared with those of the previous years are shown in the table 1. Significant differences are noticed especially in the categories of the number of samples without detectable residues and the number of samples with detectable residues at or below EU Mrl. This can be explained by the increased number of pesticides analyzed by the official laboratories compared to previous years.

90 samples out of the 2287 samples were organic. Within this category, 1 sample contained residues exceeding EU Mrls (numerical exceedance).

2010 samples were domestic (87,89%), 40 samples originated from other EU countries (1,75%), 236 samples originated from third countries (10,32%) and the origin of 1 sample was unknown (0,04%).

Table 1: Summary results 2011-2016

Category	Year 2011	%	Year 2012	%	Year 2013	%	Year 2014	%	Year 2015	%	Year 2016	%
Total number of samples	2715	100	2797	100	2361	100	2376	100	2425	100	2287	100
Number of samples without detectable	1983	73	1991	71,1	1649	69,9	1544	64,98	1545	63,71	1180	51,60
Number of samples with detectable residues below EU MRL or for which no MRL is set	653	24	754	27	650	27,5	755	31,78	789	32,54	1011	44,21
Number of samples with residues exceeding EU Mrls	74	3	53	1,9	62	2,6	77	3,24	91	3,75	91	3,98
Non compliant samples	45	1,66	33	1,2	42	1,8	43	1,81	58	2,39	53	2,32

**Table 2:** Summary results 2016

Samples	Total	Without Residues	%	With residues below MRL	%	Exceeding MRL	%	Non Compliant	%
Animal products	33	33	100%	0	0,00%	0	0,00%	0	0,00%
Baby food	10	10	100%	0	0,00%	0	0,00%	0	0,00%
Cereals	36	32	88,89%	4	11,11%	0	0,00%	0	0,00%
Processed products	173	149	86,13%	23	13,29%	1	0,58%	0	0,00%
Sum of fruits and nuts, vegetables, other plant products	2035	956	46,98%	989	48,60%	90	4,42%	53	2,60%
Total	2287	1180	51,60%	1016	44,42%	91	3,98%	53	2,32%

Table 3: Summary results 2016 for non suspect samples

Samples	Total	With residues below LOQ	%	With residues between LOQ and MRL	%	Exceeding MRL	%	Non Compliant	%
Animal products	35	34	97,14%	1	2,86%	0	0,00%	0	0,00%
Baby food	10	10	100%	0	0,00%	0	0,00%	0	0,00%
Cereals	37	32	86,49%	4	10,81%	1	2,70%	1	2,70%
Fruits and nuts	893	302	33,82%	563	63,05%	28	3,13%	14	1,57%
Other plant products (Tea)	155	137	88,39%	17	10,97%	1	0,65%	0	0,00%
Vegetables	1061	600	56,55%	417	39,30%	44	4,15%	25	2,36%
Total	2191	1115	50,89%	1002	45,73%	74	3,38%	40	1,83%

Table 4: Summary results 2016 for suspect samples

Samples	Total	With residues below LOQ	%	With residues between LOQ and MRL	%	Exceeding MRL	%	Non Compliant	%
Animal products	0	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Baby food	0	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Cereals	0	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Fruits and nuts	63	4	6,35%	45	71,43%	14	22,22%	11	17,46%
Other plant products (Tea)	4	3	75,00%	1	25,00%	0	0,00%	0	0,00%
Vegetables	29	14	48,28%	12	41,38%	3	10,34%	2	6,90%
Total	96	21	21,87%	58	60,42%	17	17,71%	13	13,54%

1.3. Non-compliant samples: possible reasons, ARfD exceedances and actions taken

Table 5: Actions taken

Action taken ^(a)	Number of non-compliant samples concerned	Comments
Rapid Alert Notification	1	Chlorpyrifos/Lemons, GR-001-16-860, RASFF: 2016.BGK, for border rejection from Turkey
	1	Fosthiazate/Potatoes, GR-001-16-532 RASFF: 2016.1381 alert, from Cyprus
	1	Lambda-Cyhalothrin+ Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)+ Oxamyl+ Propargite/(frozen) peppers, GR-001-16-63, RASFF: 2016.ANL, border rejection from Egypt
Administrative sanctions (e.g. fines)	1	Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)/Cucumbers, GR-001-16-1551
	1	Ametoctradin/Lemons, GR-002-16-1126
	1	(Bupirimate+Mepanipyrim)/Parsley, GR-001-16-996 (in progress)
	1	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)/Rice, GR-002-16-0855
	1	Chlorantraniliprole /Potatoes, GR-001-16-1577
	3	Chlorpyrifos/Apples, GR-002-16-0635, GR-002-16-0936, GR-002-16-0609
	2	Chlorpyrifos/Carrots, GR-001-16-879, Chlorpyrifos/Carrots, GR-001-16-1524 (in progress)
	2	Chlorpyrifos/Peppers, GR-002-16-0529, GR-002-16-1030
	1	Chlorpyrifos/Potatoes, GR-001-16-897
	1	Cyflufenamid/Peppers, GR-002-16-0618
	2	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/ Oranges, GR-001-16-1938, GR-001-16-726
	1	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/Peppers GR-002-16-0519 from FYROM
	1	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/Tomatoes, GR-002-16-0753
	1	Dimethomorph (sum of isomers)/Beans (with pods), GR-001-16-732
	1	Fenamiphos (sum of fenamiphos and its sulphoxide and sulphone expressed as fenamiphos)/Melons, GR-002-16-0543
	1	Fluopicolide/Beans (with pods), GR-002-16-0537 (in progress)
	2	Formetanate: Sum of formetanate and its salts expressed as formetanate(hydrochloride)/Beans (with pods), GR-001-16-382, GR-002-16-0272
3	Fosthiazate/Potatoes, GR-001-16-1028, GR-002-16-0747, GR-001-16-532 (RASFF)	
1	Imidacloprid/Spinaches, GR-002-16-0943	
1	Indoxacarb (sum of indoxacarb and its R enantiomer)/Leeks, GR-001-16-1575	
1	Indoxacarb (sum of indoxacarb and its R enantiomer)/Spring onions/green onions and Welsh onions, GR-002-16-1122 (in progress)	

Action taken ^(a)	Number of non-compliant samples concerned	Comments
	1	Linuron/Spinaches, GR-001-16-1546
	1	Metalaxyl and metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))/Courgettes, GR-002-16-0024 from Turkey
	1	Phosmet (phosmet and phosmet oxon expressed as phosmet)/Mandarins, GR-002-16-1015
	1	Phosmet (phosmet and phosmet oxon expressed as phosmet) Pears, GR-002-16-0829
	1	Propargite/Apples, GR-001-16-1574
	1	Propargite/Peaches, GR-002-16-0446
	1	Propargite+Pyraclostrobin/Peaches, GR-002-16-0308
	1	Pyraclostrobin/Spinaches, GR-001-16-1245
	1	Spiroxamine/Peppers, GR-002-16-0717
	1	Tetramethrin/Kiwi fruits (green, red, yellow), GR-002-16-0795 (in progress)
	1	Thiophanate-methyl/Plums, GR-001-16-922
	2	Biphenyl/Lemons GR-002-16-0293, GR-002-16-0294
Lot recalled from the market		
Rejection of a non-compliant lot at the border	9	Biphenyl/Lemons, GR-001-16-403, GR-001-16-417, GR-001-16-418, GR-002-16-0207, GR-002-16-0208, GR-002-16-0236, GR-002-16-0237, GR-002-16-0262, GR-002-16-0394, from Turkey
	1	Lambda-Cyhalothrin+ Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)+ Oxamyl+ Propargite/(frozen) peppers, GR-001-16-63, from Egypt (RASFF)
	1	Chlorpyrifos/Lemons, GR-001-16-860 from Turkey (RASFF)
Destruction of non-compliant lot		
Follow-up (suspect) sampling of similar products, samples of same producer or country of origin		
Warnings to responsible food business operator		
Other follow-up investigations to identify reason of non-compliance or responsible food business operator		
Other actions		

(a): If other actions were taken, please describe them in the last column.

Table 6: Possible reasons for MRL non compliance

Reasons for MRL non-compliance	Pesticide/food product ^(a)	Frequency ^(b)	Comments
GAP not respected: use of a pesticide not approved in the EU ^(c)	Propargite/Apples, GR-001-16-1574	1	
	Propargite/Peaches, GR-002-16-0308*	1	*GR-002-16-308 contained pyraclostrobin above MRL
	Propargite/Peaches, GR-002-16-0446	1	which is authorized in peaches
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)/Rice, GR-002-16-0855	1	

	Linuron/Spinaches, GR-001-16-1546	1	
	Tetramethrin/Kiwi fruits (green, red, yellow), GR-002-16-0795	1	
	Bipheyl/Lemons GR-002-16-0293, GR-002-16-0294	2	
GAP not respected: use of an approved pesticide not authorised on the specific crop ^(c)	Formetanate: Sum of formetanate and its salts expressed as formetanate(hydrochloride)/Beans (with pods), GR-001-16-382, GR-002-16-0272	2	
	Indoxacarb (sum of indoxacarb and its R enantiomer)/Leeks, GR-001-16-1575	1	
	Ametoctradin/Lemons, GR-002-16-1126	1	
	Imidacloprid/Spinaches, GR-002-16-0943	1	
	Spiroxamine/Peppers, GR-002-16-0717	1	
	Dimethomorph (sum of isomers)/Beans (with pods), GR-001-16-732	1	
	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/Peppers GR-002-16-0519 from FYROM	1	
	Fluopicolide/Beans (with pods), GR-002-16-0537	1	
	Indoxacarb (sum of indoxacarb and its R enantiomer)/Spring onions/green onions and Welsh onions, GR-002-16-1122	1	
	Bupirimate+Mepanipyrim/Parsley, GR-001-16-996	1	
GAP not respected: use of an approved pesticide, but application rate, number of treatments, application method or PHI not respected	Phosmet (phosmet and phosmet oxon expressed as phosmet)/Mandarins, GR-002-16-1015	1	
	Phosmet (phosmet and phosmet oxon expressed as phosmet)/Pears, GR-002-16-0829	1	
	Fenamiphos (sum of fenamiphos and its sulphoxide and sulphone expressed as fenamiphos)/Melons, GR-002-16-0543	1	
	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/Oranges, GR-001-16-1938, GR-001-16-726	1	
	Fosthiazate/Potatoes, GR-001-16-1028, GR-002-16-0747, Fosthiazate/Potatoes, GR-001-16-532 (RASFF)	2	

	Pyraclostrobin/Peaches, GR-002-16-0308*	-		
	Pyraclostrobin/Spinaches, GR-001-16-1245	1		
	Chlorpyrifos/Carrots GR-001-16-879, GR-001-16-1524	2		
	Chlorpyrifos/Potatoes GR-001-16-897	1		
	Chlorantraniliprol/Potatoes GR-001-16-1577	1		
	Cyflufenamid/Peppers, GR-002-16-0618	1	Chlorpyrifos non compliant samples may be also attributed to Mrls changes	
	Chlorpyrifos/Peppers, GR-002-16-0529, GR-002-16-1030	2		
	Chlorpyrifos/Apples GR-002-16-0936, GR-002-16-0635, GR-002-16-609	3		
	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)/Tomatoes, GR-002-16-0753	1		
	Thiophanate-methyl/Plums, GR-001-16-922	1		
Use of pesticide according to authorised GAP: unexpected slow degradation of residues				
Cross contamination: spray drift or other accidental contamination				
Contamination from previous use of a pesticide: uptake of residues from the soil (e.g. persistent pesticides used in the past)	Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)/Cucumbers, GR-001-16-1551	1		
Residues resulting from other sources than plant protection product (e.g. biocides, veterinary drugs, bio fuel)				
Naturally occurrence (e.g. dithiocarbamates in turnips)				
Changes of the MRL				
Use of a pesticide on food imported from third countries for which no import tolerance was set ^(d)	Metalaxyl and metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))/Courgettes, GR-002-16-0024 from Turkey	1		
	Biphenyl/Lemons, GR-001-16-403, GR-001-16-417, GR-001-16-418, GR-002-16-0207, GR-002-16-0208, GR-002-16-0236, GR-002-16-0237, GR-002-16-0262, GR-002-16-0394, from Turkey	9		
Other (Use of a pesticide on food imported from third country with exceedance of the ARfD)	Lambda-Cyhalothrin+ Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)+ Oxamyl+ Propargite/(frozen) peppers, GR-001-16-63, RASFF: 2016.ANL, from Egypt	1		
	Chlorpyrifos/Lemons, GR-001-16-860, RASFF: 2016.BGK	1		

(a): Report name as specified in the MatrixTool

(b): Number of cases

(c): Applicable only for food products produced in the EU

(d): For imported food only

1.4. Quality assurance

Table 7: Laboratories participation in the control program

Country	Laboratory		Accreditation		Participation in proficiency tests or inter-laboratory tests
	Name	Code	Date	Body	
Hellas	Benaki Phytopathological Institute, Pesticides Residues Laboratory	GR-001	09/07/2002	ESYD (Hellenic Accreditation System S.A.)	EUPT-FV-18, EUPT-CF-10, EUPT-AO-11, EUPT-SRM-11, EUPT-FV-SM 08, EUPT-FV-BF 01, COIPT-16.
Hellas	Greek Official Laboratory-Regional Centre of Plant Protection and Quality Control of Thessaloniki	GR-002	08/09/2009	ESYD	EUPT-FV17
Hellas	General Chemical State Laboratory	GR-010	2015	ESYD	PTs 2016: EUPT-FV-18, , EUPT-CF-10, EUPT-AO-11, EUPT-SRM-11
			2010	ESYD	
			1999	UKAS	

1.5. Processing factors

In the table below the processing factors are compiled that were used by national competent authorities to verify compliance of processed products with EU MRLs.

Table 8: Processing factors

Pesticide (report name) ^(a)	Unprocessed product (RAC)	Processed product	Processing factor ^(b)	Comments
All pesticides	Olives for oil production	olive oil	5	
All pesticides	Wine grapes	Wine	1	
All pesticides	Wheat	Wheat flour	1	

a) Report name as specified in the MatrixTool

b) Processing factor for the enforcement residue definition.

1.6. Additional information