TECHNICAL REPORT

National summary reports on pesticide residue analysis performed in 2013[1]

European Food Safety Authority[2, 3]

European Food Safety Authority (EFSA), Parma, Italy

ABSTRACT

In accordance with Article 31 of Regulation (EC) No 396/2005, European Union (EU) Member States have to communicate to the European Food Safety Authority the results of their official controls on pesticide residues in food. In the framework of this communication, the EU Member States, Iceland and Norway provided a short summary report outlining the main findings of the control activities during the reference year. Croatia did not yet participated to the EU monitoring programme. This technical report is the compilation of the contributions of the reporting countries.

KEY WORDS

pesticide residues, Regulation (EC) No 396/2005, pesticide monitoring 2013

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SUMMARY

In the framework of the preparation of the annual report on pesticide residues under Regulation (EC) No 396/2005, the EU Member States, Norway and Iceland reported the results of the official controls to the European Commission, EFSA and other Member States using the standardised reporting format (SSD) (EFSA, 2014). Despite Croatia entered the European Union during the year 2013, did not yet participated to the 2013 EU monitoring programme.

EFSA prepared the scientific report reflecting the 2013 European Union Annual Report on Pesticide Residues in Food (EFSA, 2015). In addition to the submission of the results in SSD format, the reporting countries provided additional information and the summary of the national results in a separate document, the national summary reports. These reports in particular contained information on the competent authorities responsible for implementation of the pesticide monitoring at national level, the objectives and the design of their national monitoring programme, highlighting the specific characteristics and priorities of the national control plans and the overall results of the national control programmes. The reporting countries also summarised the results, and provided further information on follow-up actions taken and possible reasons for samples that were found to be not compliant with the legal limits. Some reporting countries included trend analysis where the 2013 results were compared with the results of previous years. The national summary reports also addressed quality assurance aspects, such as the accreditation status of the laboratories responsible for official controls, and their participation in proficiency tests.

This technical report is a compilation of the national summary reports, which is prepared to complement the Scientific Report regarding the findings of the 2013 control year (EFSA, 2015).

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BACKGROUND

EU Member States have to submit to the European Food Safety Authority the results of the official controls on pesticide residues in food. In addition to the results that are reported according to the SSD format (EFSA, 2014), Member States provided a short summary report outlining the main findings of the samples analysed during the reference period.

TERMS OF REFERENCE

In accordance with Article 31 of Regulation (EC) No 396/2005[4] Member States shall submit their updated national control programme for pesticide residues to EFSA and publish all results of the national residue monitoring on the Internet.

EFSA shall prepare a technical report compiling the national summary reports provided by the reporting countries. The technical report is complementary to the Scientific Report regarding the findings of the 2013 control year (EFSA, 2015).

[4] Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 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. OJ L 70, 16.3.2005, p. 1–16.

1. Introduction

This report is a compilation of the national summary reports as provided by the national competent authorities (see Appendix A of EFSA, 2015).

It is noted that there might be a discrepancy between the information provided in the national summary reports and the information published in the 2013 European Union Report on pesticide residues (EFSA, 2015), since EFSA included additional data cleaning steps to ensure that the results reported by the 29 countries are comparable. Thus, these data cleaning steps might have an impact on the overall results, such as the MRL compliance rates.

2. Austria

2.1. Objective and design of the national control programme

- Responsibilities

The national pesticide monitoring is conducted according to a nation-wide sampling plan designed by the Austrian Agency for Health and Food Safety (Division for Risk Assessment, Data and Statistics) in co-operation with the Austrian Federal Ministry of Health. The plan is based on data concerning dietary consumption, production and import of fruits and vegetables and it takes into account the results of earlier monitoring programmes, as well as the analytical possibilities. The national monitoring programme furthermore covers the co-ordinated programme of the European Commission. In addition, routine samples were taken from the Austrian market by the responsible bodies.

- Design of Programmes (priorities, targeting, criteria for the percentage of samples to be taken from the organic sector)

The collected data are representative for the Austrian market. Based on the results of the previous years, however, a higher risk for pesticide residues was identified for some commodities. These commodities were especially targeted in the monitoring programme and chosen for further examination, with the aim of reflecting the results of the previous years. This year, emphasis was laid on the sampling of fruits and vegetables from organic farming. This type of 'partially targeted' monitoring is foreseen for the following years.

- Sampling: personnel, procedures, sampling points

The samples were taken by trained officials from the local Food Inspection Service ('Lebensmittelaufsicht') in accordance to the Directive 2002/63/EC,[5] which is implemented in the internal quality assurance system of the officials. The samples were predominantly taken at the retail or wholesale level.

- Analytical methods used

The analytical methods were adopted from published methods of the Dutch federal laboratories (The Netherlands, 1996) and validated in the laboratories. The samples were analysed up to a maximum of 585 substances (part of sums included). The multiresidue methods were based on QuEChERs method, combined with GC-MS/MS, GC-ECD, GC-NPD, GC-FPD, LC-MS/MS. Single residue methods were used for dithiocarbamate (GC-MSD), bromide (GC-ECD), glyphosate/glufosinate (LC-MS/MS), ethephon (LC-MS/MS) and phenoxy acids (LC-MS/MS).

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

In 2013 a total of 1 141 samples of fresh fruits, vegetables and plant products were analysed under the coordinated programme, the national pesticide monitoring programme and as routine samples. In addition, other products like cereals (26 samples), processed products (463 samples), animal products (573 samples) and baby food (106 samples) were analysed. In sum, 2 309 samples were examined for pesticide residues.

46.6 % of all samples originated from Austria, 32.7 % came from the European market, 13.4 % from third countries and the rest from an unknown origin. The percentage of surveillance samples with residues above the MRL were 0.84 %, 1.5 %, 3.6 % and 0 % respectively (without taking into account the measurement uncertainty).

[5] Commission Directive 2002/63/EC of 11 July 2002 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin and repealing Directive 79/700/EEC. OJ L 187, 16.07.2002, p. 30–43.

In 40 % of the samples (surveillance and enforcement) of fruit and vegetables, no pesticide residues could be detected. 58 % of the samples had residues below or at the Maximum Residue Limits (MRL). Disregarding measurement uncertainties, 1.4 % of the samples of fruits and vegetables contained one or more pesticide(s) numerically above the MRL (32 samples). If, however, measurement uncertainty is taken into account, the number of unprocessed or processed samples of fruits and vegetables containing pesticide residues above the MRL, and thus being non-compliant, is reduced to 18 samples (0.9 %).

In 509 samples (22 %), more than one pesticide was found. The maximum number of different pesticides found in one sample was 12 (in two samples of grapes).

40 samples were taken as enforcement samples, of which one samples contained pesticide residues above the MRL and were non-compliant.

The number of non-compliances was lower than in 2012.

2.3. Non-compliant samples: possible reasons and actions taken

In 2013, a total of 18 samples (0.9 %, all commodities) were non-compliant with the EU-MRLs, taking into account the measurement uncertainty. For these samples, administrative actions were set by the responsible officials from the local Food Inspection Service (Table 3-1). Table 3-2 shows the possible reasons for MRL non compliance.

Table 3-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
16	Administrative actions	
2	Administrative actions and RASFF notification	RASFF-ref: 2013.BBI (Sample code: 13059624-001) RASFF-ref: 2013.0789 (Sample code: 13061280-001)

Table 3-2: Possible reasons for MRL non compliance

Product	Residue	Reasons for MRL non-compliance	Note
Eggs (chicken)	lindane	Contamination: not known	
Eggs (chicken)	lindane	Contamination: not known	
Cherries	dimethoate (sum)	Contamination: not known	
Cherries	monocrotophos	Contamination: not known	
Chestnuts	chlorothalonil	Contamination: not known	
Head cabbage	dimethoate (sum)	Contamination: not known	
Lamb's lettuce	vinclozolin (sum)	Contamination: not known	
Leek	abamectin (sum)	Contamination: not known	
Lettuce	procymidone	Contamination: not known	
Lettuce	procymidone	Contamination: not known	
Lettuce	vinclozolin (sum)	Contamination: not known	
Okra, ladys fingers	chlormequat	Contamination: not known	
Okra, ladys fingers	chlormequat	Contamination: not known	
Pineapples	propiconazole	Contamination: not known	
Spinach	azoxystrobin	Contamination: not known	
Spinach	iprodione	Contamination: not known	
Spinach	imidacloprid	Contamination: not known	
Table grapes	quinalphos	Contamination: not known	

2.4. Quality assurance

The analysis of the co-ordinated programme, the national monitoring programme and routine samples were conducted by the Institute for Food Control Innsbruck of the Austrian Agency for Health and Food Safety. One additional laboratory in Vienna (Regional Institute for Food Control in Vienna (LUA3)) analysed routine samples. All laboratories received the accreditation in the year 1998 and the methods for pesticide analyses are still accredited (Table 3-3).

Table 3-3: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
AT	Austrian Agency for Health and Food Safety (Institutes and Competence centres)	AGES	01.11.1998	BMWA	EUPT-pesticides: AO8 (raw poultry meat), C7 (feed for laying hens), FV15 (potatoe homogenate), FV-SM05 (potatoe homogenate), SRM8 (potato pure), FV-T01 (Green Tea (Chinese)) Bipea 19d-Pesticides (native olive oil) VDLUFA Futtermittel-Enquette 2012/2013 (‘compound animal feedstuff’) EUPT-DP: 1302-MI(milk powder and milk fat, ndl-PCBs (indicator PCB congeners))
AT	Regional Institute for Food Control in Vienna	LUA3	01.11.1998	BMWA	EUPT-pesticides: FV15 (potatoe homogenate), SRM8 (potato homogenate)) Austrian NRL-pesticide residues (PTPR 2013, rice homogenate) IMEP-37 (determination of pesticides in grapes)

3. Belgium

3.1. Objective and design of the national control programme

The use of plant protection products during the production of fruit, vegetables and cereals can lead to the presence of residues in food and feed. Maximum residue levels (MRL) are set in the European legislation in order to check the good use of plant protection products (use of authorised products according to their authorization) and to protect the consumers. Food or feed which do not comply with the MRL cannot be put on the market. An MRL exceeding content is the sign of incorrect use of a plant protection product but does not necessarily involve a risk for the health of consumers.

The approach used by the Federal Agency for the Safety of the Food Chain (FASFC) for the control of pesticide residues is risk based. The programme is drawn up following the general statistical approach developed within the FASFC.[6] Several factors are taken into account: the toxicity of the active substances, food consumption statistics, food commodities with a high residues/non-compliance rate in previous monitoring years, origin of food (domestic, EU or third country), RASFF notifications and other useful information.

All groups of fruits and vegetables are included in the programme and a rotation programme is applied for less important commodities. The coordinated control programme[7] of the European Commission and some targeted sampling (mainly targeted sampling at border controls according to Regulation (EC) No 669/2009[8]) are also included in the national programme.

Adjustments of the programme can be made in the course of the year so that emerging problems can be dealt with.

The FASFC determines the target pesticides for each sample type according to a risk based approach taking into account the active substances authorised in Belgium, the result of previous control programmes in Belgium and other Member States, the RASFF and the analytical possibilities.

Sampling is done in accordance with Directive 2002/63/EC that has been implemented in Belgian legislation. Samples are analysed in ISO 17025 (ISO, 2010) accredited laboratories by means of multi-residues and single-residues methods which allowed in 2013 the detection of more than 550 pesticide residues.

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

In 2013, a total number of 3 573 samples of fruits, vegetables, cereals, animal products and processed products (including baby food) were taken by the Federal Agency for the Safety of the Food Chain (FASFC) and analysed for the presence of pesticide residues. The products analysed were of Belgian origin (42.8 %), EU origin (19.9 %), non-EU origin (34.2 %) and unknown origin (3.1 %).

97.6 % of the samples analysed were compliant with the pesticide residues legislation. Table 3-1 summarises the results per groups of products with respect to the sampling strategy.

[6] Maudoux J-P, Saegerman C, Rettigner C, Houins G, Van Huffel X and Berkvens D, 2006. Food safety surveillance by a risk based control programming: approach applied by the Belgian federal agency for the safety of the food chain (FASFC). Veterinary Quarterly, 28(4), 140-154.

[7] Commission Implementing Regulation (EU) No 1274/2011 of 7 December 2011 concerning a coordinated multiannual control programme of the Union for 2012, 2013 and 2014 to ensure compliance with maximum residue levels of pesticides and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin. OJ L 325, 08.12.2011, p. 24–43.

[8] Commission Regulation (EC) No 669/2009 of 24 July 2009 implementing Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards the increased level of official controls on imports of certain feed and food of non-animal origin and amending Decision 2006/504/EC. OJ L 194, 25.07.2009, p. 11–21.

Table 3-1: Products analysed for pesticide residues in 2013 with respect to the sampling strategy compared to 2012

Sampling strategy	Samples	Analysed	Without residues (%)	With residues at or below MRL (%)	> MRL[9] (%)	>MRL[10] (non compliant) (%)	Compared to 2012 (non compliant)
Surveillance	Fruit, vegetables, cereals and other products of plant origin	2 021	28.3	68.3	3.4	1.4	2.3 % (↓)
	Processed products (food)	189	70.4	29.6	0	0	0 % (=)
	Animal products[11]	582	84.4	15.4	0.2	0	0 % (=)
	Baby food	84	97.6	0	2.4	0	0 % (=)
	Feed	95	57.9	37.9	4.2	2.1	2 % (↑)
	Total	2 971	44.8	52.6	2.6	1	1.6 % (↓)
Enforcement	Fruit, vegetables, cereals other products of plant origin	114	44.7	27.2	28.1	21.9	42.5 % (↓)
	Regulation 669/2009	486	28.2	58.8	13	6	0 % (↑)
	Feed	2	50	50	0	0	3.6 % (↓)
	Total	602	31.4	52.8	15.8	9	16 % (↓)
TOTAL		3 573	42.5	52.7	4.8	2.4	3.7 % (↓)

- Surveillance sampling

2 971 surveillance samples were analysed within the context of the control programme. 99 % were compliant with the legislation in force.

Main MRL violations were observed in chilli-peppers, peas and brocolis. All samples of processed products, babyfood, and animal products were compliant. The list of MRL exceedances can be found in Table 3-6. Table 3-2 gives an overview of the main MRL violations according to the country of origin.

Table 3-2: Overview of the MRL violations per country of origin (fruit, vegetables, cereals and other products of plant origin)

Origin country[12]	Number of samples analysed	>MRL (% non compliant)	Non compliant Products	Comapred to 2012 (% non compliant)
Uganda	19	26.3 %	chilipeppers	No data
China	17	17.6 %	beans (with pods), peas (with pods), tea	10.5 % (↑)
Ethiopia	15	13.3 %	basil, peas (with pods)	0 % (↑)
Kenya	20	5 %	passion fruit	18.2 % (↓)
Italy	77	1.3 %	celery	1.6 % (↓)

[9] Measurement uncertainty is not taken into account (numerical MRL exceedances)
[10] Measurement uncertainty is taken into account (samples non compliant)
[11] Some animal products were analysed in the framework of Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC. OJ L 125, 23.5.1996, p. 10–32.
[12] Only countries with more than 15 samples analysed are included in this table

Origin country[12]	Number of samples analysed	>MRL (% non compliant)	Non compliant Products	Comapred to 2012 (% non compliant)
Israel	36	1 %	tomatoes	6.5 % (↓)
Spain	230	0.9 %	broccoli, mandarins	0.8 % (↑)
Belgium	966	0.8 %	Broccoli, lamb's lettuce, pears, spring onions, strawberries, wheat	1.5 % (↓)
The Netherlands	120	0.8 %	strawberries	0.9 % (↓)

As in previous years, more MRL violations were proportionally observed in non-EU products (2.7 %) than in products grown in BE (0.6 %) or the EU (0.6 %) (Table 3-3).

Table 3-3: Summary of samples taken in 2013 by region of origin

Strategy	Origin	Samples	Samples (%)	Exceeding MRL	Exceeding MRL (%)	Non compliant	Non/compliant (%)
Enforcement	Domestic	24	0.67	1	4.2	0	0
	EEA	5	0.14	0	0	0	0
	TC	528	15	86	16	49	9.3
	Unkown	45	1.3	8	18	5	11
Surveillance	Domestic	1 498	42	27	1.8	9	0.6
	EEA	711	20	13	1.8	4	0.56
	TC	632	18	31	4.9	17	2.7
	Unkown	130	3.6	5	3.8	0	0

The total rate of MRL violations in 2013 is significantly lower in comparison with 2012 (- 0.6 % in total and - 0.9 % for fruit, vegetables, cereals and other products of plant origin - Figure 3-1).

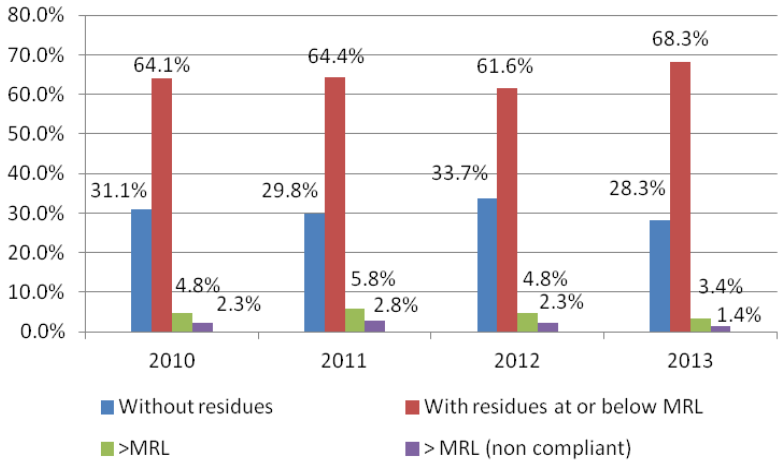


Figure 3-1: overview of the evolution of the results for fruit, vegetables, cereals and other products of plant origin from 2010 to 2013 (surveillance samples)

- Enforcement sampling

602 enforcement samples were analysed in the case of suspicion about the non compliance of a product with EU MRLs. These products were mainly targeted products analysed according to Regulation (EC) No 669/2009 (products coming mainly from Thailand, the Dominican Republic, Egypt and China) and products analysed within the context of following up of violations found previously. 91 % were compliant with the legislation

Main MRL violations were observed in products from Uganda, Malaysia and Marocco (Table 3-4:).

Table 3-4: Overview of the MRL violations per country of origin (fruit, vegetables, cereals and other products of plant origin)

Origin country[13]	Number of samples analysed	>MRL (% non compliant)	Non compliant Products	Compared to 2012 (% non compliant)
Uganda	17	76.5	chilipeppers	No data
Malaysia	15	40	aubergines, chilipeppers	36.4 % (↑)
Morocco	66	12.1	mint	67.4 % (↓)
Not specified	45	11.1	basil, beans (with pods), chilipeppers, fungi, purslane	22.2 % (↓)
Thailand	20	10	basil, guava	5.9 % (↑)
Dominican Republic	71	8.4	beans (with pods), chilipeppers	1 % (↑)
Egypt	64	6.2	strawberries	6.1 % (↑)
China	83	6	tea	10.5 % (↓)
Kenya	169	3	beans (with pods), peas (with pods)	No data

Compared to 2012, the rate of non-compliant enforcement samples observed is lower (Figure 3-2). The better results in mint from Marocco can be linked with its inclusion to targeted control at border inspection posts in the entire EU in application of Regulation (EC) No 669/2009 from January 2013.

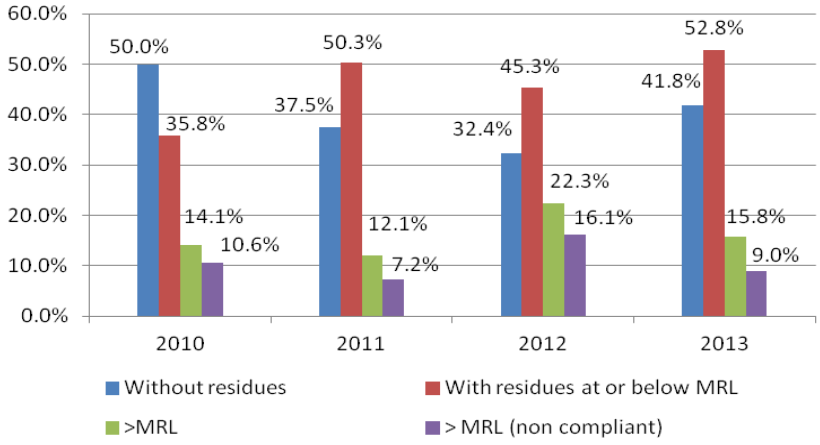


Figure 3-2: Overview of the evolution of the results for fruit, vegetables, cereals and other products of plant origin from 2010 to 2013 (enforcement samples)

3.3. Non-compliant samples: possible reasons and actions taken

When non-compliant samples are identified, the batch is seized, if available, and prevented from entering the market. An assessment of the risk for consumers is performed on all non-compliant samples and the appropriate measures such as recall and RASFF notification are taken[14] according to the risk of the non compliant product for the consumer.

[13] Only countries with more than 15 samples analysed are included in this table

[14] The actions to be taken when an MRL is exceeded are described in a procedure available on the website of the FASFC (http://www.afsca.be/publicationsthematiques/inventaire-actions.asp).

Thirty-three RASFF messages were issued by Belgium in 2013 for pesticide residues in food and feed[15] (Table 3-5).

Table 3-5: RASFF message issued by the FASFC in 2013.

Reference	Product	Origin	Substance (concentrations in mg/kg)	Type
2013.CBH	tea	China	buprofezin (0.13, 0.16, 0.050), triazophos (0.077, 0.064, 0.025), acetamiprid (0.32, 0.44, 0.30), fipronil (0.046, 0.053), unauthorised substance: isocarbophos (0.11, 0.055)	Regulation (EC) No 669/2009
2013.0011	beans	Morocco	oxamyl (0.26)	Business operator - self-checking
2013.0050	mushrooms	Netherlands	nicotine (0.62, 1.2)	Business operator - self-checking
2013.0051	mushrooms	Netherlands	nicotine (1.2)	Business operator - self-checking
2013.0065	mushrooms	Belgium	nicotine (1.0)	Business operator - self-checking
2013.0189	rambutan	Vietnam	carbendazim (2.4)	Business operator - self-checking
2013.0425	aubergines	Malaysia	omethoate (0.2)	Official control
2013.0454	aubergines	Malaysia	omethoate (0.23)	Official control
2013.0881	broccolis	Belgium	dimethoate (0.56)	Official control
2013.1059	guava	Thailand	prothiofos (0.1)	Business operator - self-checking
2013.1518	lovage	Poland	promecarb (0.047)	Business operator - self-checking
2013.AGE	beans	Dominican Republic	endosulfan (0.13)	Regulation (EC) No 669/2009
2013.AHE	beans	Kenya	chlorpyriphos-ethyl (0.58 µg/kg)	Regulation (EC) No 669/2009
2013.AMM	beans	Dominican Republic	endosulfan (0.13), dimethoate (0.09)	Regulation (EC) No 669/2009
2013.AMO	chilli peppers	Dominican Republic	fenamidone (0.1)	Regulation (EC) No 669/2009
2013.AOI	chilli peppers	Dominican Republic	triazophos (0.05)	Regulation (EC) No 669/2009
2013.ASN	peppers	Dominican Republic	lambda-cyhalothrin (0.23)	Regulation (EC) No 669/2009
2013.BDW	peas	Kenya	methoxyfenozide (0.08)	Regulation (EC) No 669/2009
2013.BFT	beans	Kenya	chlorpyriphos-ethyl (0.4), dimethoate (0.05)	Regulation (EC) No 669/2009
2013.BOP	peas	Kenya	famoxadone (029)	Regulation (EC) No 669/2009
2013.BXJ	beans	Dominican Republic	diflubenzuron (0.45)	Regulation (EC) No 669/2009
2013.CBO	strawberries	Egypt	pyridalyl (0.27)	Regulation (EC) No 669/2009
2013.CEG	strawberries	Egypt	pyridalyl (0.05)	Regulation (EC) No 669/2009

[15] http://ec.europa.eu/food/food/rapidalert/rasff_portal_database_en.print.htm

Reference	Product	Origin	Substance (concentrations in mg/kg)	Type
2013.AEK	mint	Morocco	chlorpyriphos-ethyl (0.15), hexaconazole (0.31), flutriafol (0.12)	Regulation (EC) No 669/2009
2013.AEX	mint	Morocco	chlorpyriphos-ethyl (0.16)	Regulation (EC) No 669/2009
2013.AKH	mint	Morocco	flubendiamide (0.22)	Regulation (EC) No 669/2009
2013.AUT	mint	Morocco	flubendiamide (0.81)	Regulation (EC) No 669/2009
2013.AVL	basil	from Thailand	amitraz (0.27)	Regulation (EC) No 669/2009
2013.AZF	mint	Morocco	flubendiamide (0.15, 0.12)	Regulation (EC) No 669/2009
2013.BDV	mint	Morocco	flubendiamide (0.04)	Regulation (EC) No 669/2009
2013.BPT	mint	Morocco	bifenthrin (0.2)	Regulation (EC) No 669/2009
2013.CAW	mint	Morocco	dimethoate (0.41), hexaconazole (0.11)	Regulation (EC) No 669/2009
2013.CCD	mint	Morocco	flubendiamide (0.03)	Regulation (EC) No 669/2009

Follow-up action is taken to verify the violation and to identify its cause. When non-compliant samples are identified, the producer or importer is subject to enhanced control and an official report is drawn up and sent to the legal department of the FASFC which proposes a fine. If the fine is not paid or in case of repeated offences the matter is taken to court.

The cause of MRL violations is searched for as far as possible. Table 3-6 gives an overview of MRL non compliances found in products of Belgian origin in 2013 and the possible cause of the non compliances.

Table 3-6: Possible reasons for MRL non compliance in products of Belgian origin

Product	Residue	Possible reasons for MRL non-compliance	Note
Broccoli	dimethoate (sum)	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	Products were recalled from consumer
Pears	daminozide	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	
Lambs lettuce	pendimethalin	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	
Strawberries	tolyfluanid (sum)	Use of a non-approved pesticide	
Lettuce	methabenzthiazuron	Residue of a persistent pesticide (e.g. uptake via contaminated soil)	
Spring oignons	fluazinam	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	
Barley (feed)	dichlorvos	Use of a non-approved pesticide	

Product	Residue	Possible reasons for MRL non-compliance	Note
Wheat	triticonazole	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	

3.4. Quality assurance

Table 3-7 shows the laboratories participating in 2013 control programme.

Table 3-7: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BE	Fytolab C.V.B.A	FYTOLAB	057-TEST version 12, dd 2012-07-27	BELAC	EUPT: FV-SM05, FV15, FV-T01, SRM8, AO8; CF7 proof_ACS perchlorate COIPT 2013 IMEP-37 Proof_ACS ethefon
NL	Laboratorium Zeeuws-Vlaanderen BV	ZEEUWS	L 201 version dd 2013-11-27	RvA	FAPAS: 19144, 19147, 19150, 19153, 07188, 19169, 1590, 19156, 19157, 20103, 19161 QS A, QS C, PROOF-ACS: champignon, tomato en water melon, pineapple, sweet pepper, grapes, thee, EUPT: FV15, SRM8, CF7, FV-T01 LVU 17a BIPEA: 0219, 2119
BE	WIV - ISP (Pesticiden)	WIV-PEST	081-TEST version 13, dd 2013-04-19	BELAC	EUPT: FV-15, FV-T01, CF7, FV-SM05, AO8, SRM8 IMEP 37
BE	Federaal Laboratorium voor de Voedselveiligheid Tervuren	FLVVT	014-TEST version 7, dd 2013-05-24	BELAC	EURL: FV15, AO08, CF7
BE	Laboratoire Fédéral pour la Sécurité Alimentaire Liège	LFSAL	014-TEST version 7, dd 2013-05-24	BELAC	EUPT: AO8 FAPAS: 0590
BE	CER Groupe - Département Santé	CER	073-TEST version 11, dd 2013-01-31	BELAC	EUPT: AO8 FAPAS : 0587
DE	LUFA-ITL GmbH	LUFA	D-PL-14082-01-00, dd 2013-10-21	DAkkS	EUPT: FV15, SRM8, AO8, CF7 FAPAS: 0591
NL	NOFALAB	NOFALAB	L 440, dd 2012-08-29	RvA	FAPAS: 0587, 0589, 0984 BIPEA: 01-4419, 01-0366, 01-0466, 06-1119, 05-1419 AGES: PTPR 2013

3.5. Additional Information

In 2013, 45 organic food and feed products were analysed by the FASFC. No pesticide residues were detected in these samples. Additional information on pesticide residues and their control can be found on http://www.afsca.be

4. Bulgaria

4.1. Objective and design of the national control program

The Bulgarian Food Safety Agency (BFSA) within the Ministry of Agriculture and Food (MAF) is the competent authority for the enforcement of pesticide residues monitoring in Bulgaria and is responsible for drawing up the National monitoring programme for pesticide residues in and on products of animal and plant origin. Therefore the BFSA is responsible for implementation of coordinated multiannual control programme of the Union and taking samples in terms of Commission Regulation (EC) No 788/2012.[16]

A coordinated EU multiannual control monitoring program is included in the National programme on pesticide residues monitoring.

The sampling plan for pesticide residues monitoring is always drawn up for one calendar year. The plan is elaborated by the Headquarter of BFSA and it is distributed to the Regional Food Safety Directorates (RFSD) which is responsible for its implementation.

The following criteria have been used for the selection of commodities being listed in the national programme on pesticide residues monitoring:

- the overall food consumption of the Bulgarian population/relative share in average Bulgarian's diet;
- the consumption food basket;
- the results of official controls and monitoring of pesticide residues in previous years;
- the foodstuffs intended for risk groups of population (namely infant formula and foods for young children);
- local production/imports of commodities;
- agricultural production in Bulgaria;
- the reports in RASFF system;
- Risk assessment based on the results in 2012 – prepared by Risk assessment center which includes Bulgarian focal point to EFSA;
- Commission Implementing Regulation (EU) No 788/2012.

In addition to the samples provided by the EU programme samples determined on the basis of the above criteria were included, i.e. the multiannual EU programme laid down in the Regulation (EC) No 788/2012 forms a part of this control programme.

The following factors have been considered in the selection of pesticide residues to be analysed:

- the most frequently used pesticides;

[16] Commission Implementing Regulation (EU) No 788/2012 of 31 August 2012 concerning a coordinated multiannual control programme of the Union for 2013, 2014 and 2015 to ensure compliance with maximum residue levels of pesticides and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin Text with EEA relevance. OJ L 235, 1.9.2012, p. 8–27.

- the results of official controls and monitoring of pesticide residues in previous years;
- information in RASFF system;
- Commission Implementing Regulation (EU) No 788/2012;
- the consumer food basket;
- risk assessment (Risk assessment center in Bulgaria);
- the laboratory capacity.

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

In 2013, a total number of 3 237 samples were analysed: 3 160 of fruits and nuts, vegetables and other plant products; 28 processed products; 14 cereals, 20 baby foods and 15 animal products – products of domestic and non-domestic origin in the national and co-ordinated monitoring programs. 166 samples were with residues below MRL (5.1 %). 64 samples were exceeding MRL (2.0 %).

As a comparison, in 2012, a total number of 3 174 samples were analysed: 198 samples were with residues below MRL (6.2 %) and 60 samples were exceeding MRL (1.9 %).

As a comparison, in 2011, a total number of 4 516 samples were analysed: 245 samples were with residues below MRL (5.4 %) and 108 samples were exceeding MRL (2.4 %).

The percentage of samples with residues below MRL has decreased in 2013 (5.1 %) as compared to 2012 (6.2 %), and 2011 (5.4 %).

The percentage of samples with residues above MRL slightly increased in 2013 (2.0 %), as compared to 2012 (1.9 %) and has decreased as compared to 2011 (2.4 %).

Of the total number of analysed samples in 2013:

2 975 samples were taken as enforcement samples (in line with Regulation (EC) No 669/2009), of which 45 samples contained pesticide residues above the MRL (1.5 %). Of all 45 samples: 44 were of TC origin and 1 sample was of domestic production;

262 samples were taken as surveillance samples (in line with Regulation (EC) No 788/2012), of which 19 samples contained pesticide residues above the MRL (7.25 %). Of all 19 samples: 17 samples were of domestic production, one sample was of EU production and one sample was of TC origin.

In comparison to 2012, from 2 878 samples taken as enforcement samples, 55 samples contained pesticide residues above the MRL (1.9 %). All 55 samples were of TC origin.

In comparison to 2011, from 4 055 samples taken as enforcement samples, 97 samples contained pesticide residues above the MRL (2.4 %); all 97 were of TC origin.

The percentage of samples exceeding MRL (taken as enforcement samples) decreased in 2013 (1.5 %), as compared to 2012 (1.9 %), and 2011 (2.4 %).

In comparison to 2012, from 296 samples taken as surveillance samples, five samples contained pesticide residues above the MRL (2.3 %). All five samples were of domestic production.

In comparison to 2011, from 461 samples taken as surveillance samples (in line with Regulation (EC) No 915/2010), 11 samples contained pesticide residues above the MRL (5.9 %); from them nine were domestic production and two were TC origin.

The percentage of samples exceeding MRL (taken as surveillance samples) increased in 2013 (7.25 %), as compared to 2012 (2.3 %) and 2011 (5.9 %).

4.3. Non-compliant samples: possible reasons and actions taken

In 2013, from a total number of 3 237 samples, 64 samples were exceeding the MRL (2.0 %). The action taken on the non-compliant samples are in Table 4-1 and the reasons for MRL non compliance in Table 4-2.

Table 4-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
45 non-compliant samples were taken according to Regulation (EC) No 669/2009	RASFF notification	Sample code: Z-26994. RASFF ref: 2013.AAH. Not released on the market. Sample code: Z-27038. RASFF ref: 2013. AAJ. Not released on the market. Sample code: Z-103. RASFF ref: 2013.AAT. Not released on the market. Sample code: Z-735. RASFF ref: 2013.ACN. Not released on the market. Sample code: Z-1482. RASFF ref: 2013.AEW. Not released on the market. Sample code: Z-2030. RASFF ref: 2013.AGF. Not released on the market. Sample code: Z-2019. RASFF ref: 2013.AGJ. Not released on the market. Sample code: Z-2220. RASFF ref: 2013.AGW. Not released on the market. Sample code: Z-2531. RASFF ref: 2013.AID. Not released on the market. Sample code: Z-2510. RASFF ref: 2013.AIC. Not released on the market. Sample code: Z-2785. RASFF ref: 2013.AJD. Not released on the market. Sample code: Z-3244. RASFF ref: 2013.AKP. Not released on the market. Sample code: IP_61. RASFF ref: 2013.ALQ. Not released on the market. Sample code: Z-3860. RASFF ref: 2013.AMP. Not released on the market. Sample code: Z-5482. RASFF ref: 2013.APT. Not released on the market. Sample code: Z-5378. RASFF ref: 2013.APS. Not released on the market. Sample code: Z-8012. RASFF ref: 2013.ATO. Not released on the market. Sample code: Z-11026. RASFF ref: 2013.AYC. Not released on the market. Sample code: Z-12970. RASFF ref: 2013.BAJ. Not released on the market. Sample code: Z-13336. RASFF ref: 2013.BBA. Not released on the market.

Number of non-compliant samples	Action taken	Note
		Sample code: Z-14057. RASFF ref: 2013.BCN. Not released on the market. Sample code: 2013/171. RASFF ref: 2013.BCV. Not released on the market. Sample code: Z-14901. RASFF ref: 2013.BEB. Not released on the market. Sample code: Z-15134. RASFF ref: 2013.BES. Not released on the market. Sample code: Z-16559. RASFF ref: 2013.BHX. Not released on the market. Sample code: Z-18724. RASFF ref: 2013.BOC. Not released on the market. Sample code: Z-20646. RASFF ref: 2013.BTS. Not released on the market. Sample code: Z-20907. RASFF ref: 2013.BUB. Not released on the market. Sample code: Z-21115. RASFF ref: 2013.BVQ. Not released on the market. Sample code: Z-21778. RASFF ref: 2013.BWS. Not released on the market. Sample code: Z-21623. RASFF ref: 2013.BWR. Not released on the market. Sample code: Z-21579. RASFF ref: 2013.BWQ. Not released on the market. Sample code: Z-22284. RASFF ref: 2013.BXP. Not released on the market. Sample code: Z-22400. RASFF ref: 2013.BXW. Not released on the market. Sample code: Z-22981. RASFF ref: 2013.BZB. Not released on the market. Sample code: Z-22998. RASFF ref: 2013.BZD. Not released on the market. Sample code: Z-25912. RASFF ref: 2013.CEM. Not released on the market. Sample code: Z-26044. RASFF ref: 2014.AAG. Not released on the market
	No action taken	Sample codes: Z-905, Z-1485, Z-5256, Z-5924, Z-14393, Z-21955, Z-22449, Z-23147. Released on the market, because the result did not exceed the MRL after applying the measurement uncertainty.
	Administrative sanctions	Sample code: Mlettuce01, Mlettuce07, Mlettuce10, Mrye/oats09, Mstraw01. A report was prepared within an administrative procedure and it was found that no available quantities of the lot are present.
	Warnings	Sample code: Mlettuce02, Mlettuce03, Mcuc07, Mcuc08, Mcarr10, Mgrape table03, Mstraw06, 130036382. A warning was issued. The lot was withdrawn from the market. It was found that no available quantities of the lot were present.
	Lot recalled from the market	Sample code: Mapp05, Mpears01, Mpears03, Mrice05. The lot was recalled from the market.
	Lot recalled from the market	Sample code: 130027971, 130033471 – baby food. The lot was recalled from the market and was destroyed.

Number of non-compliant samples	Action taken	Note
	Lot not released on the market	Sample code: M tom05

Table 4-2: Possible reasons for MRL non-compliance

Product	Residue	Reason for MRL non-compliance
Apples	dimethoate	Contamination: not known
Cucumbers (two samples)	dimethoate	Contamination: not known
Carrots	ethoprotophos	Contamination: not known
Grapes	thiophanate-methyl	Contamination: not known
Lettuce	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim), chlorpyrifos, thiophanate-methyl, dithiocarbamates	Contamination: not known
Lettuce	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Contamination: not known
Lettuce	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim), thiophanate-methyl, dithiocarbamates	Contamination: not known
Lettuce (two samples)	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim), thiophanate-methyl	Contamination: not known
Pears	phosmet	Contamination: not known
Pears (two samples)	dimethoate, ethoxazole	Contamination: not known. Ethoxazole is not approved for use in pears
Rice	dithiocarbamates	Contamination: not known
Oats	chlorpyrifos	Contamination: not known
Strawberries	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Contamination: not known
Strawberries	procymidone	Contamination: not known
Tomatoes	bromide ion	Contamination: not known
Tea	buprofezin	Contamination: not known
Peppers	procymidone, chlorfenapyr	Contamination: not known
Baby food for infants and young children (two samples)	chlorpropham	Contamination: not known
Tomatoes (two samples)	formetanate, malathion (sum of malathion and malaoxon expressed as malathion)	Contamination: not known
Peppers (32 samples)	malathion (sum of malathion and malaoxon expressed as malathion), formetanate, methomyl and thiodicarb (sum of methomyl and thiocarb expressed as methomyl), clofentezine, procymidone, tetradifon, carbendazim and benomyl	Contamination: not known

4.4. Quality assurance

Four laboratories have taken part in the national control programme in 2013 (Table 4-3). They are: Central Laboratory for Chemical Testing and Control (CLCTC), Central Laboratory of Veterinary Control and Ecology (CLVCE), Fytolab Bulgaria Ltd. and Euro Lab.

Three laboratories have an Accreditation Certificate as per EN ISO/IEC 17025 (ISO, 2010) by the Executive Agency ‘Bulgarian Accreditation Service’ (EA BAS) and one laboratory - Fytolab Bulgaria Ltd has an Accreditation Certificate as for EN ISO/IEC 17025 by the BELAC-Brussels, Belgium.

Table 4-3: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BG	Central Laboratory for Chemical Testing and Control	CLCTC	29/06/2012 valid until: 30.06.2016	Executive Agency 'Bulgarian Accreditation Service'	EUPT: FV15 (potatoes), SRM8 (potatoes); IMEP-37 Proficiency Test, organized by IRMM, JRC; Pesticide Residues in grape.
BG	Central Laboratory of Veterinary Control and Ecology	CLVCE	The last accreditation 02.04.2012, valid until: 30.04.2016	Executive Agency 'Bulgarian Accreditation Service'	EUPT: AO08 (poultry meat).
BG	Fytolab Bulgaria Ltd.	FYTBG	26/04/2011; valid until: 2016-05-06	BELAC-Brussels, Belgium	EUPT-CF7 (feed for laying hens); FAPAS: 19151 (lemon), 985 (brown rice), 19159 (cucumbers)
BG	Euro Lab	EuroLab	27/11/2012	Executive Agency 'Bulgarian Accreditation Service' (BAS)	EUPT: FV15 (potatoes); IMEP-37 (grapes)

The analytical uncertainty of the results is calculated based on relative standard deviation of recovery rates and results of proficiency testing if available. If the analytical results, without a correction were mathematically above the MRL, the sample was defined as an exceeding. However, before any enforcement actions were taken the analytical uncertainty was subtracted from the measured value. If the corrected analytical results still exceed the MRL enforcement actions could be taken.

The laboratories used the following multiresidue methods of analysis for pesticide residues in fruits, vegetables, cereals, processed products and baby food:

- BSS EN 12393:2001 'Non-fatty foods. Multi-residue methods for the gas chromatographic determination of pesticide residues' with GC-MSD and GC-ECD determination of main part of pesticides.
- BSS EN 15662 Foods of plant origin – Determination of pesticide residues using GC-MSD and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE- QuEChERS – method.
- Determination of residues organochlorine compounds in samples of animal origin, waters and forage by GC/ECD.
- Determination of residues organophosphorus compounds in samples of animal origin by GC-NPD.
- Determination of residues polychlorinated biphenyls (PCBs) in biological samples by GC-ECD.

The methodology used in the analysis includes:

- sample homogenization;
- pesticide extraction using a suitable organic solvent;

- purification of the extract by means of chromatographic techniques; the stage of extract purification / concentration involves the application of solid phase extraction, in some cases also gel permeation chromatography;

- instrumental analysis of the purified extract by means of capillary gas chromatography (GC-MSD and GC-ECD) or high performance liquid chromatography (LC-MS/MS).

4.5. Additional Information

More information regarding pesticide residues in Bulgaria and their control can be found on http://www.babh.government.bg.

5. Cyprus

5.1. 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 Residues Laboratory of the State General (PR-SGL) is the Official Laboratory for the Monitoring and Surveillance of PR in Food of Plant and Animal Origin. The PR-SGL Lab in cooperation with 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 organic products.

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, and consumption rate especially for children and the needs of export/imports control.

The increase in the number of compounds monitored is a continuous process. The increase in 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 plan.

5.2. Key findings, interpretation of the results

In 2013, a total of 680 samples were analysed, 467 were samples of plant origin and 213 were samples of animal origin. Sampling rate was 85 samples/100 000 inhabitants.

- Plant Origin samples

In 49.5 % of plant origin samples residues were detected. The number of plant origin products fresh or dry excluding composite/processed samples such as baby food and wine were 440 out of which the numbers of fruits tested were 147, vegetables 197 and cereals 37. 28.9 % out of the 440 samples were imported from third countries.

The number of organic farming samples analysed were 28 out of which one apple sample was positive with four pesticides: boscalid (0.015 mg/kg), chlorpyrifos (0.019 mg/kg), pyraclostrobin (< 0.01 mg/kg) and thiacloprid (< 0.01 mg/kg).

The percentage of the 440 samples exceeding MRLs was 7.3 % and 3.2 % were considered as real legal violations.

Ten samples of baby food based on fruits and vegetables were analysed, no pesticides were detected.

Sixteen samples of wine were also analysed under the EU control programme. The 50 % of the samples were positive with pesticides residues, the 19 % contained pesticides at concentrations lower than 0.01 mg/kg. All pesticides found were at concentrations lower than the MRL. The pesticides

detected were methoxyfenozide, carbentazim, pyrimethanil, thiophanate methyl, dimethomorph, boscalid and azoxystrobin.

In order to comply with the requirements of the EU control programme 16 samples of oat and rye, mostly flakes, were analysed. Eight samples found to be positive with pesticides residues at concentrations lower than the MRL.

The most frequently found pesticides within 2013 were cypermethrin in 8.0 %, chlorpyrifos in 7.1 % and boscalid in 5.6 % of the samples.

- Animal Origin Samples

Within 2013, 213 samples of animal origin have been analysed for pesticides residues: 42 eggs samples, 60 milk samples, 73 samples of meat, 13 fish samples and 25 samples of honey.

The 15 samples of cow milk and 15 samples of swine meat were analysed for various pesticides covering the requirements of the EU Monitoring Plan. The rest of the samples have been analysed under the National monitoring plan in order to fulfil the requirements of the Directive 96/23/EU.

In total 13 samples, six fish samples and seven milk samples were positive with DDT at very low levels, lower than 0.01 mg/kg and 14 honey samples were positive with coumaphos at levels lower than the MRLs. The evaluation of the results for honey has been performed in accordance to the provisions of the Regulation (EU) No 37/2010.[17]

5.3. Non-compliant samples: possible reasons and actions taken

In 2013, 7.3 % of the samples of plant origin (32 samples in total out of 440 samples fresh or dry excluding composite/processed samples) were found non-compliant with the EU MRL, whereas the 3.2 % of the samples (14 samples in total) were considered as legal violations (meaning that they were found as non-compliant with the legal limits taking into account the measurement uncertainty). The following follow-up actions were taken (Table 5-1) in cases of non-compliant samples (Table 5-2).

Table 5-1: Number of samples non-compliant

Number of non-compliant samples	Action taken	Note
18	Warnings	
7	Warnings and administrative sanctions	
7	RASFF notification	

Table 5-2: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Black eye beans	acephate	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Pomegranates	prochloraz	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Black eye beans	acephate, dimethoate, methamidophos	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Black eye beans	acephate, methamidophos	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.

[17] Commission Regulation (EU) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. OJ L 15, 20.01.2010, p. 1–72.

Product	Residue	Reason for MRL non compliance	Note
Black eye beans	acephate, dimethoate	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Black eye beans	acephate	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Black eye beans	acephate, dimethoate, methamidophos	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Pears	amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz)	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Tea (Herbal Tea – flowers)	fenpropathrin	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Cherries	thiophanate-methyl	GAP not respected: use of pesticide non-authorized use	
Pears	amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz)	Other (please specify in the 'Note' column)	Import Product from TC, EU GAP not respected.
Beans with pods	propamocarb	GAP not respected: Not authorized use	
Lettuce	pyriproxyfen	GAP not respected: Not authorized use	
Spinach	dimethoate	GAP not respected: Not authorized use	

5.4. Quality assurance

The PR Lab of the SGL (Table 5-3) is accredited by the Greek Accreditation body ESYD since 2002 according to EN 45001, from June 2003 according to ISO/IEC 17025 (ISO, 2010). 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' (EU, 2011).

Table 5-3: Laboratoty details reporting data in 2013

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	EUPT: SRM 8, AO08, FV15

6. The Czech Republic

6.1. Objective and design of the national control programme

Pesticide residues monitoring in foodstuffs in the Czech Republic is guided by the Multi-Annual Control Plan for the Control of Pesticide Residues in CZ submitted by the Ministry of Health Care, in cooperation with the Ministry of Agriculture and other supervisory bodies (CAFIA, SVA). A coordinated multi-Community monitoring program is included in the plan as required by the European Parliament and Regulation (EC) No 396/2005.

The requirements of a multi-annual control plan are included in the control plans of supervisory authorities (CAFIA and SVA), competent to monitor pesticide residues in foodstuffs of plant and animal origin.

The sampling plan for pesticide residues monitoring is always drawn up for one calendar year. The plan is elaborated by the Headquarters of CAFIA/SVA as internal provision and it is distributed to the CAFIA/SVA regional inspectorates which are responsible for its implementation.

The criteria used for drawing up the Programme are:

- Selection of Commodities: the following criteria have been used for the selection of commodities being listed in the national programme on pesticide residues control:
    - the overall food consumption in the Czech Republic: http://www.czso.cz/csu/tz.nsf/i/vychazi_spotreba_potravin_v_roce_2007;
    - the consumption food basket: http://www.szu.cz/tema/bezpecnost-potravin; http://www.chpr.szu.cz/spotreba-potravin.htm;
    - the results of official controls and monitoring of pesticide residues in previous years: http://www.svscr.cz; http://www.szpi.gov.cz/;www.ukzuz.cz);
    - the foodstuffs intended for risk groups of population (namely infant formula and foods for young children);
    - the products having specific stricter rules on the use of pesticides (organic products);
    - the reports in RASFF system;
    - the annual report of the European Commission: http://ec.europa.eu/food/food/rapidalert/index_en.htm;
    - Commission Implementing Regulation (EU) No 788/2012;
    - the final reports on results of monitoring at the EU level: http://ec.europa.eu/food/fvo/specialreports/pesticides_index_en.htm and http://www.efsa.europa.eu/en/publications/efsajournal.htm.
- The number of samples is set so as to determine characteristic profiles of pesticide residues content in selected commodities and to map trends in pesticide residues presence and their levels in analysed commodities with respect to statistical evaluation. The coordinated multiannual programme of the Union laid down in the Commission Implementing Regulation (EU) No 788/2012 forms a part of this control programme. The number of samples is set as a

minimum. It is possible to change and update the number of samples according to the current situation.

- The following factors have been considered in the selection of pesticide residues to be analysed:
    - The most frequently used pesticides (the source – the database of SPA CZ). The database of used plant protection preparations is managed by the State Plant Administration. The database contains active substances and their used amounts as both the total amount and the amounts used for main agricultural crops.
    - The results of official controls and monitoring of pesticide residues in previous years: http://www.svscr.cz; http://www.szpi.gov.cz/
    - Information in RASFF system – EU annual reports: http://ec.europa.eu/food/food/rapidalert/index_en.htm
- Regulation (EU) No 788/2012.
- The last report on EU monitoring results: http://ec.europa.eu/food/fvo/specialreports/pesticides_index_en.htm
- The consumer food basket: http://www.szu.cz/tema/bezpecnost-potravin and http://www.chhpr.szu.cz/spotreba-potravin.htm
- Toxicological profiles of pesticides (National Institute of Public Health, Prague)
- The laboratory capacity

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

Within the official inspections in 2013, the Czech Agriculture and Food Inspection Authority together with the State Veterinary Administration took a total of 1,036 samples to determine pesticide residues (Table 6-1). Positive finding of one of the analysed effective substances was detected in 579 out of the total number of samples (56 %), and the MRL was exceeded in 25 samples (2.4 %). Nine samples (0.9 %) were assessed as non-complying, i.e. these samples exceeded the MRL even after uncertainty measurement was taken into account.

The largest proportion of the total number of taken samples was represented by samples from EU countries (48 % samples) followed by samples from the Czech Republic (32 %), and by samples from third countries (17 %). In 3 % of the samples, the country of origin was not specified.

Organic products comprised 15 % of the total amount of the samples taken compared to 85 % of foodstuffs produced within mainstream manner (Table 6-2). Out of the total number of samples taken from mainstream foodstuffs, positive finding of pesticide residues was detected in 66 % of samples compared to 13 % of positive cases of samples taken from organic foodstuffs.

Within follow-up inspections, 16 samples were taken, all cases concerned samples originating in third countries. MRL was exceeded in six samples; two samples were assessed as non-complying.

Table 6-1: Summary of samples taken in 2013 by product class

Samples	Total	Without residues	With residues below MRL	Exceeding MRL	Non-compliant
Animal products	40	32	8	0	0
Baby food	12	12	0	0	0
Cereals	85	61	24	0	0
Processed products	163	86	63	14	7
Sum if fruits and, nuts, vegetables, other plant products	736	244	481	11	2
Sum	1 036	386	577	25	9

- Vegetables: to determine the pesticide residues, in total 471 samples of fresh vegetables including grown mushrooms were taken. Out of all samples, 60.7 % contained one of the effective substances. Samples from the EU (62 % of samples analysed) comprised the largest proportion. The samples from the CZ comprised 28.9 % out of all taken samples, 7.6 % originated from third countries.

  Out of the total number of samples taken, vegetables produced within ecological (organic) agriculture comprised 12.5 % and vegetables produced within mainstream agriculture comprised 87.5 %.

  In eight cases, MRL level was exceeded and in three cases were assessed as non-complying (samples were non-complying even after uncertainty measurement was taken into account). Samples of mushrooms produced in Poland and China as well as a sample of vegetable pepper from Morocco were concerned.

  In the vegetable samples and mushrooms, the most detected active substances were dithiocarbamates (31.2 %), boscalid (12.3 %), propamocarb (11.4 %) and azoxystrobin (10.4 %).

- Fruit: a total number of 302 samples of fresh fruit were analysed for the presence of pesticide residues. The largest proportion of the total number of fruit samples were from EU countries 55 %, the samples from third countries 30.1 % and the smallest proportion the samples from the CZ 12.6 %. The information on the country of origin was missing in 2.3 % of samples.

  Fruit produced within organic agriculture comprised 13.2 % of the total number of samples taken; fruit produced by mainstream manner comprised 86.8 %. As regards fruit produced within mainstream manner, positive findings of pesticide residues were detected in 85 % of samples taken compared to 12.5 % of organic fruit.

  Exceeded MRL was detected in apples from Poland and bananas from Martinique; however both samples were assessed as complying after uncertainty measurement was taken into account.

  Active substances which appeared in the highest percentage of positive findings in samples of fresh fruit were: dithiocarbamates (21.4 %), chlorpyrifos (20.9 %), boscalid and imazalil (16.0 %), and thiabendazol (13.9 %) and pyraclostrobin (11.5 %).

- Cereals and products thereof: in total, 118 samples of cereal and cereal products were analysed for pesticide residues. The positive pesticide finding of at least one active substance reached 26.1 % cereal samples. MRL was exceeded in a sample of barley from China. However, the sample was evaluated as complying after uncertainty measurement was taken into account.

The largest proportion of cereal samples represented samples from the CZ (61.9 %), EU countries (17.8 %) and from third countries (11 %). The country of origin was not indicated in 9.3 % of the samples taken.

In terms of representation of individual types of cereals, the analyses showed following results: 33 samples of wheat where pesticides were detected in seven cases; 22 samples of rye with four identified positive findings; 15 samples of oat with three positive sample, 19 samples of barley with five positive findings, 15 samples of rice with 11 positive cases and eight corn samples with no positive sample.

The most frequently detected active substances in cereals were: chlormequat, chlorpyrifos, chlorpyrifos-methyl and tricyclazole.

- Baby food: pursuant to the EU Coordinated Control Programme, the samples of follow-on formulae for infants and babies were analysed in accordance with Regulation (EU) No 788/2012. All of 12 analysed samples of follow-up formulae were negative for the presence of pesticide residues.

- Food of animal origin: in 2013, the State Veterinary Administration took a total of 70 samples of the animal origin, of which 22 samples were found with positive finding of pesticide residues. DDT, carbendazim, ethofenprox, hexachlorbenzene and indoxacarb were detected in products of animal origin (situation is similar to the previous years). The MRLs were not exceeded in samples of animal origin (as well as in the previous years).

Table 6-2: Summary of samples taken in 2013 by the type of production

Samples	Total				Without residues				With residues below MRL				Exceeding MRL		Non compliant	
	Non organic	%	Organic	%	Non organic	%	Organic	%	Non organic	%	Organic	%	Non organic	Organic	Non organic	Organic
Animal products	65	100	0	0	48	73.8	0	0	17	26.2	0	0	0	0	0	0
Baby food	7	58.3	5	41.7	7	100	5	100	0	0	0	0	0	0	0	0
Cereals	76	64.4	42	35.6	50	65.8	35	83.3	26	34.2	7	16.7	1	0	0	0
Fruts	262	86.8	40	13.2	39	14.9	35	87.5	223	85.1	5	12.5	2	0	0	0
Other plant and animal products	61	88.4	8	11.6	22	36.1	7	87.5	39	63.9	1	12.5	13	1	6	0
Vegetables	411	87.4	59	12.6	133	32.4	52	88.1	278	67.6	7	11.9	8	0	3	0
Sum	882	85.1	154	14.9	299	33.9	134	87	583	66.1	20	13	24	1	9	0

6.3. Non-compliant samples: possible reasons and actions taken

Out of the total number of samples taken in 2013, MRL was exceeded in 25 samples out of which nine samples was assessed as non-complying even after uncertainty measurement was taken into account (Table 6-3). Possible reasons for non-compliant can be seen in Table 6-4.

Detections of positive substance dicofol and tetradifol in vegetable pepper from Morocco (2013.0576), positive substance of carbendazim in champignons from Poland (2013.1345), findings of didecyldimetylmmonium chloride (DDAC) and quaternary ammonium compounds in grapefruit drops originating in the EU (2013.0151) were notified into the RASFF system in the form of information.

Findings of imidacloprid in green tea from China (D052-80738/13/A06), acetamiprid and imidaclorpid in green tea from Poland (D006-30391/13/A06), acetamiprid and dimethoate in green tea from China (C059-11107/13/A01), acetamiprid and dimethoate in green tea from China (D035-40294/13/A02), imidacloprid in green tea from China (C017-11076/13/A01), acetamiprid in oyster mushroom from China (D004-30391/13/A01) exceeding the limits were not notified into the RASFF based on the risk assessment carried out by the National Health Institute.

Table 6-3: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
	Warnings	
5	Warnings and administrative sanctions/fines	
3	RASFF notification	Sample code: D011-50562/13/A02, RASFF ref: 2013.0576 Sample code: P121-60599/13/A06, RASFF ref: 2013.1345 Sample code: D001-50193/13/A01, RASFF ref: 2013.0151
2	Lot rejected at the border	
	Lot destroyed	
2	Recall of non-compliant products	
2	Shipment back to country of origin (third country)	
9	Publication of name of the responsible food business operator on web site of control authority	
1	No decision taken yet	Court decision/administrative procedure still pending/other reason
	No action taken	Please report the reason why no action was taken

Table 6-4: Possible reasons for MRL non compliance

Product	Residue	Reasons for MRL non-compliance
Pepper	dicofol, tetradifol	Contamination: not known
Mushroom	carbendazim	Contamination: not known
Oyster Mushroom	acetamiprid	Contamination: not known
Tea	imidacloprid	Contamination: not known
Tea	acetamiprid, imidacloprid	Contamination: not known
Tea	imidacloprid	Contamination: not known
Tea	acetamiprid, dimethoate	Contamination: not known
Tea	acetamiprid, imidacloprid	Contamination: not known
Food supplement	DDAC, Quaternary Ammonium Compounds (QACs)	Contamination: not known

6.4. Quality assurance

Table 6-5 reflects each laboratory participating in the control programme.

Table 6-5: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
CZ	Czech Agriculture and Food Inspection Authority	Praha 5	2002 EN ISO/IEC 17025 (1993 EN 45001)	CAI – Prague, Czech Republic	EUPT: FV-SM05, FV15, SRM8, CF7

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
CZ	State Veterinary Institute Prague	V01	First accreditation 1997; valid accreditation issued 21/03/2011 and 21/06/2012 (Accreditation expires on February 25, 2016)	CAI – Prague, Czech Republic	

7. Denmark

7.1. Objective and design of the national control programme

The National Food Institute, Technical University of Denmark, designed the monitoring programme in cooperation with the Danish Veterinary and Food Administration. Since 2006 the sampling plan has been based on dietary consumption pattern with regard to pesticide intake from two previous reports,[18,19] which analysed monitoring data from 1998-2003 and 2004-2011. These reports showed that 25 commodities were responsible for more than 95 % of the intake of pesticide residues (Top25 commodities). These commodities were included in the sampling plan along with commodities included in the EU coordinated control programme. The focus on the Top25 commodities will provide a better basis for comparison between years, so that trends in pesticide residues found may be analysed. In addition to these samples, a broad range of commodities common on the Danish market was analysed, including processed foods, food for infants and organically grown products. Most sampling projects were designed to cover surveillance as well as control in combination and the sampling strategy for these samples is listed as objective or selective sampling. One project was set up to cover sampling and analysis according to Regulation (EC) No 669/2009. Another project was sampled by a special task force for suspect sampling and included sampling of direct import via Copenhagen Airport. Sampling strategy for these two projects is listed as suspect sampling.

Samples of animal origin were not analysed for all pesticides included in the coordinated programme due to lack of validated analytical methods for all relevant pesticides.

Sampling was performed by authorised personnel from the Food Control Offices of the Danish Veterinary and Food Administration. Directive 2002/63/EC on sampling procedures for control of pesticide residues is implemented in Danish legislation. All samples for control of the MRL, except the directly imported samples were sampled on the market, primarily at wholesalers or importers. A few (44 samples of fruit and vegetables) were taken as raw materials at food processing plants. Meat was sampled at slaughterhouses.

Reporting includes samples analysed for pesticides from projects, based on Directive 96/23.

Most samples of fruit and vegetables were analysed for about 280 pesticides (counted as residue definitions). In addition, part of the samples (683 samples) were analysed for dithiocarbamates and others for bromide ion (27 samples). Due to the methodology applied it was not possible to distinguish between the specific dithiocarbamates included in the residue definition for enforcement.

In addition to the above quantitative methods, a new validated screening method using LC-QTOF was tested on approx. 100 samples of fruit and vegetables already analysed by the quantitative methods. The screening method included about 150 substances not included in the other methods. Most of the substances were pesticides but few were safeners and other formulation additives.

Most cereal samples were analysed for about 200 pesticides (counted as residue definitions).

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

In 2013 a total of 2 237 surveillance samples of fruit, vegetables, cereals, processed products, baby food and animal products were analysed. Furthermore, 110 samples were taken from direct import

[18] Poulsen M E, Andersen J H, Petersen A, Hartkopp H, 2005. Pesticide - Food Monitoring, 1998-2003. Part 2. Danish Veterinary and Food Administation, Denmark, 1-113 pp. ISBN 87-91569-54-0.

[19] Petersen A, Hamborg Jensen B, Andersen J H, Poulsen M E, Christensen T, Nielsen E, 2013. Pesticides Residues, Results from the period 2004-2011. Danish Veterinary and Food Administation, Denmark, ISBN 978-87-92763-78-5.

from third countries at the Copenhagen Airport and 82 samples were taken in the Project 669/2009. Samples from these two projects are listed as suspect sampling. Results from these two projects are reported separately and are not included in the following general statistics.

Of the 2 237 samples, 800 were produced in Denmark and 1 437 samples were produced in other EU countries and outside EU. These samples included: 1 597 samples of fruit and vegetables, 287 samples of cereals, 237 samples of animal origin, 103 samples of processed foods and 13 samples of baby foods.

56 (6 %) of the fruit and vegetable samples and 49 (17 %) of the cereal samples were organically produced.

Pesticide residues were found in 69 % of the conventionally grown fruit, 34 % of the conventionally grown vegetables and in 25 % of the conventionally grown cereal samples. Residues exceeding the MRL were found in 1.7 % of the conventionally grown fruit and vegetables samples (25 samples). Of these, 13 samples (0.9 %) had non-compliant residues. No residue was found exceeding the MRL in cereals. As in 2013, no exceedings of the MRLs were found in baby food or processed commodities.

For fruits, pesticide residues were found in 70 % and 75 % of the samples produced in EU and outside EU, respectively, whereas pesticide residues was only found in 49 % of the samples from Denmark. For vegetables, residues were found in 48 % and 54 % of the samples produced in EU and outside EU, respectively, while residues were found in 18 % of the samples from Denmark.

The frequency of conventionally grown samples exceeding the MRLs was 1.0 % and 4 % for fruit produced in EU and outside the EU, respectively. For vegetables the frequency of samples exceeding the MRL was 1.2 % and 3 % for vegetables originating from EU and outside the EU, respectively. The frequency of residues in Danish grown fruit was zero while the frequency of Danish grown vegetables exceeding the MRLs was 0.3 %.

Using sampling strategy ‘suspect’ covering both conventionally and organically grown crops, a total of 192 samples were taken. Non-compliant residues were found in 21 samples.

Residues were found in four organically produced samples: azoxystrobin (0.025 mg/kg) was found in one sample of banana from the Dominique Republic, carbendazim (0.05 mg/kg) was found in one sample of tea from Germany, spinosad (0.013 mg/kg) was found in one sample of ruccula from Italy and chlormequat was found in one sample of rye meal from Germany (0.01 mg/kg).

The residue of azoxystrobin in banana was in the same range as in conventionally grown banana. Therefore it was evaluated not to be grown in accordance to rules for organic production.

Since it is allowed to use spinosad in ecologically produced food and because of the low residue in ruccula it was concluded that this sample was produced in accordance with the rules for organic production.

For the residue of chlormequat in rye meal it was evaluated that it might be caused by a cross contamination from conventionally grown rye. Therefore it was evaluated to be grown according to rules for organically production.

The residue of carbendazim in organic tea was evaluated to be caused by a conventionally grown ingredient in the tea. Therefore it was concluded that this sample was produced in accordance with the rules for organic production.

7.3. Non-compliant samples: possible reasons and actions taken

In 2013, residues were found to exceed the EU MRL in 1.2 % of the samples (26 samples) taken by objective or selective sample strategy. Of these samples 0.6 % (13 samples) was found to be non-compliant with the EU MRL.

For samples taken by suspect sampling strategy, residues in 13 % (25 samples) were found to exceed the EU MRL. Of these, 11 % (21 samples) were found non-compliant with the EU MRL.

Table 7-1 gives the following follow-up actions taken in case of samples non-compliant with the EU MRL (measurement uncertainty taken into consideration).

Table 7-1: Follow-up actions taken in non-compliant samples

Number of non-compliant samples	Action taken	Note
1 suspect sampling	Lot not released on the market	
1 suspect sampling	Rapid Alert Notification	Sample code 0413069578, RASFF Reference: 2014.0201-Information for attention
7 suspect sampling	Fine	
10 (+ 9 suspect sampling)	Warnings	
3 (+ 2 suspect sampling)	No action	

Table 7-2 includes samples that are non-compliant with Danish legislation even where measured pesticide residues did not exceed the EU-MRL.

Table 7-2: Non-compliant samples

Number of non-compliant samples (measured residue do not exceed the MRL)	Action taken	Note
2	One sample: not in agreement with declaration (chlormequat in cereals)	MRL not exceeded
	One sample: residue in organically grown crop (not in agreement with declaration)	MRL not exceeded

In case of imported samples, reasons for MRL non-compliances are unknown and outside the jurisdiction of the National Food Authority

7.4. Quality assurance

Table 7-3 shows the laboratories reporting data analysis in 2013.

Table 7-3: Laboratories reporting data in 2013

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DK	National Food Institute, Technical University of Denmark	DTU Food	20 April 1995 (DANAK #350)	DANAK, Denmark	EUPT: FV15, SM05, AO08, SRM8 FAPAS 0985. Organiser of EUPT-CF7
DK	Danish Veterinary and Food Administration, Region East	FVST Region East	30. September 2008 (DANAK #405)	DANAK, Denmark	EUPT: C7, FV15, AO08, SRM8, FV-T01 RIKILT Parasiticides and Antibiotics 2013 FAPAS: 19143, 19145, 19150, 19153, FAPAS 0591, 19156, 0985, 19160,

7.5. Additional Information

The analytical methods have been developed and/or validated by the National Food Institute, Technical University of Denmark. Most samples were analysed at the laboratory of the Danish Veterinary and Food Adminstration in Ringsted. Both laboratories are accredited to pesticide analysis in compliance with EN45001/ISO17025 by the Danish Accreditation body, DANAK. Furthermore, the laboratories participated in the relevant FAPAS proficiency test scheme and in all EU-proficiency tests.

Guidelines concerning Quality Control Procedures for Pesticide Residue Analysis (EU, 2011) has been applied for all methods. Mass selective confirmation was performed for part of the GC multi methods and for the LC-MS/MS methods for fruit and vegetables. Analytical uncertainty is not applied in monitoring reports, but is always applied in case of enforcement actions.

Each year, the National Food Institute, Technical University of Denmark, and the Danish Veterinary and Food Administration prepare a report on pesticide residues in foods on the Danish market. Since 1st January 2011, the annual pesticide report has been supplemented with the regular publication of control data from each quarter. The quarterly reporting comprises results from samples of fresh and frozen fruit and vegetables as well as cereals – both conventionally and organically grown. The National Food Institute, Technical University of Denmark, prepares and publishes the quarterly reports.

A risk assessment was performed of all findings above the MRL by the National Food Institute. It was concluded in all cases that there was no risk for the consumers besides two samples taken as suspect samples. In addition, all samples, where more than one pesticide residue were found, were evaluated by using the Hazard Index method, using the sum of each residue in relation to the ADI and ARfD, respectively, taking into account the estimated consumption of the sample commodity for an adult and a child. For all samples taken in 2012 with multiple residues it was concluded that the residues were not expected to result in any risk for the consumer.

8. Estonia

8.1. Objective and design of the national control programme

Veterinary and Food Board is responsible for drawing up the pesticide residue monitoring programme which contains two parts. One is the coordinated multiannual control programme of the Union (a legal requirement from Regulation (EC) No 788/2012) and it gives the list of commodities and pesticide residues to be analysed and the number of samples to be taken for year 2013. Another part of the pesticide residue monitoring programme is the national control programme. It contains two inputs prepared by two different competent authorities Veterinary and Food Board (VFB) and Agricultural Board (AB).

The design of the pesticide residue monitoring programme is shown in Figure 8-1.

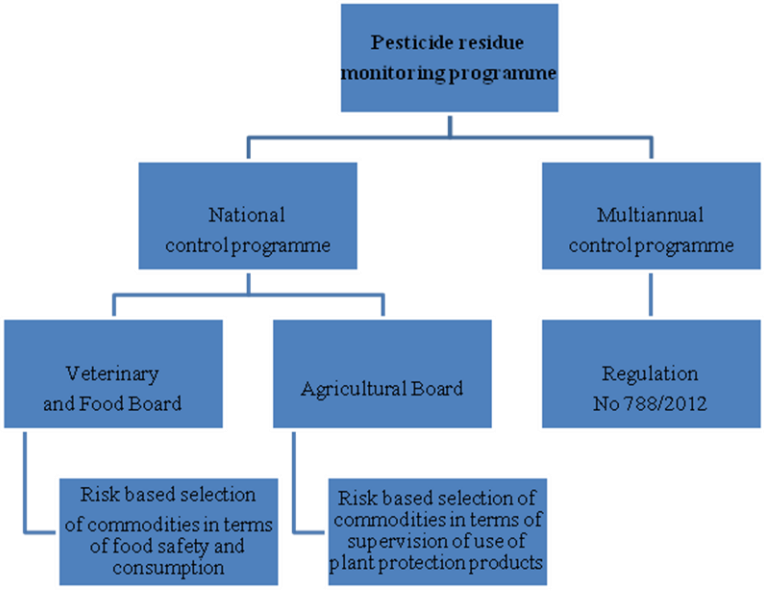


Figure 8-1: Design of the pesticide residue monitoring programme

VFB is a competent authority for food safety and is responsible for implementation of coordinated multiannual control programme of the Union and taking samples in terms of Regulation (EC) No 788/2012. VFB is also taking samples in terms of national control programme and the programme contains commodities which are important for local consumption (e.g. turnip, beetroot etc) and commodities where the MRLs were exceeded in previous years. Due to reduction of financial resources it is not always possible to include these commodities into sampling plan every year.

For AB taking samples is part of the supervision of compliance of using plant protection products at primary production level and contains the most cultivated crops. AB's sampling is based on evaluated risks and the results of previous year's sampling attached in annual control plan. The results are also included in the national control programme.

In year 2013 VFB took 188 and AB 80 samples, all together 268 samples. 35 different food commodities were analysed.

Proportion of sampling at different marketing level is represented in Table 8-1.

Table 8-1: Proportion of sampling

Level of sampling	% of all samples
Primary production	31.7

Level of sampling	% of all samples
Retail	25.7
Storage and wholesale	22.0
Processing and manufacturing	17.5
Border inspection activities	3.0

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

In 2013 there were seven cases of MRL exceedance. The matrices where exceedances were detected were apricots, strawberries and tea.

During previous years there has been infringements in broccoli, apricots, sweet pepper and peaches, beans and spinach.

The level of non-compliant samples (results above MRL after taking into account the measurement uncertainty) has stayed in low level.

In 2010 it was 2.1 % of samples, in year 2011 this number decreased to 0.7 % out of all samples and in year 2012 the number of non-compliant samples was one (0.4 % out of all) and in 2013 this number was 2.6 % of all samples.

So the overall percentage of samples with no residues has stayed in the level near 50 % over the years. In year 2010, this number was 152 samples (53.1 %) out of 286, in year 2011 the number was 175 samples (65.3 %) out of 268, in year 2012 the number was 146 samples (51.9 %) out of 281 and in 2013 this number was 137 samples (51.1 %) out of 268.

The total number of samples analysed, number of samples with no detected residues, number of samples with detected residues and the number of samples with residues above MRL since year 2007 is represented in the Figure 8-2.

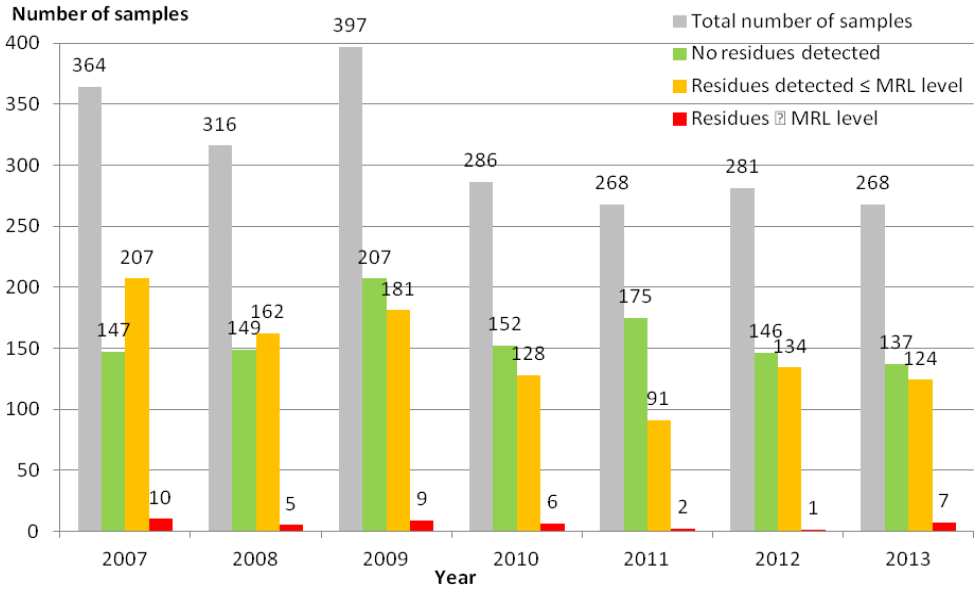


Figure 8-2: Total number of samples with detectable residues and above the MRL

The distribution of samples by its origin in year 2013 was divided into three groups: domestic products 56.3 %, other EU origin 33.2 % and third countries 10.4 % of all samples taken. In year 2013 the commodities analysed from third countries were mainly peaches, wine and table grapes, head cabbages, tomatoes, oranges, tea and citrus fruits (pomelos).

For comparison, Table 8-2 shows a summary of the samples taken in 2010 to 2013 by origin.

Table 8-2: Summary of samples analysed from 2010 to 2013

Region of origin	2010 (% of samples)	2011 (% of samples)	2012 (% of samples)	2013 (% of samples)
Domestic products	66	66	43	56.3
Other EU origin products	30	25	42	33.2
Products from Third countries	4	9	15	10.4

The proportion of organic samples in year 2013 was 1.4 % (4 samples).

In 2012 the laboratories could measure up to 340 different residues and in 2013 this number was 345.

8.3. Non-compliant samples: possible reasons and actions taken

In 2013, 268 samples in total were taken, from which seven were non-compliant (2.6 % of all) due to exceeding MRL (Table 8-3).

One sample of Spanish strawberries (sample code 13-002015JSL/TK) contained tebuconazole residues above MRL. One sample of French apricots (sample code 13-011352JSL/TK) contained esfenvalerate and chlorpyrifos residues above MRL. After conducting risk assessment with EFSA PRIMo model, it was confirmed for both cases that the exceedance of the residue did not posed hazard to the human health.

One sample of tea from China taken at the import control contained multiple residues above MRL and this tea consignment was destroyed.

There were four samples of strawberries from Estonian origin where it was found that the samples contained residues of substances which are not authorised to be used in pesticides in Estonia or on the specific crop (strawberries). The strawberries contained residues of propiconazole and in one case in addition residues of pyrimethanil. Information about the findings was sent from the Veterinary and Food Board to the Agricultural Board (AB) and AB conducted further investigations. The producers did not confirm using plant protection products containing these substances and the investigations did not reveal use of non-authorised plant protection products. As the origin of the strawberries could not be fully determined, it could have been that the origin of the strawberries sampled was not Estonia, but some other country. Reasons for MRL non compliant can be seen in Table 8-4.

Table 8-3: Number of non-compliant samples

Number of non-compliant samples	Action taken	Note
2	Risk assessment activities	Sample codes: 13-002015JSL/TK, 13-011352JSL/TK
1	Consignment was destroyed, not released on the market	Sample codes: 13-000329 JSL/TK
4	Investigation	Sample codes: 13-007765 JSL/TK, 13-007766 JSL/TK, 13-007767 JSL/TK, 13-007768 JSL/TK

Table 8-4: Reasons for MRL non compliant

Product	Residue	Reason for MRL non compliance	Note
Strawberries (1 sample)	tebuconazole	Other	Sample of Spanish origin. No reason possible to determine.

Product	Residue	Reason for MRL non compliance	Note
Apricots (1 sample)	esfenvalerate, chlorpyrifos	Other	Sample of French origin. No reason possible to determine.
Tea (1 sample)	acetamiprid, azinphos-methyl, buprofezin, chlorpyrifos, dimethoate (sum of dimethoate and omethoate expressed as dimethoate), dimethoate, fenvalerate and esfenvalerate (sum of RR and SS isomers), fipronil (sum fipronil and sulfone metabolite (MB46136) expressed as fipronil), fipronil, fipronil-sulfone, hexaflumuron, imidacloprid, methomyl and thiodicarb (sum of methomyl and thiodicarb expressed as methomyl), methomyl	Other	Sample of Chinese origin. No reason possible to determine.
Strawberries (4 samples)	Propiconazole	Use of an approved pesticide on a crop for which the use was not permitted	As the origin of the strawberries could not be fully determined, it could have been that the origin of the strawberries sampled was not Estonia, but some other country.

8.4. Quality assurance

According to Regulation (EC) No 882/2004[20] the competent authority shall designate laboratories that may carry out the analysis of samples taken during official controls. Designated laboratories are assessed (Table 8-5) and accredited in accordance with EN ISO/IEC 17025 (ISO, 2010). The laboratories are accredited by the Estonian Accreditation Centre (EAK) and designated by Veterinary and Food Board for all analytical methods (and residues within these methods) used for official control of pesticide residues in food.

The EU guideline SANCO/12495/2011 (EU, 2011) was implemented as far as practicable for year 2013.

There are three accredited and designated laboratories analyze pesticide residues: Tartu Laboratory of Estonian Health Board (HB), Central Chemistry Laboratory of the Health Board (HBC) and Agricultural Research Centre Laboratory for Residues and Contaminants in Saku (ARC). HB and HBC analyses commodities of animal origin and non-animal origin. ARC analyses commodities of non-animal origin.

Table 8-5: Laboratories assessed to analysed 2013 samples

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
EE	Laboratory for Residues and Contaminants, Agricultural Research Centre	L003	18.06.1996	EAC – Estonian Accreditation Centre	EUPT: C7, FV-SM-05, FV-15, SRM8 FAPAS 19143

[20] Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. OJ L 165, 30.4.2004, p. 1–141.

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
EE	Tartu Laboratory of Estonian Health Board	L019	28.12.1999	EAC – Estonian Accreditation Centre	EUPT: FV15 (potato), AO8 (poultry), SRM8 (potato)
EE	Central Chemistry Laboratory of the Health Board	L042	19.02.2001	EAC – Estonian Accreditation Centre	EUPT: AO8 (raw poultry meat)

9. Finland

9.1. Objective and design of the national control programme

In the design of the monitoring plan in Finland, the following factors have been considered:

- EU Commissions Regulation concerning a coordinated multiannual control programme of the Union.
- Importance of a commodity in national food consumption.
- Food commodities with high residues/non-compliance rate in previous years.
- Number of organic/conventional production samples reflects the market shares.
- Origin of food: domestic, EU or third country.
- RASFF notifications.
- Co-operation possibilities in sampling with different contaminant projects.
- Needs of the national risk assessment projects.

The selection criteria for pesticide residues and metabolites included into the control program are the following:

- Those pesticides which are commonly used and which are known to leave residues in foods are included. Frequency of pesticide findings in the EU-monitoring reports is used as selection criteria.
- Pesticides listed in the Regulation concerning a coordinated multiannual control programme are included as far as possible.
- Toxicity of the active substances is considered e.g. many toxic OP-compounds which are not commonly used anymore are still included (they may occur in samples originating from the developing countries).
- Pesticides that are authorized for use in Finland are included into the program when relevant.
- Multiresidue analyses are preferred, as the cost of analysis in case of single residue methods is higher. If many single residue analyses are performed the total number of samples to be analysed is decreased.
- Single residue methods are run as required by the EU coordinated programme and a limited number of other samples. Instrument and personnel capacity in the laboratories is limiting the number of single residue analyses.

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

The total number of samples analysed under the national and EU coordinated programs was 2 408, which is 7 % more than previous year. This total number includes 195 follow-up enforcement samples or samples based on the Regulation (EC) No 669/2009. The number of samples taken under the EU coordinated program was 466.

The distribution of the samples by origin was: domestic 13 %, EEA 40 %, other countries not EEA 45 % and unknown 2 %.

51 % of all samples had residues of one or more pesticide active ingredients. Exceedances of MRLs were found in 122 samples and 66 of them were non-compliant (measurement uncertainty taken in to consideration; including surveillance and enforcement samples). The percentage of non-compliances (2.7 %) increased slightly compared to previous year (2.2 %). The non-complying lots originated from 17 different countries. Highest number of non-compliances was in Indian products as 19 lots were rejected. Several non-complying samples were found also in products of Egypt (6), Thailand (6) and Spain (5). Twelve non-complying samples originated from EEA countries including three domestic samples. In addition two domestic leek samples had residues of pesticides which are not authorised in Finland to be used on leek. Information of these misuses was forwarded to the authorities responsible for the control of pesticide usage.

Most non-compliant samples were fresh or frozen vegetables and fruit and other plant products. Only five processed products and two cereal samples were non-compliant. The commodities with most non-compliant were tea (nine samples), basil and other fresh herbs (9), leaf vegetables and spinach (7), oranges (6) and currants (5). The baby food samples and samples of foods of animal origin did not contain any residues.

This year 195 enforcement samples were taken from fruits and nuts (105), vegetables (57) and tea (33). Only 12 enforcement samples were from EEA countries. The number of non-compliances was 19 (9.7 %). Among the enforcement samples there were 130 samples taken in the framework of Regulation (EC) No 669/2009. Ten samples (7.7 %) of these were non-complying.

466 samples were taken under the EU coordinated program. All samples were compliant.

A total of 227 samples from organic production were analysed. 26 samples had residues above reporting limit. In six samples the residues exceeded the MRLs and five samples were non-compliant.

The number of multiresidue compounds analysed from samples of plant origin was 327 active ingredients and metabolites. From animal products (other than honey) 74 compounds were analysed.

9.3. Non-compliant samples: possible reasons and actions taken

In 2013, 2.7 % of the samples (66 samples in total) were found to be non-compliant with the EU MRLs.

For five samples RASSF notifications were issued.

Table 9-1 shows the following follow-up actions taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration). Table 9-2 gives the possible reasons for MRL non compliant.

Table 9-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
19	Warnings Administrative sanctions	Enforcement samples. The lots were detained and destroyed under customs control or sent back to the seller by permission of authorities in the country of origin.
47	Administrative sanctions	The lot partly or totally consumed. The remaining part detained and destroyed or sent back to the seller by permission of authorities in the country of origin. Enforcement sampling on next coming import lots.

Number of non-compliant samples	Action taken	Note
5	RASFF notification – border rejection - lot detained- no distribution	Sample code: 13-00885-02, RASFF ref: 2013.ASK Sample code: 13-02266-02, RASFF ref: 2013.AYA Sample code: 1-02964-02, RASFF ref: 2013.BCK Sample code: 13-04045-03, RASFF ref: 2013.BKP Sample code: 13-04532-01, RASFF ref: 2013.BKO
1	RASFF notification - product distributed, recall from consumers	Sample code: 13-02730-04, 13-02885-01 and 13-02885-02, RASFF ref: 2013.0652
1	RASFF notification – product already consumed	Sample code: 13-08384-01, RASFF ref: 2014.009
1	Recall from consumers	Turnips Sample code: MLAB 2013-11851-01. The lot partly consumed. The remaining part detained and destroyed under the control of competent authority of Uusikaupunki.

Table 9-2: Possible reasons for MRL non compliance

Product	Residue	Reasons for MRL non-compliance	Note
Basil	carbendazim, clofentezine, thiophanate-methyl, tetraconazole	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	Kenya, India, Israel
Basil	anthraquinone	Use of a pesticide which is not approved in the EU	Uganda
Basil	triazophos	Use of a pesticide which is not approved in the EU	India
Beans (dry)	methamidophos, acephate	Use of a pesticide which is not approved in the EU	Thailand
Beans (with bods)	profenofos	Use of a pesticide which is not approved in the EU	Uganda
Brussels sprouts	tau-fluvalinate	Use of an approved pesticide on a crop for which the use was authorised, but not respecting the GAP (dose rate, PHI, etc)	Finland
Carrots	iprodione	Use of an approved pesticide on a crop for which the use was authorised, but not respecting the GAP (dose rate, PHI, etc)	Israel
Cucurbits (inedible peel)	acephate	Use of a pesticide which is not approved in the EU	India
Currants	propargite	Use of a pesticide which is not approved in the EU	Poland, Morocco
Currants	fenazaquin	Use of an approved pesticide on a crop for which the use was authorised, but not respecting the GAP (dose rate, PHI, etc)	Poland
Fresh herbs	ethion, profenofos, triazophos, acephate	Use of a pesticide which is not approved in the EU	India
Herbal infusions	anthraquinone, propargite	Use of a pesticide which is not approved in the EU	Russia, USA
Kale	pirimicarb	Use of an approved pesticide on a crop for which the use was authorised, but not respecting the GAP (dose rate, PHI, etc)	Spain
Onions	methamidophos	Use of a pesticide which is not approved in the EU	Peru
Oranges	profenofos, diazinon	Use of a pesticide which is not approved in the EU	Egypt

Product	Residue	Reasons for MRL non-compliance	Note
Oranges	dimethoate	Use of a pesticide on a crop for which no import tolerance is set.	Egypt
Peppers	profenofos, triazophos, ethion	Use of a pesticide which is not approved in the EU	India, Thailand
Peppers	methiocarb	Use of an approved pesticide on a crop for which the use was authorised, but not respecting the GAP (dose rate, PHI, etc)	Spain
Peppers	methomyl	Use of a pesticide on a crop for which no import tolerance is set.	Spain
Scarole (broad-leaf endive)	phorate, triadimefon	Use of a pesticide which is not approved in the EU	Spain
Spring Onions	chlorfenapyr	Use of a pesticide which is not approved in the EU	Thailand
Spring Onions	carbendazim, diflubenzuron, fipronil	Use of a pesticide on a crop for which no import tolerance is set.	Thailand
Tea	quintozene	Use of a pesticide which is not approved in the EU	India
Tea	acetamiprid, buprofezin, dimethoate, fipronil, imidacloprid, methomyl, 2-phenylphenol	Use of a pesticide on a crop for which no import tolerance is set.	China, India, Taiwan
Turnip	dimethoate	Use of an approved pesticide on a crop for which the use was not (or no longer) permitted.	Finland

9.4. Quality assurance

Table 9-3 gives the laboratories participating in the 2013 control programme.

Table 9-3: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FI	Finnish Customs Laboratory	FI01	24/03/2014	FINAS-Espoo, Finland	EUPT: FV15, C7, SRM8, FV-SM5, FV-T01, FAPAS 0592, IMEP-37 BIPEA 05-03019, 04-3219, 0619-066, 08-0619, 04-2619, 3119-0026, 04-3119, 03-0519
FI	MetropoliLab Oy	FI02	30/06/2014	FINAS-Espoo, Finland	EUPT: FV15
FI	Finnish Food Safety Authority	FI03	29/11/2013	FINAS-Espoo, Finland	FAPAS 0984, 0587 EUPT: AO-08, SRM8, CF7

10. France

10.1. Objective and design of the national control programme

- Ministry of Economy and Finance - Directorate General for Competition, Consumption and Fraud DGCCRF

The program for monitoring and control of pesticide residues in plant products is planned and implemented by the Directorate General for Competition, Consumption and Repression of Fraud (DGCCRF). Three laboratories belonging to the Common Service Laboratories for DGCCRF and Customs (SCL), that analyse the samples. One of these laboratories is located overseas and focuses primarily on local productions. The other two analysed all types of plant food present on the French market, including both raw materials and processed products.

Programs distinguish three sampling strategies called 'surveillance' for random samples (including the ones in the EU coordinated program), 'control' for targeted sampling (based on a high probability of non-compliance, such as winter salads or on specific problems, such as chlordecone in root vegetables) and 'enhanced import controls' for samples taken under Regulation (EC) No 669/2009.

The samples are taken by local experienced inspectors of the DGCCRF, following procedures comply with the European regulations.

The sampling plan was developed with the assistance of ANSES (National Agency for the Safety of Food, Environment and Labour). It takes into account not only the requirements of the EU coordinated program but also the calculation of the exposure to risk (frequency of detection of different active substances, weighted by the importance of their matrices in the French consumption on chronic and acute risks for different segments of the population) and the exceeding of the maximum residue levels recorded in previous years.

Beyond the indications provided in the initial plans, additional analyses can be performed on products that have been notify to the RASFF system, or where non-compliance was found during the previous sampling.

Samples can be taken at all stages of the marketing, but are preferably to be sample from the closest placed to the markets (wholesaler, importer).

For multi-residue analysis, Quechers method (NF EN 15662) is used by all laboratories. However, for very specific or ad hoc analysis (in the case of notifications) the SCL Laboratories generally indicate that the NRL performs the analysis using develop method in-house in the absence of validated mehtods. The laboratories also follow the recommendations of the EURLs when a specific method is updated (e.g QuPPe method).

Laboratories are accredited by the French Accreditation Committee (COFRAC). The overseas laboratory was accredited late 2012 to detect chlordecone in products of plant origin.

- Ministry of Agriculture and Agri-Food and Forest - Directorate General of Food: DGAL

A national monitoring programme for plant pesticide residues at farm gates is planned and carried out by the General Directorate of Food. Nine laboratories, three belonging to the Common Laboratory Network (SCL) for both DGCCRF and Customs affairs and six laboratories registered by the French Ministry of Agriculture as official laboratories, analysed the samples. The authorisation of laboratories is based on their accreditation on pesticides residue analyses given by the national competent authority and their participation in the proficiency tests or interlaboratory tests results.

This sampling programme is identified as 'control' – ST 20A for targeted samples (based on high probability of non compliance) and concern domestic production.

Sampling is performed by trained inspectors of the local services of the DGAL called DRAAF at primary production. Procedures follow Directive 2002/63/EC, transposed in national legislation by an order signed on the 12th of December 2002 and publish in the national official journal the 20th of December 2002 and respect the parts of the products to which the MRLs apply fixed in Annex I to Regulation (EC) No 396/2005.

The plant pesticide residue sampling scheme is based on a risk analysis. It takes in account:

- the results of previous national monitoring plans for the 3 last years (DGAL, DGCCRF),
- the results of previous European monitoring plan,
- the calculation of exposure at the chronic and acute risks made by EFSA on the last European monitoring results,
- the scientific and technical opinion of ANSES (French Agency for Food, Environmental and Labour Safety) on national monitoring program given to DGCCRF,
- the national monitoring program of DGCCRF based on the EU monitoring,
- the notifications in the RASFF for French and bordering countries product for the three last years,
- the MRL changes associated to French uses of the corresponding PPP,
- the changes in French uses authorisations (added and retired for the three last years),
- the previous DGAL programs (rotation in the crops selected),
- the importance of the crop in national production and the geographic repartition on the territory.

Beyond the takings planned in the initial plans, additional analyses can be made on commodities suspected to be non compliant according the interpretation of the farmer's treatment register or for which non-compliance was noticed during a previous taking.

The sample distribution among the nine laboratories is based on the capacity of the laboratories (relevance of the list of pesticide residue analysed – taking into account residue definition - is considered for each crop) and their geographic localisation.

The nine labs are accredited by the French Committee for Accreditation (COFRAC) under the norm ISO 17025 (ISO, 2010) for the analysis of pesticide residue in fruits and vegetables. The obviousness is that accreditation for multiresidue methods are appreciably difficult and expensive, because it needs validation for each pesticide and each class of matrix. Nevertheless, the accreditation field is focused on often found residues or the most relevant.

The Quechers method is used by all laboratories. However, for very specific or punctual analyses, the samples can be sent to labs recognized competent to do specific method by the COFRAC and registered by the French Ministry of Agriculture (six are registered for the moment).

The realisation of the official analysis is framed by a statement of work based on the SANCO/12495/2011 (EU, 2011) recommendations.

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

- Ministry of Economy and Finance - Directorate General for Competition, Consumption and Fraud DGCCRF

The number of samples taken in 2013 was slightly lower compared to 2012 (5 144 against 5 410). The main results are outlined in Table 10-1.

Table 10-1: Number of samples taken in 2013

Food product	Total number of samples	Total number of samples without residues	Above MRL	Non compliance
Fruits, vegetables and other plant products	4 293	2 152 (50 %)	316 (7.4 %)	188 (4.4 %)
Processed products	436	265 (61 %)	1 (0.2 %)	1 (0.2 %)
Cereals	349	154 (44 %)	10 (2.9 %)	7 (2 %)
Baby food	30	26 (87 %)	0 (0 %)	0 (0 %)
Products of animal origin	36	36 (100 %)	0 (0 %)	0 (0 %)
Total	5 144	2 633 (51 %)	327 (6.4 %)	196 (3.8 %)

The rate of non-compliance has increased compared to 2012 mainly because of the increasing number of enhanced import controls.

- Ministry of Agriculture and Agri-Food and Forest - Directorate General of Food: DGAL

769 samples were taken at primary production but only 633 of them respected the Regulation (EC) No 396/2005 and Directive 2002/63/EC (see Table 10-2).

Table 10-2: Number of samples analysed

Commodities	Number of samples	Number of samples without residue	> MRL	Non compliant
Fruits and vegetables	633	329	13	8
Total	633	329 (51.97 %)	13 (2.05 %)	8 (1.26 %)

10.3. Non-compliant samples: possible reasons and actions taken

- Ministry of Economy and Finance - Directorate General for Competition, Consumption and Fraud DGCCRF

Of the 196 non-compliance samples in 2013, 78 have been reported in the RASFF system. The action taken is summarised in Table 10-3.

Table 10-3: Action taken in the non-compliant sample

Number of non-compliant samples[(a)]	Action taken	Note
71	reminder in law	

Number of non-compliant samples[(a)]	Action taken	Note
7	litigation and prosecution	
1	consignment	
60	destruction	
78	RASFF notification	

(a): the total number of samples is not equal to 196 because several measurements have been done in the same sample.

- Ministry of Agriculture and Agri-Food and Forest - Directorate General of Food: DGAL

In 2013, eight non-compliance samples were notified. The actions taken are summarised in **Table 10-4**. Table 10-5 lists the samples exceeding the MRL.

Table 10-4: Action taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
8	administrative consequences and reminder in law	

Table 10-5: List of samples exceeding the MRL

Laboratory sample code	Matrix	Parameter	Results (mg/kg)	Status
CAMP-RH0101130009	celery	pyrimethanil	0.055	MRL exceedance
CAMP-PA1303130036	celery	tau-fluvalinate	0.055	MRL exceedance
CAMP-PA1303130048	spinach	dithiocarbamates (dithiocarbamates expressed as CS_2, including maneb, mancozeb, metiram, propineb, thiram and ziram)	0.19	MRL exceedance
CERECO-MY9703130028	tomatoes	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	0.05	MRL exceedance
GIRPA-PA8403130004	lettuce	oxamyl	0.085	MRL exceedance
SCL35-PC8601130045	kohlrabi	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	0.038	MRL exceedance
SCL34-PA8403130018	cherries	thiacloprid	0.16	MRL exceedance
SCL34-PL4903130008	cherries	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	0.2025	MRL exceedance

10.4. Quality Assurance

- Ministry of Economy and Finance - Directorate General for Competition, Consumption and Fraud DGCCRF

The laboratories under the DGCCRF analysing samples in 2013 are listed in Table 10-6.

Table 10-6: Laboratories under DGCCRF

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	SCL – Laboratoire de Montpellier	SCL34	1997	French Accreditation Committee	EUPT: FV-SM05, FV-T01, FV15, SRM08 Bipea COIPT: olive oil
FR	SCL – Laboratoire de Massy	SCL91	1996	French Accreditation Committee	EUPT: FV15, CF7, SRM08, FV-SM05, FV-T01 COIPT: olive oil FAPAS

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	SCL - Laboratoire de Jarry	SCL971	End 2012	French Accreditation Committee	NRL-SRM : PT on chlordecone
FR	SCL – Laboratoire de Rennes	SCL35	2008	French Accreditation Committee	EUPT: FV15, CF7

- Ministry of Agriculture and Agri-Food and Forest - Directorate General of Food: DGAL

The laboratories under the DGAL analysing samples in 2013 are listed in Table 10-7.

Table 10-7: Laboratories under DGAL

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	SCL – Laboratoire de Montpellier	SCL34	1997	French Accreditation Committee	EUPT: FV15, SRM08, FV-T01, FV-SM05 COIPT: olive oil BIPEA
FR	SCL – Laboratoire de Massy	SCL91	1996	French Accreditation Committee	EUPT: CF7, FV15, FV-SM05, FV-T01, SRM08 COIPT: olive oil FAPAS
FR	SCL – Laboratoire de Rennes	SCL35	2008	French Accreditation Committee	EUPT: FV15, CF7 COIPT: olive oil
FR	CAPINOV	CAPINOV	1993	French Accreditation Committee	EUPT: SRM08, FV15, FV-SM05
FR	CAMP	CAMP	1999	French Accreditation Committee	EUPT: SRM08, FV15, FV-SM05
FR	CERECO	CERECO	2001	French Accreditation Committee	EUPT: SRM08, FV15, FV
FR	FYTOLAB	FYTOLAB	2001	French Accreditation Committee	EUPT: SRM08, FV15, FV
FR	GIRPA	GIRPA	2007	French Accreditation Committee	EUPT: SRM08, FV15, FV
FR	INOVALYS 72	LD72	2009	French Accreditation Committee	EUPT: SRM08, FV15, FV

The laboratories analysing products of animal origin (pork and milk) are presented in Table 10-8.

Table 10-8: Laboratories analysis animal origin samples

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	LABEO Franck Duncombe	LDV 14		French Accreditation Committee	EUPT: AO08
FR	Laboratoire Départemental de la Côte d'Or	LDV 21		French Accreditation Committee	EUPT: AO08
FR	LABOCEA	LDV 22		French Accreditation Committee	EUPT: AO08

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
FR	Laboratoire Départemental 31	LDV 31		French Accreditation Committee	EUPT: AO08
FR	Laboratoire Départemental des Pyrénées et des Landes	LDV 40		French Accreditation Committee	EUPT: AO08
FR	Laboratoire Départemental d'Analyses du Morbihan	LDV56		French Accreditation Committee	EUPT: AO08
FR	INOVALYS 72	LDV72		French Accreditation Committee	EUPT: AO08
FR	LASAT	LDV79		French Accreditation Committee	EUPT: AO08
FR	Laboratoire Départemental d'Analyses de la Vendée	LDV85		French Accreditation Committee	EUPT: AO08
FR	Laboratoire d'analyses et de recherches de la Haute-Vienne	LDV87		French Accreditation Committee	EUPT: AO08

11. Germany

11.1. Objective and design of the national control programme

Germany's multi-annual national programme for control of pesticide residues in and on foodstuffs serves the planning of official controls to make sure that residues in food of animal or plant origin do not lead to inacceptable risks to health. Investigations under this programme aim to evaluate consumers' exposure to pesticide residues and control compliance with legal regulations.

The control programme is jointly developed by the Federal Government and the Federal states (Länder). Each programme covers a period of three years and is updated each year and submitted to the Commission and EFSA three months before the end of the current calendar year at the latest, in accordance with Article 30 (1) 2 of Regulation (EC) No 396/2005.

To reach both the aim of evaluating consumer exposure and of monitoring legal compliance, part of the samples are analysed following the provisions set out in a multi-annual national monitoring plan. This plan has been specifically conceived to measure pesticide residues, to the end of determining consumers' exposure on a national scale. Sampling is made at random and is based on the conditions of the German market, as regards the origin of samples and their distribution over conventional and organic farming.

A much larger amount of samples is taken and analysed on a risk basis and at all levels of trade (import, wholesale, retail sale, production), on the basis of uniform criteria, which allows to integrate the sampling plans separately developed by the Länder into one national sampling plan.

The following criteria have been set up for the selection of products to be sampled, in order to allow a uniform approach to developing the multi-annual national control plan, and integration of the Länders' plans into a national sampling plan in a transparent manner:

- 'Hard' criteria:
    - Product risk as defined in a health risk assessment of the respective product (risk to population, risk to sensitive consumer groups, food with potential risks), while considering the product's dietary importance.
    - Amount of production/import/distribution of the food product in question.
    - Frequency of non-compliance with residue levels, frequency of complaints.
    - Frequency of findings (distribution of frequency), frequency of multiple residues.
    - Findings under the monitoring programme; findings reported in the Annual Report pursuant to Article 32 of Regulation (EC) No 396/2005.
- 'Soft' criteria:
    - Seasonal particularities (for instance, early strawberries: sampling should be concentrated at the beginning of the season, to allow forecasts of trends in residue findings).
    - Origin and regional particularities (for instance, regional prevalence of certain crops).
    - Consideration of findings in controls performed by the Crop Protection Services of the Länder (for instance, findings about improper or unauthorised use of plant protection

products, or suspicion of residues of unauthorised use of plant protection products or use of banned products).

- Information of the public/public perception of pesticide residues.
- Type of farming (such as ecological/conventional, small-scale/large-scale cropping).
- Efficiency of producers'/suppliers' self-control systems.

With both control programmes, sampling and actual analyses are performed by the competent authorities of the Länder. Analytic results are delivered to the BVL. The BVL compiles the data submitted by the Länder, makes an assessment, and sends the data to the European Commission, to EFSA, and to the other Member States, in accordance with Article 31(1) of Regulation (EC) No 396/2005. In addition, the programme results are published annually in a "National Report about Residues of Plant Protection Products in Foodstuffs". They serve as a basis for discussing risk-minimising measures in the field of food safety.

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

In 2013 in Germany a total of 17 473 samples (17 029 surveillance and 444 follow-up enforcement samples) were tested for pesticide residues. Of these samples, 7 968 were from products produced in Germany, 4 538 samples came from within the EU, 3 169 samples were produced outside of the EU and 1 798 of the samples had an unknown origin. The samples included 13 765 samples of fruits, vegetables and other plant origin, 656 samples of cereals, 1 834 samples of animal products, 349 samples of baby food and 869 samples of processed products.

The participating laboratories reported a total of 5 408,526 analyses for the food samples. The samples were analysed for a total of 837 different pesticides (excluding isomers and metabolites) from which 347 were detected at least in one sample. Residues of 138 individual pesticides exceeded MRLs.

In 6 101 (35.8 %) surveillance samples no residues of pesticides could be quantified (2012: 37.1 %). In 10 530 (61.8 %) surveillance samples residues of pesticides were quantified at or below MRLs (2012: 60.3 %). 398 (2.3 %) surveillance samples contained residues of pesticides exceeding MRLs (2012: 2.6 %). 221 (1.3 %) samples had residues non-compliant with the MRL (2012: 1.5 %).

In 157 (35.4 %) follow-up enforcement samples no residues of pesticides could be quantified (2012: 45.8 %). In 259 (58.3 %) follow-up enforcement samples residues of pesticides were quantified at or below MRLs (2012: 49.5 %). 28 (6.3 %) follow-up enforcement samples contained residues of pesticides exceeding MRLs (2012: 4.8 %). 17 (3.8 %) samples had residues non-compliant with the MRL (2012: 3.4 %).

1 742 samples of 17 473 (10.0 %) were from products produced under the rules of organic farming. In 584 (33.5 %) samples residues of pesticides could be quantified. Only 18 (1.0 %) of organic samples contained residues of pesticides exceeding MRLs. The sampling strategies for these products varied between the States. Some have special programs; others take samples rather by chance.

Multiple residues were found and quantified in 39.7 % of all samples (2012: 36.6 %).

11.3. Non-compliant samples: possible reasons and actions taken

In 2013, 1.4 % of the samples (238 samples in total) were found non-compliant with the EU MRL. For five samples RASF notifications were issued.
The follow-up actions taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration) can be seen in Table 11-1.

Table 11-1: Follow-up actions taken in case of non-compliant samples

Number of non-compliant samples	Action taken	Note
83	Administrative consequences	
5	Rapid Alert Notification	Sample codes: 729194609412820695; 8926120406234322464; 4325864585406718146; 273794476068520605; 6969978089060052029
11	Warnings	
9	Lot not released on the market	
8	Lot recalled from the market	
28	No action	
58	Other	Forwarded to competent authority
2	Other	Lot rejected at the border
39	Other	Next three consignments are withheld at Frankfurt Border Inspection Post (BIP) and tested for pesticides. Release only after negative test results. Administrative offence by Local Competent Authorities.

The possible reasons for the MRL exceedances (Table 11-2) were submitted in only 46 cases from the competent authorities in the Federal States. In all other cases the information was not available.

Table 11-2: Possible reasons for the MRL exceedances

Product	Residue	Reason for MRL non compliance	Note
Blackberries	Trifloxystrobin	Contamination: spray drift	
Peas (with pods)	BAC, Sum of BAC 10, BAC 12, BAC 14 and BAC 16	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peas (without pods)	DDAC	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Figs	Ethephon	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Fresh Herbs	Chlorate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Fresh Herbs	Chlorpyrifos	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Fresh Herbs	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide non-authorised on the specific crop	
Poultry — chicken, geese, duck, turkey and Guinea fowl — ostrich, pigeon Meat	Mercury compounds (sum of mercury compounds expressed as mercury)	Residues resulting from other origin than plant protection treatment (e.g. biocides, veterinary medicines)	
Pomegranate	Thiacloprid	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance	Note
Lettuce	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide non-authorised on the specific crop	
Kale	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Other (please specify in the 'Note' column)	Probably over-dosage, investigations will continue in the next season.
Kale	Iprodione	Other (please specify in the 'Note' column)	Probably over-dosage, investigations will continue in the next season.
Kale	Linuron	Other (please specify in the 'Note' column)	Probably over-dosage, investigations will continue in the next season.
Kale	Metobromuron	GAP not respected: use of pesticide non-authorised on the specific crop	
Kale	Pyraclostrobin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Kale	Pyraclostrobin	GAP not respected: use of pesticide non-authorised on the specific crop	
Kale	Tebuconazole	Other (please specify in the 'Note' column)	Probably over-dosage, investigations will continue in the next season.
Eggs Chicken	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Contamination: residues resulting from previous use of a pesticide (e.g. persistent pesticides no longer authorised, soil residues taken up in succedding crops)	old wood (shredded for litter/bedding) has previously (years ago) been used for construction purposes and therfore been treated with pesticides
Currants (red, black and white)	Tebufenozide	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Potatoes	Fluazifop-P-butyl (fluazifop acid (free and conjugate))	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Head cabbage	Fluazifop-P-butyl (fluazifop acid (free and conjugate))	GAP not respected: use of pesticide non-authorised on the specific crop	
Cultivated fungi	DDAC	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Kumquats	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	Contamination: spray drift	

Product	Residue	Reason for MRL non compliance	Note
Kumquats	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Limes	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Melons	BAC, Sum of BAC 10, BAC 12, BAC 14 and BAC 16	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Melons	BAC, Sum of BAC 10, BAC 12, BAC 14 and BAC 16	Residues resulting from other origin than plant protection treatment (e.g. biocides, veterinary medicines)	
Papaya	Fenpropathrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Papaya	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peppers	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peppers	DDAC	Residues resulting from other origin than plant protection treatment (e.g. biocides, veterinary medicines)	
Peppers	Metominostrobin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peppers	Propiconazole	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Peppers	tau-Fluvalinate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Passion fruit	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Passion fruit	Lambda-Cyhalothrin	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	

Product	Residue	Reason for MRL non compliance	Note
Passion fruit	Propamocarb (Sum of propamocarb and its salt expressed as propamocarb)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Passion fruit	Thiacloprid	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Persimmon	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Rocket, Rucola	Indoxacarb as sum of the isomers S and R	GAP not respected: use of pesticide non-authorised on the specific crop	
Swine Liver	Mercury compounds (sum of mercury compounds expressed as mercury)	Residues resulting from other origin than plant protection treatment (e.g. biocides, veterinary medicines)	
Celery	BAC, Sum of BAC 10, BAC 12, BAC 14 and BAC 16	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Folpet	Contamination: spray drift	Probably drift from neighbouring vineyard.
Table grapes	Methomyl and Thiodicarb (sum of methomyl and thiodicarb expressed as methomyl)	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Table grapes	Trimethyl-sulfonium cation, resulting from the use of glyphosate	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	
Wild fungi	Mercury compounds (sum of mercury compounds expressed as mercury)	Residues resulting from other origin than plant protection treatment (e.g. biocides, veterinary medicines)	

11.4. Quality assurance

In the national control programme of 2013, 31 accredited laboratories took part (Table 11-3).

Table 11-3: Laboratories involved in the 2013 national control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Chemisches und Veterinäruntersuchungsamt Freiburg, 79114 Freiburg Bissierstr. 5	082102	02.12.2008	SAL-Wiesbaden	FAPAS: 0587, 0593 Bipea: 19g-011-Pesticides-Honey (RCIL No 2012-2013-0521), 19g-013-Pesticides-Honey (RCIL No 2013-2014 0119), 19g-014-Pesticides-Honey (RCIL No 2013-2014-0248)

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Chemisches und Veterinäruntersuchungsamt, Stuttgart, 70736 Fellbach, Schaflandstr. 3/2	082107	05.01.2009	SAL-Wiesbaden	EUPT: FV 15 Austrian NRL: Pesticide residues in rice (homogenate)
DE	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, Dienststelle Oberschleißheim, 85764 Oberschleißheim, Veterinärstraßhe 2	092811	29.06.2009	SAL-Wiesbaden	PT Parasiticides/Antibiotics in Salmon 13/RIK0416 (RIKILT, Wageningen, The Netherlands) EUPT: AO 08
DE	Bayerisches Landesamt für Gesundheit und Lebensmittelsicherheit, 91058 Erlangen, Eggenreuther Weg 43	092821	29.06.2009	SAL-Wiesbaden	EUPT: SRM8, FV15, FV-SM05, FV-T01 PTS 66 01-0466 - Multiresidue screening of Pesticides (matrix: honey), Bipea, Frankreich
DE	Landeslabor Berlin-Brandenburg, Dienstsitz Berlin, 10557 Berlin, Invalidenstr. 60	112001	ab 17.07.2013	DakkS	EUPT: AO08, SRM8
DE	Landeslabor Berlin-Brandenburg, Dienstsitz Frankfurt (Oder), 15236 Frankfurt (Oder), Gerhard-Naumann-Straße 2/3	122104	ab 17.07.2013	DakkS	EUPT: FV15, SRM8
DE	Landesuntersuchungsamt für Chemie, Hygiene und Veterinärmedizin, 28217 Bremen, Lloydstraße 4	042101	13.02.2009	AKS-Hannover	EUPT: AO08, FV15, FV-T01
DE	Institut für Hygiene und Umwelt, 20539 Hamburg, Marckmannstr. 129a	022020	26.09.2008	AKS-Hannover	EUPT: AO08, FV15,FV-T01, SRM8
DE	Landesbetrieb Hessisches Landeslabor, FG I.3 Datenmeldestelle, 65203 Wiesbaden, Glarusstraße 6	062109	02.12.2008	SAL-Wiesbaden	EUPT: FV15

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Landesamt für Landwirtschaft, Lebensmittelsicherheit und Fischerei Mecklenburg-Vorpommern, 18059 Rostock, Thierfelderstr. 18	132101	10.03.2009	AKS-Hannover	EUPT: AO08, CF7, FV15, SRM8
DE	Niedersächsisches Landesamt für Verbraucherschutz und Lebensmittelsicherheit-Lebensmittelinstitut Braunschweig-38124 Braunschweig Dresdenstr. 2 und 6	032001	19.03.2009	AKS-Hannover	EUPT: AO08, CF7, FV15, FV-SM05, SRM8 COIPT-13
DE	Niedersächsisches Landesamt für Verbraucherschutz und Lebensmittelsicherheit-Lebensmittelinstitut Oldenburg-26133 Oldenburg Martin-Niemöller-Straße 2	032002	12.09.2008	AKS-Hannover	EUPT: AO08, CF7, FV15, FV-SM05, SRM8 COIPT-13
DE	Niedersächsisches Landesamt für Verbraucherschutz und Lebensmittelsicherheit-Lebensmittel- und Veterinärinstitut Oldenburg-26133 Oldenburg Martin-Niemöller-Straße 2	032010	12.09.2008	AKS-Hannover	EUPT: AO08, CF7, FV15, FV-SM05, SRM8 COIPT-13
DE	Staatliches Veterinäruntersuchungsamt Arnsberg, 59821 Arnsberg, Zur Taubeneiche 10-12	052101	23.04.2009	SAL-Wiesbaden	EUPT: FV15, SRM8
DE	Stadt Bochum, Chemisches Untersuchungsamt, 44793 Bochum, Carolinenglückstr. 27	052107	23.04.2009	SAL-Wiesbaden	EUPT: FV15, SRM8
DE	Chemisches und Lebensmitteluntersuchungsamt, 44791 Bochum, Westhoffstraße 17	052109	23.04.2009	SAL-Wiesbaden	EUPT 2013: FV 15, SRM8

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Stadt Hagen Chemisches Untersuchungsamt 58099 Hagen Pappelstraße 1	052114	23.04.2009	SAL-Wiesbaden	EUPT: FV15, SRM8
DE	Stadt Hamm Chemisches Untersuchungsamt 59073 Hamm Sachsenweg 6	052115	23.04.2009	SAL-Wiesbaden	EUPT: FV15, SRM8
DE	Chemisches und Veterinäruntersuchungsamt Ostwestfalen-Lippe CVUA-OWL 32717 Detmold Postfach 2754	052203	05.01.2009	SAL-Wiesbaden	EUPT: AO08, SRM8
DE	Chemisches und Veterinäruntersuchungsamt Rhein-Ruhr-Wupper CVUA-RRW 47798 Krefeld Deutscher Ring 100	052306	05.01,2009	SAL-Wiesbaden	EUPT: AO08, CF7, FV15, FV-SM05, SRM8, FV-T01
DE	Landeshauptstadt Düsseldorf Amt für Verbraucherschutz Chemische und Lebensmitteluntersuchung 40468 Düsseldorf Ulmenstraße 215	052311	16.12.2009	SAL-Wiesbaden	EUPT: FV15, SRM8, FV-T01
DE	Kreisverwaltung Mettmann Amt für Verbraucherschutz Chemische und Lebensmitteluntersuchungen 40822 Mettmann Düsseldorfer Str. 26	052319	16.12.2009	SAL-Wiesbaden	EUPT: FV15, SRM8, FV-T01
DE	CVUARheinland 52068 Aachen Blücherplatz 43	052403	12.08.2008	SAL-Wiesbaden	EUPT: AO08, FV15, SRM8, FV-T01
DE	Chemisches und Veterinär-untersuchungsamt Münsterland-Emscher-Lippe CVUA-MEL 48147 Münster Joseph-König-Straße 40	052502	23.04.2009	SAL-Wiesbaden	EUPT: AO08, FV15, FV-SM05, SRM8
DE	Landesuntersuchungsamt Abteilung Tiermedizin 56073 Koblenz Blücherstr. 34	072104	05.01.2009	SAL-Wiesbaden	EUPT: AO08, FV15, SRM8

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
DE	Landesuntersuchungsamt Institut für Lebensmittelchemie 67346 Speyer Nikolaus-von-Weis-Str. 1	072107	05.01.2009	SAL-Wiesbaden	EUPT: AO08, FV15, SRM8
DE	Landesamt für Soziales, Gesundheit und Verbraucherschutz Abt. G (Lebensmittelchemie) 66115 Saarbrücken Hochstrasse 67	101101	29.06.2009	SAL-Wiesbaden	EUPT: AO08, FV15
DE	Landesuntersuchungsanstalt für das Gesundheits- und Veterinärwesen Sachsen Standort Dresden 01099 Dresden Jägerstraße 8/10	142262	02.12.2008	SAL-Wiesbaden	EUPT: AO08, FV15, SRM8
DE	Landesamt für Verbraucher-schutz Sachsen-Anhalt Fachbereich 3 06009 Halle (Saale) Postfach 20 08 57	152200	29.08.2008	AKS-Hannover	EUPT: AO08, FV15, SRM8
DE	Landeslabor Schleswig-Holstein (Lebensmittel-, Veterinär- und Umweltuntersuchungsamt) Postfach 2743 24537 Neumünster Max-Eyth-Str. 5	012001	10.10.2008	AKS-Hannover	FAPAS 0594 EUPT: AO08, FV15, SRM8
DE	Thüringer Landesamt für Lebensmittelsicherheit und Verbraucherschutz Standort Bad Langensalza 99947 Bad Langensalza Tennstedter Str. 8/9	162104	12.08.2008	SAL-Wiesbaden	EUPT: AO08, FV15

12. Greece

12.1. Objective and design of the national control programme

National control programme of 2013 for pesticide residues (monitoring) as part of the Multi-Annual Control Programme has been established according to terms and conditions of Articles 26-35 of Regulation (EC) No 396/2005.

The monitoring programme was designed and coordinated by the Ministry of Rural Development and Food (Directorate of Plant Produce Protection). The programme 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 programmes, dietary intake contribution of each product, sampling location, community control programme, 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.

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

In **Table 12-1** the surveillance samples taken in 2013 are presented, in **Table 12-2** the suspect samples whereas in **Table 12-3** a comparison with previous years is done.

Table 12-1: Surveillance samples taken in 2013

Category	Total number of samples	Number of samples without detectable residues	Number of samples with detectable residues below EU MRL or for which no MRL is set	Number of Samples with residues exceeding EU-MRL
Fruits, vegetables and nuts	1 823	1 229	545	49
Cereals (raw and processed) and pulses	85	72	12	1

Category	Total number of samples	Number of samples without detectable residues	Number of samples with detectable residues below EU MRL or for which no MRL is set	Number of Samples with residues exceeding EU-MRL
Plant origin processed products (olive oil, juices, wine and vegetables)	297	250	47	0
Baby food	19	18	0	1
Food of animal origin	40	40	0	0
Other plant products	6	2	2	2
Total number of samples	2 270	1 611	606	53

Table 12-2: Suspect samples taken in 2013

Category	Total number of samples	Number of samples without detectable residues	Number of samples with detectable residues below EU MRL or for which no MRL is set	Number of Samples with residues exceeding EU-MRL
Fruits, vegetables and nuts	84	34	41	9
Cereals (raw and processed) and pulses	1	0	1	0
Plant origin processed products (vine leaves)	2	1	1	0
Baby food				
Food of animal origin				
Other plant products	4	3	1	0
Total number of samples	91	38	44	9

Table 12-3: Comparability with previous year's results

Category	Year 2011	%	Year 2012	%	Year 2013	%
Total number of samples	2 715	100	2 797	100	2 361	100
Number of samples without detectable residues	1 983	73.4	1 991	71.1	1 649	69.9
Number of samples with detectable residues below EU MRL or for which no MRL is set	653	24.5	754	27	650	27.5
Number of samples with residues exceeding EU MRLs	74	2.7	53	1.9	62	2.6

12.3. Non-compliant samples: possible reasons and actions taken

- Surveillance samples: in 2013, 53 samples out of 2 270 samples were exceeding the EU MRLs (2.3 %) and 35 samples were non compliant (1.5 %). In 2012, 43 samples out of 2 709 samples were exceeding the EU MRLs (1.6 %) and 26 samples were non compliant (0.96 %). In 2011, 60 samples out of and 2 558 (2.35 %) were exceeding the EU MRLs and 34 samples were non complaint (1.33 %).

- Suspect samples: in 2013, nine samples out of 91samples were exceeding the EU MRLs (9.9 %) and seven samples were non compliant (7.7 %). In 2012, 10 samples out of 88 samples were exceeding the EU MRLs (11.3 %) and eight samples were non compliant (9 %). In 2011, 14 samples out of 157 were exceeding the EU MRLs (8.9 %).

Analytical information about the samples and the actions taken regarding non compliant samples are given at the table below (Table 12-4).

Table 12-4: Non-compliant samples for which administrative actions were taken or administrative actions are in progress.

a/a	Sample code	Product	Residue	Reason for MRL non compliance	Note
1	GR-001-13-087	basil	imidacloprid	Reason unknown	In progress, imported (IL)
2	GR-001-13-1580	carrot	linuron	GAP not respected	
3	GR-001-13-1262	celery	chlorpyrifos	GAP not respected	
4	GR-001-13-1169	leek	cyprodinil	GAP not respected	
5	GR-001-13-1406	leek	indoxacarb as sum of the isomers R and S	GAP not respected	
6	GR-001-13-109	other spices (bark)	ethephon	GAP not respected (not authorized use)	
7	GR-001-13-964	peaches	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	
8	GR-001-13-1004	peaches	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	
9	GR-001-13-1005	peaches	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	
10	GR-001-13-1542	pear	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	In progress
11	GR-001-13-1115	vine leaves	hexaconazole, kresoxim-methyl, myclobutanil	Reason unknown	In progress
12	GR-001-13-227	vine leaves	azoxystrobin, boscalid, flufenoxuron, methoxyfenozide, myclobutanil	Reason unknown	Imported (TR)
13	GR-001-13-494	vine leaves	acrinathrin, famoxadone, fenhexamide, methiocarb (sum of methiocarb sulfoxide and sulfone, expressed as methiocarb)	GAP not respected, not authorised use	
14	GR-001-13-503	vine leaves	fenoxycarb, tau-fluvalinate	GAP not respected, not authorised use	
15	GR-002-13-160	beans with pods	chlorpyrifos	GAP not respected	
16	GR-002-13-197	beans with pods	lufenuron	GAP not respected	
17	GR-002-13-198	beans with pods	propargite	GAP not respected, not authorised use	
18	GR-002-13-269	pears	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	GAP not respected, not authorised use	
19	GR-002-13-172	pepper	formetanate (sum of formetanate and is salts expressed as formetanate (hydrochloride))	GAP not respected	
20	GR-002-13-253	pepper	acetamiprid, oxamyl	GAP not respected	
21	GR-002-13-314	pepper	formetanate (sum of formetanate and is salts expressed as formetanate (hydrochloride))	GAP not respected	In progress
22	GR-002-13-351	potatoes	fosthiazate	GAP not respected	
23	GR-002-13-419	potatoes	pirimiphos-methyl	GAP not respected, not authorised use	
24	GR-002-13-420	potatoes	pirimiphos-methyl	GAP not respected, not authorised use	

a/a	Sample code	Product	Residue	Reason for MRL non compliance	Note
25	GR-002-13-421	potatoes	pirimiphos-methyl	GAP not respected, not authorised use	
26	GR-002-13-123	vine leaves	tebuconazole	GAP not respected, not authorised use	
27	GR-002-13-145	vine leaves	cypermethrin (cypermethrin including other mixtures of constituent isomers) sum of isomers))	Reason unknwon	Imported (TR)
28	GR-003-13-029	lettuce	tebuconazole	GAP not respected	In progress
29	GR-003-13-060	lettuce	chlorpyrifos	GAP not respected	
30	GR-003-13-099	parsley	chlorpyrifos	GAP not respected, not authorised use	
31	GR-003-13-119	parsley	chlorpyrifos	GAP not respected, not authorised use	
32	GR-003-13-085	vine leaves	trifloxystrobin	GAP not respected, not authorised use	
33	GR-003-13-087	vine leaves	famoxadone, myclobutanil	GAP not respected, not authorised use	
34	GR-004-13-120	melon	aldrin and dieldrin (aldrin and dieldrin combined expressed as dieldrin)	GAP not respected, not authorised use	In progress
35	GR-004-13-073	peach	chlorpyrifos	GAP not respected	
36	GR-006-13-222	wine grapes	cypermethrin (cypermethrin including other mixtures of constituent isomers (sum of isomers))	GAP not respected	In progress
37	GR-007-13-150	spinach and similar leaves	clorpyrifos , cypermethrin (cypermethrin including other mixtures of constituent isomers (sum of isomers))	GAP not respected, not authorised use	
38	GR-008-13-095	orange	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	
39	GR-008-13-099	orange	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected	
40	GR-009-13-026	lettuce	pendimethanil	GAP not respected	
41	GR-009-13-053	spinach	chlorothalonil	GAP not respected	
42	GR-009-13-054	spinach	chlorothalonil	GAP not respected	

12.4. Quality assurance

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
GR-001	Benaki Phytopathological Institute, Laboratory of Pesticide Residues	GR-001	09-07-2002	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: CF7, FV15, SRM8, AO8 COIPT-13 SCHEMA 23/03 determination of PAHS in water/oil sample
GR-002	Regional Center of Plant Protection and quality control of Thessaloniki, Laboratory of pesticide residues	GR-002	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
GR-003	Regional Center of Plant Protection and quality control of Kavala, Laboratory of Pesticide residues	GR-003	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-004	Regional Center of Plant Protection and quality control of Ioannina, Laboratory of pesticide residues	GR-004	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-005	Regional Center of Plant Protection and quality control of Magnesia, Laboratory of pesticide residues	GR-005	08-09-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-006	Regional Centre of Plant Protection and Quality Control of Achaia, Laboratory of pesticide residues	GR-006	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-007	Regional Centre of Plant Protection and Quality Control of Pireaus, Laboratory of Pesticide Residues Analysis	GR-007	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-008	Regional Center of Plant Protection and Quality Control of Iraklion,Laboratory of pesticide residues	GR-00	08-9-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV-15 COI-PT-13
GR-009	Regional Center of Plant Protection and Quality Control of Argolida, Laboratory of pesticide residues	GR-009	23-10-2009	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV15
GR-010	General Chemical State Laboratory, D Chemical Division of Athens, Pesticide Residues Laboratory	GR-010	14-03-2012	ESYD S.A. (Hellenic Accreditation System S.A.)	EUPT: FV-15, FV-SM04, C7, SRM08, AO08 COI-PT-13

13. Hungary

13.1. Objective and design of the national control programme

The programme is drawn up following the general statistical approach developed within the National Food Chain Safety Office (NFCSO). Several factors are taken into account: the toxicity of the active substances, food consumption statistics, food commodities with a high residues/non-compliance rate in previous monitoring years, origin of food (domestic, EU or third country), RASFF notifications and other useful information.

All groups of fruits and vegetables are included in the programme and a rotation programme is applied for less important commodities. The coordinated control programme of the European Commission and some targeted sampling (mainly targeted sampling at border controls according to Regulation (EC) No 669/2009) are also included in the national programme.

Adjustments of the programme can be made in the course of the year so that emerging problems can be dealt with.

Sampling is done in accordance with Directive 2002/63/EC that has been implemented in Hungarian legislation. Samples are analysed under ISO 17025 (ISO, 2010) accredited laboratories by means of multi-residues and single-residues methods which allowed in 2013 the detection of more than 473 pesticide residues.

The four regional Pesticide Residues Analytical Laboratories – Hódmezővásárhely, Miskolc, Szolnok, and Velence - belongs to the NFCSO Directorate of Plant Protection, Soil Conservation and Agri-Environment (NFCSO DPPSCA) and are situated as it is indicated in Figure 13-1.

Figure 13-1: Location of the four laboratories belonging to NFCSO DPPSCA

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

In 2013, a total number of 3 573 samples of fruits, vegetables, cereals, animal products and processed products (including baby food) were taken by the National Food Chain Safety Office (NFSCO) and analysed for the presence of pesticide residues. The products analysed were of Hungarian origin (71 %), EU origin (22 %), non-EU origin (7.6 %).

99.7 % of the samples analysed were compliant with the pesticide residues legislation. Table 13-1 summarises the results per groups of products with respect to the sampling strategy.

Table 13-1: Products analysed for pesticide residues in 2013 with respect to the sampling strategy

Sampling strategy	Samples	Analysed	Without residues (%)	With residues at or below MRL (%)	> MRL (%)	>MRL (non compliant) (%)
Surveillance	Fruit, vegetables, cereals and other products of plant origin	2 072	51.7	46.8	1.5	0.4
	Processed products (food)	228	87	0.0	0.0	0.0
	Animal products[21]	789	99.7	0.3	0.0	0.0
	Baby food	142	99	0.0	0.7	0.0
	Cereals	115	77	22	0.9	0.0
	Total	3 346	68	31	1.0	0.3

- Surveillance sampling

3 346 surveillance samples were analysed within the context of the control programme. 99.7 % were compliant with the legislation in force.

Main MRL violations were observed in chilli-peppers, peas and brocolis. All samples of processed products, babyfood, and animal products were compliant. As in previous years, more MRL violations were proportionally observed in products from Hungary (0.27 %) than in products grown in non-EU or the EU. The total rate of MRL violations in 2013 is significantly lower in comparison with 2012 (0.6 % in total and - 0.9 % for fruit, vegetables, cereals and other products of plant origin – see Figure **13-2**).

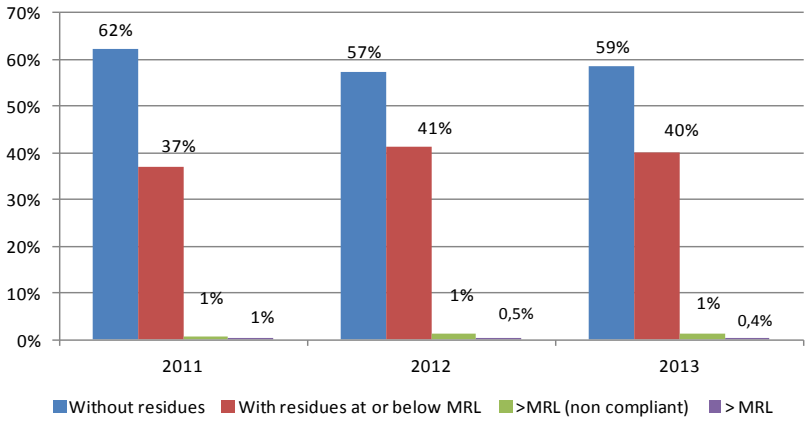


Figure 13-2: Overview of the evolution of the results for fruit, vegetables, cereals and other products of plant origin from 2011 to 2013 (surveillance samples)

Multiple residues occurred in 542 samples of fruits vegetables and cereals. The maximum number of residues found in one sample was 11, which occurred in one sample of apples, and the residues were acetamiprid, dithiocarbamates, pyridaben, spyrodichlofen, tebuconazole, tetraconazole, trifloxystrobin, indoxacarb, fenoxicarb, klorantraniliprol, sum of captan and folpet; followed by another sample of apples with seven residues. In two samples of strawberries five compounds were detected (one sample from Spain with tebuconazole, methiocarb (sum), dimethoate (sum), cyprodinil and chlorpyrifos and the other sample from domestic production with pyrimethanil, fludioxonil, fenhexamid, chlorothalonil and cyprodinil.

[21] Some animal products were analysed in the framework of Directive 96/23/EC of 29 April 1996 (10/2002. (I.23.) national regulation) on measures to monitor certain substances and residues thereof in live animals and animal products

13.3. Non-compliant samples: possible reasons and actions taken

Follow-up action is taken to verify the violation and to identify its cause. When non-compliant samples are identified, the producer or importer is subject to enhanced control.

The cause of MRL violations is searched for as far as possible (Table 13-2). The table below gives an overview of MRL non compliances found in products of Hungarian origin in 2013 and the possible cause of the non compliances. Two cases occurred in tea from EU

Table 13-2: Possible reasons for MRL non compliance in products

Product	Residue	Possible reasons for MRL non-compliance	Note
Peppers	dichlorvos	Use of a non-approved pesticide.	2 cases
Tea	fipronil (sum)	Use of a non-approved pesticide.	1 case: product from EU
Tea	spinozad (sum)	Other	1 case: product from EU
Lettuce	dimethoate (sum)	GAP not respected: use of pesticide non-authorised on the specific crop	1 case
Cherries	dimethoate (sum)	GAP not respected: use of pesticide non-authorised on the specific crop	1 case
Cucumber	folpet	GAP not respected: use of pesticide non-authorised on the specific crop	1 case
Beans (with pods)	dimethoate (sum)	GAP not respected: use of pesticide non-authorised on the specific crop	1 case
Potatoes	triticonazole	GAP not respected: use of pesticide non-authorised on the specific crop	1 case

13.4. Quality assurance

Table 13-3 gives the laboratories reporting data of the control programme.

Table 13-3: Laboratories participating of the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
HU	NFCSO – DPPSCA Pesticide Residue Analytical Laboratory, Miskolc	206	NAT-1-1742/2014 Valid: 28-01-2018	NAT	EUPT: FV-SM05, FV15, SRM8, AO8, CF7
HU	NFCSO – DPPSCA Pesticide Residue Analytical Laboratory, Hódmezővásárhely	213	NAT-1-1704/2012 Valid: 30-10-2016	NAT	EUPT: FV15, SRM8, CF7
HU	NFCSO – DPPSCA Pesticide Analytical Laboratory, Velence	220	NAT-1-1594/2013 Valid: 09-04-2017	NAT	EUPT: FV15, FV-T01, CF7, FV-SM05, AO8, SRM8
HU	NFCSO – DPPSCA Pesticide Residue Analytical Laboratory, Szolnok	244	NAT-1-1625/2014 Valid: 26-08-2018	NAT	EUPT: FV15, SRM8, AO8, CF7

14. Iceland

14.1. Objective and design of the national control programme

The Food and Veterinary Authority is the competent authority for designing the pesticide residues monitoring program as well as reporting results to EFSA. The Environmental and Public Health office in Reykjavik collected the samples and is responsible for enforcement action when necessary.

Only imported fruits can be found in stores, except for strawberries during the summer. Vegetables are also imported in to Iceland but also grown locally in green houses and with the use of electrical illumination. This allows fresh domestically grown vegetables through largest part of the year. However there is no export of domestically grown vegetables (or fruits). The market for organic products is growing but is not large.

A multi-annual sampling plan is revised every year. An emphasis is laid on a random sampling regime based on what officers doing sampling find on their visits to importers. Also the products consumed on daily basis by many, is emphasised. The sampling plan is based on information extracted from customs tariff on import volumes and domestic production and the co-ordinated EU programme in Regulation (EC) No 788/2012 was also taken into consideration. Organic fruits and vegetables are imported mostly by specialty stores. They are included in the monitoring programme. In total, nine samples were taken of organic products and are identified as organic in the data. 17 % of the samples are of domestic produce, 32.5 % of samples are imported from third countries and the rest are from EU countries.

The Environmental and Public Health office in Reykjavik collected the samples according to national Regulation No 736/2003 on sampling methods for contaminants in foodstuffs, which is based on EC Directives 98/53/EC,[22] 2001/22/EC,[23] 2002/26/EC,[24] 2002/27/EC[25] and 2002/63/EC. Samples were taken at wholesaler´s warehouses in Reykjavik and occasionally at retailer´s.

No sampling according to Regulation (EC) No 669/2009 was performed, as import from the listed countries was not direct, but through EU MS.

A limited number of pesticides are included in the monitoring program. Laboratory capacity is the deciding factor and the number of pesticides screened for is 61 since year 2010. Laboratory capacity is also a deciding factor in why only samples of fruits and vegetables were taken. No samples of animal origin, nuts or grains were included. In year 2014 the laboratory capacity has grown with new equipment and training of all relevant staff including officers doing the sampling. This is ongoing and many more pesticide residues will be included and more matrixes also in 2015.

Reporting does not include samples in the NRCP based on Directive No 96/23/EC that were analysed for pesticides.

[22] Commission Directive 98/53/EC of 16 July 1998 laying down the sampling methods and the methods of analysis for the official control of the levels for certain contaminants in foodstuffs. OJ L 201, 17.07.1998, p. 93–101.
[23] Commission Directive 2001/22/EC of 8 March 2001 laying down the sampling methods and the methods of analysis for the official control of the levels of lead, cadmium, mercury and 3-MCPD in foodstuffs. OJ L 77, 16.03.2001, p. 14–21.
[24] Commission Directive 2002/26/EC of 13 March 2002 laying down the sampling methods and the methods of analysis for the official control of the levels of ochratoxin A in foodstuffs. OJ L 75, 16.03.2002, p. 38–43.
[25] Commission Directive 2002/27/EC of 13 March 2002 amending Directive 98/53/EC laying down the sampling methods and the methods of analysis for the official control of the levels for certain contaminants in foodstuffs. OJ L 75, 16.03.2002, p. 44–45.

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

In total 240 samples of fruits and vegetables were taken and analysed for pesticide residues in Iceland for surveillance. That includes 105 samples of fruits and 135 samples of vegetables. In addition six enforcement samples were taken to follow-up on a non-compliant sample.

In 37.5 % of samples one or more residues analysed for were detected. 11 sampled were found to contain residues of three different pesticides. Four samples from surveillance had residues above MRL and three were considered a true non-compliant after measurement uncertainty was taken into consideration. Enforcement samples were taken and of six samples five had residues above MRL and were non-compliant. Much higher percentage of fruit were found to include one or more residues than vegetables, but 84.3 % of vegetable samples were found to be without any of the residues screened for.

None of the samples of organic produce were found to have residues of the pesticides screened for.

For fruits the residues most often detected were imazalil in 24 samples (22 %), thiabendazole in 19 samples (17.4 %), cyprodinil in 13 samples (11.9 %), orthophenylphenol in eight samples (7.3 %), and pirimicarb, iprodione and chlorpyrifos each in six samples (5.5 %).

For vegetables the residues most often detected were permethrin in four samples (2.9 %), tebuconazole in four samples (2.9 %), pirimicarb and metalaxyl each in three samples (2.2 %), bupirimate, cyprodinil and iprodione each in two samples (1.5 %).

2013 had a higher rate of non-compliant samples (8) compared to last year with only two true non-compliant samples. This is caused by the randomness of a very small program, since in 2011 Iceland had eight non-compliant samples.

14.3. Non-compliant samples: possible reasons and actions taken

In 2013, four samples were found to be non-compliant with the MRLs. They were the cause for six enforcement samples to be taken that resulted in five more non-compliant samples, in total eight true non-compliant samples and one compliant due to measurement uncertainty.

Producer/importers were given warnings and administrative consequences which were, that they are obligated to notify authorities of the next two shipments from the offending producer. These shipments are then sampled and not allowed to be distributed until lab results have confirmed that they comply with the MRLs. A repeated finding of bupirimate in domestically grown strawberries resulted in destruction of all plants in one greenhouse. Table 14-1 summarises actions taken. Table 14-2 gives reasons for MRL non-compliance. In case of imported products, reasons for MRL non-compliances are unknown and outside the jurisdiction of the Food and Veterinary Authority.

Table 14-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
1	Administrative consequences	Compliant due to measurement uncertainty
1	Administrative consequences	
3	Lot recalled from the market	
4	Lot destroyed	

Table 14-2: Possible reasons for MRL non compliance

Product	Residue	Reasons for MRL non-compliance	Note
Strawberries	bupirimate	Use of an approved pesticide on a crop for which the use was authorised, but was used in a greenhouse where PHI for out-doors use is not appropriate.	
Spinach	permethrin	Imported from third country	
Mint	propargite	Imported from third country	
Lemons	thiabendazole	Imported from third country	Compliant due to measurement uncertainty.

14.4. Quality assurance

Table 14-3 shows the laboratory participating in the 2013 control programme.

Table 14-3: Laboratories participating in the control programme

Country code	Laboratory name	Laboratory code	Accreditation date	Accreditation body	Participation in proficiency tests or interlaboratory tests
IS	Matis ohf.	Matis	01/05/2007	SWEDAC - Sweden	EUPT: FV15

15. Ireland

15.1. Objective and design of the national control programme

The 2013 Irish national control programme for pesticide residues in food was carried out by the Pesticide Controls Division (PCD) of the Department of Agriculture, Food and the Marine with the co-operation of the Pesticide Control Laboratory and under the terms of a service contract with the Food Safety Authority of Ireland (FSAI).

The control programme consisted of two strategies:

- surveillance of plant and animal origin for the presence of pesticide residues;
- enforcement of the pesticide residue legislation e.g. where non compliances were detected and targeting of imported commodities listed in Regulation (EC) No 669/2009 for pesticide residues.

This involved sampling of produce at distribution outlets, storage, processing, slaughter premises, ports and airports and the analysis of those samples for the presence of pesticide residues at the Pesticide Control Laboratory in Ireland.

The control programme for 2013 took into consideration:

- the co-ordinated programme required by Commission Regulation (EU) No 788/2012,
- dietary intake patterns of Irish consumers[26] (adult and children),
- the residue profile of commodities as established from the results of the programme in previous years,
- results from other Member States in the EFSA annual reports,
- handling/processing of food prior to consumption,
- the capacity of the laboratory.

The planned number of samples (1 521) for the 2013 control programme was agreed with the Food Safety Authority of Ireland. A major contribution to the planned number of samples for food of animal origin (395) was decided in conjunction with the Veterinary Medicine Unit of the Department of Agriculture, Food and the Marine (DAFM), as part of the National Residue Plan required under Directive 96/23/EC.

Table 15-1 provides a breakdown of the number of samples for each of the food categories which were planned and achieved. A total of 1 476 surveillance samples were taken in 2013 in line with the overall planned number of samples for the major food groupings of ‘fruit and vegetables’, ‘cereals’, ‘food of animal origin’ and ‘baby food’.

As follow up to non-compliant samples and invalid uses detected in 2012 and 2013, and increased control of imported produce under Regulation (EC) No 669/2009, an additional 106 enforcement samples were identified and analysed in 2013, bringing the overall sample number to 1 582.

[26] IUNA, Irish Universities Nutrition Alliance. North South Food Consumption Database, 2001 and National Children’s Food Survey 2005.

Table 15-1: Number of samples planned and achieved in the 2013 control programme

Strategy	Categories	Planned		Achieved	
		Raw	Processed	Raw	Processed
Surveillance	Citrus fruits	140	10	140	25
	Pome fruits	120	10	121	22
	Stone fruits	45		45	2
	Berries/Small fruits	90	10	91	16
	Miscellaneous fruits	100	10	103	5
	Root/ tuber vegetables	75		73	1
	Bulb vegetables	10		11	0
	Fruiting vegetables	75		74	2
	Brassica vegetables	40		42	0
	Leafy vegetables	75		80	0
	Legume vegetables	30		30	1
	Stem vegetables	30		29	0
	Oilseed	10		0	9
	Fungi	20		26	0
	Spice	0		3	0
	Tea	6		0	
	Other processed	40		0	0
	Cereals	100		72	0
	Animal origin	395		398	15
	Baby foods	40		0	40
Enforcement	Regulation (EC) No 396/2005	20		23	0
	Regulation (EC) No 669/2009	20		83	0
Total		1 521		1 582	

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

In the 2013 programme a total of 951 samples were analysed from the surveillance sampling programme (Table 15-2). When comparing to previous years (2010-2012), the number of samples with breaches (1.8 %) increased slightly from 2012 (1.2 %) but was slightly lower than 2010 and 2011 (3.3 %). The number of fruit and vegetables with detectable residues above the LOQ and MRL has been increasing since 2010: 60 % in 2010, 65 % in 2011, 66 % in 2012 and 72 % in 2013. This is due, in part, to the increase in the number of pesticides in the analytical methods with more pesticides added each year and the LOQs set at lower levels.

Table 15-2: Fruit and vegetable: surveillance samples in 2013

Fruit and vegetable samples	Characteristics
Fruit and vegetable with residues detected	951 fruit and vegetable surveillance samples were analysed 28.5 % had no residue detected above the LOQ 69.7 % had residues greater than the LOQ and less than the MRL 1.8 % had residues detected above the MRL
Origin of samples	17 % were of Irish origin 41 % were from EU countries 36 % were from third countries 6% of unknown origin (origin of raw commodity not specified)
Most frequent pesticide detected	Top ten pesticides were detected in fruit and vegetable samples: imazalil 17 %, thiabendazole 12 %, boscalid 12%, chlorpyrifos 11 %, imidacloprid 11%, fludioxonil 7 %, pyraclostrobin 7 %, pyrimethanil 7 %, azoxystrobin 7 %, fenhexamid 6 %
Maximum number of multiple residues	Up to 12 different pesticides were found in a strawberry sample from Ireland.

Fruit and vegetable samples	Characteristics
Residues above the MRL	17 samples exceeded the MRL: two vegetable samples from Ireland, one fruit and six vegetable samples from other EEA countries, four fruit and four vegetable samples from third countries.
Processed	88 fruit and vegetables samples were processed.
Labelled organic	49 samples taken were labelled as organic. Three were found to contain residues not permitted for use in organic farming at levels greater than the LOQ and less than the MRL. One spinach sample breached the MRL.

Pesticide residues were found in 47 (65 %) of the 72 cereal samples that were taken in the surveillance programme (Table 15-3). This is a higher frequency than that found in previous years – 25 % in 2010; 54 % in 2011 and 55 % in 2012. This is due, in part, to the increase in the number of pesticides in the analytical methods with more pesticides added each year and the LOQs set at lower levels.

Table 15-3: Cereal surveillance samples in 2013

Cereal samples	Characteristics
Cereal samples with residues detected	72 cereal samples were analysed 35 % had no residue detected above the LOQ 65 % had residues detected above the LOQ below the MRL No cereal sample has residues detected above the MRL
Origin of samples	72 % of the cereal samples were of Irish origin 14 % were from other EU countries 3 % were from third countries 11 % of unknown origin
Most frequent pesticide detected	Chlormequat was detected in 76 % of the cereal samples analysed for that pesticide
Maximum number of multiple residues	Up to three different pesticides were found in four wheat samples
Residues above the MRL	No samples exceeded the MRL
Processed	No cereal samples taken were processed
Labelled organic	Three organic oat samples analysed with no residue detected.

The percentage of food of animal origin surveillance samples (Table 15-4) with detectable residues remained relatively low over the past four years: 4.3 % in 2010; 2.8 % in 2011; 6 % in 2012 and 5 % in 2013 in spite of an increase in the analytical scope and the sensitivity of the methods used for these samples.

Table 15-4: Food of animal origin Surveillance samples in 2013

Animal origin samples	Characteristics
Animal origin samples with residues detected	413 food of animal origin samples were analysed 95 % has no residue detected above the LOQ 5 % has residues detected above the LOQ and below the MRL No food of animal has residues exceeding the MRL for veterinary legislation Directive 96/23EC.
Origin of samples	99 % of the food of animal origin samples were of Irish origin 1 % was from other EU countries.
Most frequent pesticide detected	Either diazinon or DDT was detected in 3 % of the animal fat samples
Maximum number of multiple residues	No more than one pesticide residue was found in each of the 20 samples with residues detected above the LOQ

Animal origin samples	Characteristics
Residues above the MRL	Diazinon at 0.15 mg/kg exceeds the MRL of 0.05 set in the Regulation (EC) No 396/2005 for an ovine fat sample at the time of sampling. This residue however is in compliance with the Veterinary Medicine Legislation with a MRL of 0.7 mg/kg.
Processed	All 15 meat samples were processed as cooked ham.
Labelled organic	No organic food of animal origin samples were taken

No pesticide residues were found in 40 infant formula and follow on formula surveillance samples analysed (Table 15-5).

Table 15-5: Baby food samples in 2013

Baby food samples	Characteristics
Baby food samples with residues detected	40 infant formula and follow on formula samples were analysed 100 % had no residue detected above the LOQ
Origin of samples	100 % were of Irish origin
Residues above the MRL	There was no exceedance
Processed	All the baby food samples were processed
Labelled organic	No baby sample taken was labelled organic.

The findings on enforcement samples can be seen in Table 15-6 and Table 15-7.

Table 15-6: Enforcement samples under Regulation (EC) No 396/2005

Enforcement samples under Regulation (EC) No 396/2005	Characteristics
Enforcement samples with residues detected	23 follow up enforcement samples were analysed 65 % had no residue detected above the LOQ 26 % had residues detected above the LOQ and below the MRL 9 % had residues detected above the MRL
Origin of samples	78 % of the samples were of Irish origin 13 % were from other EU countries 9 % were from outside the EU
Maximum number of multiple residues	Up to six different pesticides were found in a kale sample
Residues above the MRL	Two samples exceeded the MRL: fluazifop-P in a head cabbage and thiacloprid in a kale sample
Processed	One sample was processed: rapeseed oil
Labelled organic	No organic enforcement samples were taken

Table 15-7: Enforcement samples under Regulation (EC) No 669/2009

Enforcement samples under Regulation (EC) No 669/2009	Characteristics
BIP samples with residues detected	83 Border Import Point (BIP) samples were analysed 29 % had no residue detected above the LOQ. 55 % had residues greater than the LOQ and below the MRL 16 % had residues detected above the MRL.
Origin of samples	100 % were from outside the EU: Egypt, India, Kenya and Turkey
Most frequent pesticide detected	Azoxystrobin detected in 36 % of legume samples Thiabendazole in 14 % of orange samples
Maximum number of multiple residues	Up to 10 different pesticides were found in an okra sample (76 703) from India, several of which exceeded the MRLs.

Enforcement samples under Regulation (EC) No 669/2009	Characteristics
Residues above the MRL	13 samples exceeded the MRL: four oranges from Egypt, one strawberry from Egypt, one okra from India, four beans with pods from Kenya and three peas with pods from Kenya
Processed	No BIP samples taken were processed.
Labelled organic	No organic BIP samples were taken

15.3. Non-compliant samples: possible reasons and actions taken

In 2013, 2 % of the samples analysed (32 samples in total) contained residues above the legal limit (MRL) set in Regulation (EC) No 396/2005 and Commission Regulation (EU) No 37/2010. Table **15-8** shows the follow-up actions taken and Table 15-9 details the possible reasons, if known, for the MRL non-compliance.

Table 15-8: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
2	Intake concern identified and a follow-up sample taken. Produce remaining on market and growing in field destroyed.	Administrative fine applied. These will be targeted for sampling in 2014.
2	Inspections carried out and warnings issued to domestic producers.	These will be targeted for sampling in 2014.
15	Warnings issued to food business operators (FBOs). Contact point in country of origin informed.	These will be targeted for sampling in 2014
1	Re despatched with RASFF Notification	
9	Border rejection and consignment destroyed. Three RASFF notifications issued	
3	Consignments released as they did not exceed the MRL with the 50 % measurement of uncertainty	

Table 15-9: Possible reason for non-compliant samples, if known

Origin	Procuct	Residue	Reasons for non-compliance/actions taken
Domestic	Cabbage	Fluazifop-P/Methiocarb	Invalid GAP applied
	Cabbage	Fluazifop-P	Follow up investigation from same grower
	Potato	Pencycuron	On site investigation inconclusive.
	Swede	Chlorpyrifos	Investigation inconclusive
EU	Pear	Phosmet	Letters sent to FBO and country contact point. Reason for non-compliance is not established
	Potato	Chlorpropham	Letters sent to FBO and country contact point. Reason for non-compliance is not established
	Spinach	Imidacloprid	Letters sent to FBO and country contact point. Reason for non
	Kale	Cypermethrin	Letters sent to FBO and country contact point. Reason for non
	Kale	Thiacloprid	Letters sent to FBO and country contact point. Reason for non

Origin	Procuct	Residue	Reasons for non-compliance/actions taken
	Broccoli	Fluazifop butyl	Letters sent to FBO and country contact point. Reason for non
	Mushroom	O phenylphenol	Letters sent to FBO and country contact point. Reason for non
TC (396/2005)	Grapefruit	Biphenyl	Letters sent to FBO and country contact point. Reason for non
	Satsuma	Thiabendazole	Letters sent to FBO and country contact point. Reason for non
	Clementine	Malathion	Letters sent to FBO and country contact point. Reason for non
	Lime	Dicofol	Letters sent to FBO and country contact point. Reason for non
	Basil	Acetamiprid	Letters sent to FBO and country contact point. Reason for non
	Chives	Folpet	Letters sent to FBO and country contact point. Reason for non
	Chives	Cyfluthrin	Letters sent to FBO and country contact point. Reason for non
	Beans without pods	Methamidophos	Letters sent to FBO and country contact point. Reason for non
	Peas with pods	Methoxyfenozide	Letters sent to FBO and country contact point. Reason for non
TC (669/2009)	Oranges	Ortophenylphenol	Consignment destroyed
	Oranges	Malathion	
	Oranges	Ortophenylphenol	Consignment destroyed
	Oranges	Ortophenylphenol	Consignment released as < MRL with 50 % uncertainty applied
	Oranges	Imazalil	Consignment redespatched. RASFF notification issued
	Strawberry	Carbendazim	Consignment destroyed
	Okra	Acetamiprid	Intake concern identified. Consignment destroyed. RASFF notification issued
	Okra	Monocrotophos	
	Okra	Profenophos	
	Okra	Dimethoate	
	Beans with pods	Dimethoate	Consignment destroyed. RASSF notification issued
	Beans with pods	Dimethoate	Consignment released as < MRL with 50 % uncertainty applied
	Beans with pods	Dimethoate	Consignment destroyed. RASFF notification issued
	Beans with pods	Dimethoate	Consignment destroyed
	Peas with pods	Dimethoate	Consignment released as < MRL with 50 % uncertainty applied
	Peas with pods	Famoxadone	Consignment destroyed. RASFF notification issued.
	Peas with pods	Dimethoate	Consignment destroyed

15.4. Quality assurance

Table 15-10 shows the laboratories participating in 2013 control programme.

Table 15-10: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
IE	Pesticide Control Laboratory	PCS	01/12/2000	INAB - Dublin	EUPT: FV16, AO8, C8, SRM09

16. Italy

16.1. Objective and design of the national control programme

The national control program is defined by the Ministerial Decree of the 23rd December 1992 (transposing Directive 90/642/EEC) as integrated by Ministerial Decree of the 30th July 1993 concerning the programming of official controls for imports coming from Third Countries.

The National Programme of Pesticide Residues foresees a detailed program implementing the checks to be carried out by Regions and Autonomous Provinces of Trento and Bolzano, with indication of the minimum number and the type of samples to be analysed.

The breakdown of the number of samples to be taken from each Region/Province is calculated according to the data on consumption and production of a given foodstuffs in the concerned Region or Autonomous Province concerned.

The number of samples to be taken from each Region/Province for the following foodstuffs: vegetables, fruits, cereals, wine and oils, is provided in the above mentioned Decree.

The program also foresees as priority the research of residues in plant protection products in foodstuffs of vegetable origin.

The 'Uffici di Sanità Marittima, Aerea e di Frontiera' (USMAF) of the Ministry of Health performs the sampling of the products of vegetable origin imported from Third Countries, in at least 3 % of the consignments of imported food.

The national program does not specify the types of pesticide residues that the laboratories have to analysed, but the laboratories identify the type of residues using the data on pesticide sales and the 'RASFF notifications' are also taken into account. The results of the proficiency test performed by the laboratories are also considered.

The choice on the types of residues and the number of samples is made according to their technical capacities and the equipments.

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

Out of a total of 9 358 samples 59 % are fruits and vegetables, 4.7 % are cereals, 10.7 % are oil and wine, 0.6 % are baby food and 25 % are other type of food (processed different form oil and wine, product of animal origin, spices, seeds and sugar plants). From the overall, 67 % of the samples were without residues, while 32.5 % were with residues below the MRL and only 0.5 % of the samples were irregular. All samples of wine, oil and baby food were compliant. Irregular samples were found in fruits and vegetables, cereals and other food types.

From the above, 7 807 samples have as origin Italy, 233 come from other member states, 880 come from third country and for 438 samples the origin is unknown.

The total of products sampled for the 2013 EUCP was 816, from which only five samples were irregular.

The 3.7 % of samples were organic. Only 5 % were enforcement samples.

The information about import controls was not completed because the transmission of data is not binding.

16.3. Non-compliant samples: possible reasons and actions taken

In 2013, 0.5 % of the samples (50 samples in total) were found to be not compliant with the EU MRL. There were also 54 samples compliant with the EU MRL, but considered not compliant because the residue found were not authorised in Italy. Another food sample was considered not compliant because the sample was organic and the residues found are not permitted in organic product in Italy. The measures adopted for samples not complying with Regulation (EC) No 396/2005 are reported in Table 16-1.

Table 16-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
22	Rapid alert	The measures was applied too if the MRL was exceeded
1	Warning	
14	Administrative consequences	
2	Lot not released on the market	
11	Others	

The samples exceeding the European legal limits under Regulation (EC) No 396/2005 are reported in Table 16-2.

Table 16-2: Samples exceeding the legal limit

Product	Residue	Processed or unprocessed	Country of origin	Region	Result
Apples	carbendazim	unprocessed	Italy	Lazio	0.48
Aubergines (egg plants)	oxamyl	unprocessed	Italy	Abruzzo	0.06
Aubergines (egg plants)	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	unprocessed	Italy	Calabria	0.099
Beans (with pods)	tau-fluvalinate	unprocessed	Italy	Emilia Romagna	0.23
Beans (with pods)	dimethoate	unprocessed	Italy	Sardegna	0.136
Berries and small fruit	propargite	unprocessed	Unknown	Veneto	0.075
Cherries	dimethoate	unprocessed	Italy	Veneto	0.28
	omethoate	unprocessed	Italy	Veneto	0.14
Courgettes	chlorothalonil	unprocessed	Italy	Puglia	0.085
Courgettes	oxamyl	unprocessed	Italy	Emilia Romagna	0.18
Cumin seed	profenofos	unprocessed	Sri Lanka	Import control	1.55
Fennel	tolclofos-methyl	unprocessed	Italy	Abruzzo	0.19
Fungi	tetramethrin	processed	China	Emilia Romagna	1.4
	propoxur				2.6
Lettuce	tolclofos-methyl	unprocessed	Italy	Puglia	6
Lettuce	chlorothalonil	unprocessed	Italy	Puglia	0.16
Oats	dichlorvos	unprocessed	Italy	Sardegna	0.05
Okra, ladys fingers	acephate	unprocessed	India	Import control	0.086
Onions	profenofos	unprocessed	Unknown	Import control	0.3

Product	Residue	Processed or unprocessed	Country of origin	Region	Result
Oranges	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	unprocessed	Italy	Puglia	0.093
Oranges	dimethoate	unprocessed	Italy	Sardegna	0.34
Oranges	linuron	unprocessed	Italy	Lazio	0.35
Other herbs	profenofos	unprocessed	Sri Lanka	Import control	1.3
Peaches	dimethoate	unprocessed	Italy	Umbria	0.059
Peaches	chlorpyrifos	unprocessed	Italy	Lazio	0.342
Peaches	carbendazim	unprocessed	Italy	Lazio	0.476
Peaches	carbendazim	unprocessed	Italy	Lazio	0.712
Peaches	carbendazim	unprocessed	Italy	Lazio	0.937
Peaches	carbendazim	unprocessed	Italy	Lazio	0.43
Peaches	dimethoate	unprocessed	Italy	Lazio	0.221
	carbendazim	unprocessed	Italy	Lazio	0.641
Peaches	chlorpyrifos	unprocessed	Italy	Lazio	0.45
Peaches	mepanipyrim (mepanipyrim and its metabolite: 2-anilino-4-(2-hydroxypropyl)-6-methylpyrimidine expressed as mepanipyrim)	unprocessed	Italy	Abruzzo	0.16
Pears	carbendazim	unprocessed	Italy	Lazio	0.53
Pears	carbendazim	unprocessed	Italy	Lazio	0.023
Peas (without pods)	chlorpyrifos-methyl	unprocessed	Unknown	Import control	0.15
Peppers	cypermethrin	unprocessed	Italy	Veneto	0.23
Peppers	ethion	unprocessed	India	Import control	0.188
Peppers	profenofos	unprocessed	Cambodia	Import control	0.662
Peppers	triazophos	unprocessed	India	Import control	0.36
	profenofos	unprocessed	India	Import control	0.48
	monocrotophos	unprocessed	India	Import control	0.12
Peppers	ethion	unprocessed	Bangladesh	Import control	0.019
	triazophos	unprocessed	Bangladesh	Import control	1.03
	profenofos	unprocessed	Bangladesh	Import control	0.38
Peppers	ethion	unprocessed	India	Import control	0.839
Peppers	ethion	unprocessed	India	Import control	0.1
Scarole (broad-leaf endive)	chlorpyrifos	unprocessed	Italy	Puglia	0.14
Spices (seeds)	ethion	unprocessed	Sri Lanka	Import control	0.19
Strawberries	ethion	unprocessed	Unknown	Veneto	0.086
Strawberries	spinosad (sum of spinosyn A and spinosyn D, expressed as spinosad)	unprocessed	Italy	Calabria	0.67
Tea	triazophos	unprocessed	India	Import control	0.11

Product	Residue	Processed or unprocessed	Country of origin	Region	Result
Tomatoes	endosulfan (sum of alpha- and beta- isomers and endosulfan sulfate expresses as endosulfan)	unprocessed	Italy	Valle D'Aosta	0.13
Tomatoes	procymidone	unprocessed	Italy	Valle D'Aosta	0.027
Wine grapes	procymidone	unprocessed	Italy	Piemonte	0.12
Wine grapes	procymidone	unprocessed	Italy	Piemonte	0.054
Wine grapes	procymidone	unprocessed	Italy	Piemonte	0.12

16.4. Quality assurance

The laboratories involved in the 2013 monitoring programme are presented in Table 16-3.

Table 16-3: Official laboratories

Country code	Laboratory Name	Laboratory code	Accreditation date	Accreditation body	Participation in proficiency tests or interlaboratory tests
IT	IZS Lombardia e Emilia	I0200000	03/04/1997	Accredia	EUPT: SRM1, SRM8, FV15, AO08 COIPT-13
IT	IZS delle Venezie	I0300000	18/07/1997	Accredia	EUPT: FV-SM05, FV15, AO08
IT	IZS Lazio e Toscana	I0500000	1998	Accredia	EUPT: FV15, AO08 COIPT-13
IT	IZS Umbria e Marche	I0600000	14/12/1998	Accredia	EUPT: FV-SM05, FV15, AO08
IT	IZS Abruzzo e Molise	I0700000	18/12/2003	Accredia	EUPT: SRM1, SRM8, FV15, AO08
IT	IZS della Sicilia	I1000000	08/07/1999	Accredia	EUPT: AO08, SRM1
IT	IZS della Sardegna	I0400000	17/05/2011	Accredia	EUPT: FV15, AO08, SRM1
IT	IZS della Puglia e Basilicata	I0800000	31/10/2000	Accredia	EUPT: AO08, SRM1
IT	IZS del Mezzogiorno	I0900000	14/07/2010	Accredia	EUPT: FV15, CF7
IT	ARPA Torino	P0101010	1998	Accredia	EUPT: SRM1, FV-T01, FV15 COIPT-13
IT	ARPA Aosta	P0201010	03/10/2007	Accredia	EUPT: FV15
IT	ASL Bergamo	P0302510	19/06/2009	Accredia	EUPT: SRM1, SRM8, FV15 COIPT-13
IT	APPA Bolzano	P0411010	05/12/2001	Accredia	EUPT: SRM1, SRM8, AO08, FV-SM05, FV15
IT	APPA Trento	P0421010	02/04/2001	Accredia	EUPT: SRM1, SRM8, FV15, FV-T01, CF7 COIPT-13
IT	ARPAV Verona	P0501200	09/07/2008	Accredia	EUPT: SRM1, SRM8, FV15, FV-SM05
IT	ARPA Pordenone	P0601060	18/11/2004	Accredia	EUPT: SRM1, FV-SM05, FV15 COIPT-13
IT	ARPAL La Spezia	P0701050	25/06/2002	Accredia	EUPT: FV-T01, FV15 COIPT-13
IT	ARPA Ferrara	P0801090	1997	Accredia	EUPT: SRM1, SRM8, FV15, FV-T01, C7 COIPT-13

Country code	Laboratory Name	Laboratory code	Accreditation date	Accreditation body	Participation in proficiency tests or interlaboratory tests
IT	ARPAM Macerata	P1101090	December 1999	Accredia	EUPT: SRM1, SRM8, FV-T01, FV15 COIPT-13
IT	ARPA Roma	P1200020	18/03/2004	Accredia	EUPT: FV15 COIPT-13
IT	ARPA Latina	P1201110	18/03/2004	Accredia	EUPT: SRM8, FV15
IT	ARPA Bari	P1601040	25/02/2010	Accredia	EUPT: SRM1, SRM8, FV15, FV-T01 COIPT-13
IT	ARPA Campania	P1500400	17/02/2011	Accredia	EUPT: FV15, SRM1
IT	ASL Milano	P0303080	21/12/2010	Accredia	EUPT: SRM1, SRM8, FV15, FV-T01 COIPT-13
IT	Laboratorio di Sanita Pubblica di Firenze	P090100	18/12/2006	Accredia	EUPT: SRM1, SRM8, FV15 COIPT-13
IT	Laboratorio di Sanita Pubblica di Varese	030314	24/07/2006	Accredia	EUPT: FV15

17. Latvia

17.1. Objective and design of the national control programme

The Ministry of Agriculture in collaboration with the Food and Veterinary Service and the State Plant Protection Service updated the National control program for pesticide residues control in plant products for 2013 according to Article 30, Part 1 of Regulation (EC) No 396/2005.

Plant products have been chosen according to statistical information of National Food Consumption Survey of Latvia (2007-2009). Fresh plant products of domestic origin from conventional farms are included in National control program for pesticide residues control in plant products for 2013. Above mentioned plant products have a high importance for agricultural production and consumption in Latvia. The food of organic production is not included in the National control program for pesticide residues control in plant products for 2013. The food for sensitive groups of the population, e.g. baby food is not included in the National control program for pesticide residues control in plant products for 2013. Taking into account the importance of the commodity in the production of the Latvia, samples of potatoes and carrots were both included in the National control programme. In other cases the planning of program the following approach was used – the products included in the EU coordinated program were not included in National program.

Pesticide residues have been chosen on the basis of application of plant protection products in Latvia. Mostly pesticide residues are not included in the EU coordinated program have been chosen for National control program for 2013.

Sampling was carried out at different marketing levels (farm gates, wholesalers) by trained inspectors and samples are taken in regional offices of the Food and Veterinary Service (FVS) according to Directive 2002/63/EC.

The Food and Veterinary Service and The Institute of Food Safety, Animal Health and Environment 'BIOR' are responsible of implementation of National pesticides residues control program.

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

- Coordinated programme. In 2013, a total of 209 samples of fruit, vegetables, cereals animal products and baby food were analysed for the pesticides residues: 92 samples of domestic origin, 104 samples of other EU countries and 13 samples from non – European countries.

- National programme. A total of 42 samples of fruit, vegetables, honey were analysed for pesticides residues, all samples of domestic origin.

In 2013, one sample was found non-compliant with the EU MRL.

The most frequently found pesticides residues are boscsalid, fludioxonil, pyraclostrobin, tebuconazole, fenhexamid, thiacloprid, (above LOQ, but under MRL).

17.3. Non-compliant samples: possible reasons and actions taken

The action taken for non-compliant samples can be seen in Table 17-1. The reasons for MRL non compliance are given in Table 17-2.

Table 17-1: Action taken for non-compliant samples

Number of non-compliant samples	Action taken	Note
1	Administrative sanction	Sample code: PV-2013-P-79681

Table 17-2: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance
Apple	Dimethoate (sum)	Residues resulting from the use of pesticide.

17.4. Quality assurance

The laboratories reporting data in 2013 are presented in Table 17-3.

Table 17-3: Laboratory details

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
LV	Institute of Food Safety, Animal Health and Environment 'BIOR'	90009235333	08/06/2011	Latvian National Accreditation Bureau - LATAK	EUPT: FV-12, AO-05, SRM-05, C-04
DE	Eurofins GfA Lab Service GmbH	Eurofins Analytik GmbH	02/08/2011	German Accreditation Body - DAKKS	FAPAS-04/2010/19106F; FAPAS-09/2010/19110F; FAPAS-11/2010/19114F; FAPAS-05/2010/0965

18. Lithuania

18.1. Objective and design of the national control programme

Main part of the national pesticide control is utilised with respect to the national monitoring of foods of plant origin programme approved by State Food and Veterinary Service director order of 24 January 2013 No B1-33.

Pestisides are also monitored in the foods of animal origin. This is carried out via national monitoring of residues in foods of animal origin. Programme is approved by State Food and Veterinary Service director order of 24 January 2013 No B1-33.

The institutions involved and their responsibilities are:

- State Food and Veterinary Service (SFVS) is the main food controlling institution in Lithuania supervising responsible for management execution of all national and EU-coordinated programmes concerning animal health and food control.
  - SFVS food department: prepares and consolidates with other institutios involved the annual plan for control of foods of plant origin bearing in mind and to be in line with the following:
    - Regulation (EU) No 788/2012.
    - Recommendations of the Minister of Health of Republic of Lithuania.
    - Risks arising because of contamination of foods with pesticides or other contaminants.
    - Data on the use of registered pesticides and information on possible use of unregistered plant protection products.
    - Risk assessment results carried out by National Food and Veterinary Risk Assessment Institute.
    - Notifications obtained from Rapid Alert system (RASFF).
    - The budget allocated for the programme execution.

    Organises data management and summarises for actions taken and assessment of results achieved. NFVRAI prepares instructions for transporting samples to the laboratory. Coordinates systematic training of inspectors, and prepares seminars to implement the programme. NFVRAI analyses the decisions taken by territorial SFVS if the market limiting sanctions have been taken. Summarises the programme results and gives recommendations for territorial SFVS units and feedback to other institutions concerned.
  - SFVS urgent action department: notifies SFVS food unit on the new RASFF notifications coming from other member states and notifies other memberstates for non-compliances detected in Lithuania via RASFF system.
  - Territorial SFVS: drafts sampling plans for the programme. Consolidates planning with SFVS food unit and NFVRAI. Approves sampling plans for the territory. Carries out sampling according to plans approved and arranges the transportation of samples

to NFVRAI. Upon reception of detected non-compliant foods, takes actions to prevent product entering the market and/or withdraw, if the produt is already in the market. As competency allows takes measures for contamination prevention

- NFVRAI is located in Vilnius, but also has 5 territorial branches. As for pesticide testing, only the main laboratory of Vilnius has capacities to comply with the programme requirements, and it's only involved for the testing. Following functions are carried out: sample analysis for pesticide residues and evaluation of results according to Regulation (EC) No 396/2005. Provides support for SFVS and territorial SFVS by providing the feedback on the capacities to implement proposed testing and sampling plan at the phase of concolidation. Prepares and delivers periodic reports for the programme to SVFS. Prepares reports and delivers to EFSA as required by Regulation (EC) No 788/2012. Carries out all research and development in order to facilitate large scope of pesticides to be tested. Validates methods developed. Represents Lithuanian interest, at the pesticide concerning meetings organised by EFSA. Provides territorial SFVS with the packaging necessary for the sampling to be utilised.

The annual monitoring programme for food of plant origin is drafted by Food department of SVFS and is in line with the following requirements:

- Regulation (EC) No 396/2005.
- Regulation (EU) No 788/2012.
- Directive 2002/63/EC
- Directive 2006/125/EC[27]
- Product safety law of Republic of Lithuania (Žin, 199, No 52-1673)
- Lithuanian food law (Žin. 2000, No 32-893)
- Order of Lithuanian Minister of Healtcare, of 31 December 2003, No V-787, implementing sampling methods for pesticide residues analysis (Žin, 2004, No 45-1448)
- SVFS director order of 22 December 2007, No B1-883, implementing sampling methods for laboratory tests (Žin., 2007, No 139-5746)

The 2012 plant origin food contamination monitoring program (hereinafter - Programme) aims - to monitor, evaluate and manage the use of pesticides, mycotoxins, acrylamide and furan residues in plant origin foods. Its objectives are:

- To collect information in the field of the safety of plant origin food in the market, with respect to the pesticide residues and other contaminants.
- To assess current situation of contamination levels in locally produced, as well as imported products on the Lithuanian market with respect to pesticide residues and other contaminants, with the seek for improvement

[27] Commission Directive 2006/125/EC of 5 December 2006 on processed cereal-based foods and baby foods for infants and young children. OJ L 339, 6.12.2006, p. 16–35.

- To give a feedback to producers, users and/or their associations, Government of the Republic of Lithuania and other official institutions and authorities concerned, on the on-going state of plant food control, as well as results and actions taken.

- Impose sanctions whenever non-compliances detected, to reduce pollution and consumer protection. Withdrawal from the market and prevention from entering the market are

- To warn and inform other EU member states, whenever the non-compliance detected could possibly affect other countries. Notification is carried out via RASFF system.

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

Sampling has been carried out in the wide spectre of places (Table 18-1). Demonstrates the sampling points used for the programme. Mapping the data versus the sampling strategy, it's clear, that the initial goal of the programme, to collect the data on the actual market condition in this respect has been accomplished, as the majority of samples have been taken from the market and are belonging to selective sampling groups. Only samples, taken for animal product surveillance could not be taken in selective way.

Table 18-1: sampling points and types of sampling strategies used in the programme

Sampling points	Objective sampling	Selective sampling	Total
Farming	15		15
Growing crops		76	76
School, kindergarten		4	4
Processing plant		11	11
Meat processing	5		5
Slaughtering	10		10
Wholesale		20	20
Retail sale		226	226
Import activities		51	51
Mobile retailer, market/street vendor		15	15
Grand Total	30	403	433

All findings across 433 samples analysed can be summarised in Table 18-2. The table reflects commodities and pesticides detected. Total number of findings is 404. From these, 21 have been found to exceed the MRL. However one must note that measurement uncertainty has been taken into account. 16 of those results are declared as the ones to with 'action code': 'other'. In total only three (0.69 %) true non-compliant samples have been detected. This is approximately the same percent as the previous year.

Table 18-2: Findings in national monitoring for pesticides

Findings		Result above MRL			Result bellow MRL	Total
Comodity	Pesticide	O	R	W		
Apples	Boscalid				5	5
	Carbendazim				2	2
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				2	2
	Cyprodinil				2	2

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
	Difenoconazole				3	3
	Kresoxim-methyl				1	1
	Methoxyfenozide				2	2
	Pirimicarb				1	1
	Propargite				3	3
	Pyraclostrobin				5	5
	Thiacloprid				4	4
Apricots	Acetamiprid				1	1
	Carbendazim				2	2
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				2	2
	Cyprodinil				2	2
	Fenhexamid				1	1
	Tebuconazole				2	2
	Thiacloprid				3	3
Bananas	Biphenyl	1				1
	Imazalil				6	6
	Myclobutanil				2	2
	Thiabendazole				5	5
	Barley				2	2
	Pirimiphos-methyl				2	2
Carrots	Boscalid				1	1
	Linuron				1	1
	Cherries				6	6
	Boscalid				1	1
	Carbendazim				1	1
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
	Fenhexamid				1	1
	Propargite				1	1
	Pyraclostrobin				1	1
Chinese cabbage	Carbendazim				1	1
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
	Courgettes				1	1
	Pymetrozine				1	1
Cucumbers	Acetamiprid				1	1
	Boscalid				2	2
	Cyproconazole	1				1
	Cyprodinil				3	3
	Diazinon	1				1
	Fenazaquin				1	1
	Propamocarb				6	6
	Spinosad (sum of spinosyn A and spinosyn D, expressed as spinosad)				1	1

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
	Spinosyn A				1	1
	Spinosyn D				1	1
	Thiacloprid				2	2
	Thiametoxam				1	1
	Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
Grapefruit	Fenazaquin				1	1
	Imazalil				3	3
	Pyrimethanil				1	1
	Thiabendazole				3	3
Head Cabbage	Dimethoate				1	1
	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	1				1
	Dithiocarbamates (dithiocarbamates expressed as CS_2, including maneb, mancozeb, metiram, propineb, thiram and ziram)				2	2
	Omethoate				1	1
	Thiametoxam				1	1
	Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
	Thiophanate-methyl	1				1
Kiwi	Fenhexamid				1	1
	Fludioxonil				2	2
Leek	Dithiocarbamates (Dithiocarbamates expressed as CS_2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram)				5	5
Lemons	Chlorpyrifos				1	1
	Imazalil				4	4
	Prochloraz				3	3
	Thiabendazole				4	4
Lettuce	Bifenthrin				1	1
	Bromide ion				4	4
	Imidacloprid				5	5
Mandarins	2-phenylphenol				1	1
	Flutriafol				1	1
	Hexythiazox				1	1
	Imazalil				8	8
	Prochloraz				1	1
	Pyrimethanil				1	1
	Thiabendazole				6	6
Mangoes	Prochloraz				2	2
	Thiabendazole				1	1
Melons	Imidacloprid				1	1
Oats	Pirimiphos-methyl				1	1
Oranges	2-phenylphenol				1	1
	Carbendazim				1	1

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
	Imazalil				5	5
	Pyrimethanil				1	1
	Thiabendazole				6	6
Papaya	Biphenyl	1				1
	Difenoconazole				1	1
	Prochloraz				1	1
Peaches	Boscalid				3	3
	Carbendazim				1	1
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
	Cyprodinil				1	1
	Difenoconazole				1	1
	Etofenprox				1	1
	Imidacloprid				1	1
	Pyraclostrobin				1	1
	Spinosad (sum of spinosyn A and spinosyn D, expressed as spinosad)				1	1
	Spinosyn A				1	1
	Spinosyn D				1	1
	Thiophanate-methyl				1	1
Pears	Boscalid				3	3
	Cyproconazole	1				1
	Cyprodinil				4	4
	Difenoconazole				2	2
	Fludioxonil				1	1
	Flufenoxuron				1	1
	Imazalil				1	1
	Methoxyfenozide				1	1
	Pyraclostrobin				3	3
	Pyrimethanil				1	1
	Thiacloprid				1	1
Peppers	Flutriafol				1	1
	Myclobutanil				1	1
	Pirimicarb	1				1
	Pymetrozine				1	1
Pineapples	Diazinon	1				1
Plums	Acetamiprid				1	1
	Boscalid				1	1
	Carbendazim				4	4
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				4	4
	Cyprodinil				3	3
	Diflubenzuron				1	1

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
	Etofenprox				1	1
	Fenhexamid				1	1
	Pyrimethanil				1	1
	Tebuconazole				1	1
	Thiophanate-methyl				4	4
Pomegranate	Acetamiprid	1	1			2
	Difenoconazole				1	1
Potatoes	Metalaxyl	1				1
Rice	Acetamiprid	1				1
	Carbendazim		1			1
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)		1			1
	Difenoconazole				1	1
	Hexaconazole	1				1
	Isoprothiolane				1	1
	Tricyclazole	1			1	2
Rye	Chlormequat				1	1
	Glyphosate				1	1
	Pirimiphos-methyl				1	1
Strawberries	Acetamiprid				2	2
	Boscalid				9	9
	Carbendazim			1	1	2
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)			1	1	2
	Chlorpyrifos-methyl				1	1
	Cyprodinil				8	8
	DDD, p,p-				1	1
	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	1				1
	DDT, o,p-				1	1
	Ethirimol				1	1
	Fenazaquin				1	1
	Fenhexamid				3	3
	Fludioxonil				2	2
	Flusilazole	1				1
	Haloxyfop				1	1
	Mepanipyrim				5	5
	Permethrin (sum of isomers)				1	1
	Propamocarb				1	1
	Pyraclostrobin				8	8
	Pyrimethanil				2	2
	Spinosad (sum of Spinosyn A and Spinosyn D, expressed as Spinosad)				1	1
	Spinosyn A				2	2
	Spinosyn D				2	2

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
	Tetraconazole				2	2
	Thiacloprid				1	1
	Thiametoxam				1	1
	Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
	Thiophanate-methyl				1	1
Sunflower seed	Imidacloprid				1	1
	Pirimiphos-methyl				1	1
Table grapes	Boscalid				6	6
	Cyprodinil				3	3
	Dimethomorph				1	1
	Fenhexamid				2	2
	Imidacloprid				1	1
	Indoxacarb as sum of the isomers S and R				2	2
	Kresoxim-methyl				1	1
	Methoxyfenozide				1	1
	Myclobutanil				2	2
	Penconazole				1	1
	Propargite				2	2
	Pyraclostrobin				1	1
	Pyrimethanil				3	3
	Spinosad (sum of Spinosyn A and Spinosyn D, expressed as Spinosad)				1	1
	Spinosyn A				2	2
	Spinosyn D				2	2
	Trifloxystrobin				2	2
Tomatoes	Boscalid				1	1
	Bromide ion				2	2
	Carbendazim				1	1
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
	Cyprodinil				2	2
	Difenoconazole				1	1
	Dimethomorph				3	3
	Dithiocarbamates (Dithiocarbamates expressed as CS_2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram)				2	2
	Fenpyroximate				1	1
	Fludioxonil				1	1
	Indoxacarb as sum of the isomers S and R				1	1
	Propamocarb				3	3
	Tebuconazole				1	1
	Thiametoxam				1	1
	Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
	Trifloxystrobin				1	1

Findings		Result above MRL			Result bellow MRL	Total
Comodity	**Pesticide**	**O**	**R**	**W**		
Wheat	Pirimiphos-methyl				4	4
	wine grapes				23	23
	Boscalid				3	3
	Carbendazim				4	4
	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				4	4
	Dimethomorph				3	3
	Dithiocarbamates (Dithiocarbamates expressed as CS_2, including Maneb, Mancozeb, Metiram, Propineb, Thiram and Ziram)				5	5
	Methoxyfenozide				1	1
	Pyrimethanil				1	1
	Thiophanate-methyl				2	2
Grand Total		16	3	2	383	404

Apart from those surface protection products used for citrus fruits (imazalil, orthophenylphenol, and thiabendazole), boscalid and cyprodynil and carbendazim are most commonly detected pesticides (Table 18-3).

Table 18-3: Top detected pesticides in all commodities tested for national monitoring programme

Parameter	Findings
Boscalid	35
Cyprodinil	28
Imazalil	27
Thiabendazole	25
Carbendazim	20
Pyraclostrobin	19
Dithiocarbamates (total, expressed as CS_2)	14
Pyrimethanil	11
Thiacloprid	11
Difenoconazole	10

Imports control was carried out uunder national initiative with respect to EU giudelines for the frequence of sampling, but also having in mind RASFF notifications. Total of 388 samples were tested. In 467 residues were detected. Table 18-4 summarises the findigs against commodities. It must be noted that 15 findings cannot be atributed to non-comlying samples as the exceeding cannot be proven because of the measurement uncertainty overlapping with the permited range. Phoxim has been detected in wheet sample 0.075 ± 0.038 mg/kg vs MRL of 0.01 mg/kg.

Table 18-4: Findings for national import control

Findings	Results above MRL			Results bellow MRL	Total
Commodity/Pesticide	**O**	**R**	**W**		
Bananas				**8**	**8**
Bifenthrin				1	1
Chlorpyrifos				1	1
Imazalil				3	3
Thiabendazole				3	3
Cherries				5	5
Boscalid				1	1

Findings	Results above MRL			Results bellow MRL	Total
Commodity/Pesticide	**O**	**R**	**W**		
Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)				1	1
Omethoate				1	1
Thiametoxam				1	1
Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
Coffee				**2**	**2**
Thiametoxam				1	1
Thiametoxam (sum of thiametoxam and clothianidin expressed as thiametoxam)				1	1
Cucumbers				**3**	**3**
Acetamiprid				1	1
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Garlic	**1**			**2**	**3**
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Imidacloprid	1				1
Grapefruit	**1**			**91**	**92**
2-phenylphenol				1	1
Acetamiprid				8	8
Bromopropylate	1				1
Buprofezin				1	1
Chlorpyrifos				5	5
Fenbutatin oxide				1	1
Imazalil				17	17
Imidacloprid				2	2
Prochloraz				21	21
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz)				21	21
Pyraclostrobin				1	1
Thiabendazole				10	10
Thiophanate-methyl				3	3
Head cabbage				**1**	**1**
Chlorpyrifos				1	1
Herbal infusions, dried	**4**			**7**	**11**
Acetamiprid	2			1	3
Buprofezin				3	3
Imidacloprid	2			1	3
Triazophos				2	2
Lemons	**1**			**45**	**46**
2-phenylphenol				3	3
Buprofezin				1	1
Carbendazim				4	4

Findings	Results above MRL			Results bellow MRL	Total
Commodity/Pesticide	**O**	**R**	**W**		
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				4	4
Chlorpyrifos				3	3
Flutriafol				1	1
Imazalil	1			10	11
Prochloraz				3	3
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz)				3	3
Pyrimethanil				3	3
Thiabendazole				9	9
Trifloxystrobin				1	1
Lettuce and other salad plants, including Brassica				**1**	**1**
Pymetrozine				1	1
Mandarins				**17**	**17**
2-phenylphenol				1	1
Bifenthrin				1	1
Chlorpyrifos				1	1
Imazalil				5	5
Prochloraz				1	1
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz)				1	1
Pyrimethanil				2	2
Thiabendazole				5	5
Oranges	**2**			**194**	**196**
2-phenylphenol				42	42
Acetamiprid				6	6
Buprofezin				1	1
Carbendazim				2	2
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				2	2
Chlorpyrifos				2	2
Dimethoate				1	1
Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	1				1
Fenpyroximate				1	1
Imazalil				56	56
Imidacloprid				5	5
Lambda-Cyhalothrin				2	2
Malathion				2	2
Malathion (sum of malathion and malaoxon expressed as malathion)				2	2
Omethoate				1	1
Prochloraz				1	1
Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz)				1	1

Findings	Results above MRL			Results bellow MRL	Total
Commodity/Pesticide	**O**	**R**	**W**		
Propanil				1	1
Pyraclostrobin				5	5
Pyrimethanil				4	4
Thiabendazole	1			57	58
Other small fruit and berries	**1**		**1**	**7**	**9**
Acetamiprid				1	1
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Difenoconazole				1	1
Fenpropathrin	1				1
Imidacloprid				1	1
Lambda-Cyhalothrin				1	1
Propargite			1		1
Tebuconazole				1	1
Pepper, black and white				**2**	**2**
Propamocarb				1	1
Propamocarb (Sum of propamocarb and its salt expressed as propamocarb)				1	1
Plums				**2**	**2**
Fenbuconazole				1	1
Pyrimethanil				1	1
Pomegranate	**1**			**3**	**4**
Acetamiprid	1				1
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Imidacloprid				1	1
Rice				**11**	**11**
Difenoconazole				1	1
Isoprothiolane				4	4
Tricyclazole				6	6
Sunflower seed				**2**	**2**
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Table grapes				**34**	**34**
Azoxystrobin				2	2
Boscalid				5	5
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Chlorpyrifos				1	1
Cyprodinil				3	3
Fenbutatin oxide				1	1
Fenhexamid				1	1
Fenpyroximate				1	1
Imidacloprid				5	5

Findings	Results above MRL			Results bellow MRL	Total
Commodity/Pesticide	**O**	**R**	**W**		
Indoxacarb as sum of the isomers S and R				1	1
Mandipropamid				1	1
Myclobutanil				1	1
Pyrimethanil				4	4
Tebufenpyrad				1	1
Tetraconazole				2	2
Triadimefon and triadimenol (sum of triadimefon and triadimenol)				1	1
Triadimenol				2	2
Tea, Coffee, Herbal infusions and Cocoa	**4**			**5**	**9**
Acetamiprid	1				1
Bifenthrin				1	1
Buprofezin	1			1	2
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Imazalil				1	1
Imidacloprid	2				2
Tomatoes				**6**	**6**
Acetamiprid				1	1
Boscalid				2	2
Difenoconazole				1	1
Pyraclostrobin				1	1
Thiacloprid				1	1
Watermelons				**2**	**2**
Carbendazim				1	1
Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)				1	1
Wheat		**1**			**1**
Phoxim		1			1
Grand Total	**15**	**1**	**1**	**450**	**467**

18.3. Non-compliant samples: possible reasons and actions taken

As it was mentioned above, 433 samples have been taken for the programme. However, only three true non compliant samples were detected. 16 more MRL exceeding in 14 different samples, could not be proven because of the measurement uncertainty. Details of MRL exceedings are presented in Table 18-5 and Table 18-6. The MRL exceeding in Lithuanian strawberries (0.9 mg/kg of carbendazim vs 0.1 mg/kg MRL of sum parameter of carbendazim and benomyl), could be explained with bad timing of use of the plant protection product as the sample has been taken and analysed during the harvesting peek. The product has been prevented from entering the market. Other two samples are of the foreign origin. No investigation on the possible causes of exceedings can be carried out. RASFF notification has been sent out. Two non compliant products detected: rice (carbendazim 0.037 ± 0.018 mg/kg, MRL 0.01 mg/kg) and pomegranates (acetamiprid 0.071 ± 0.036 mg/kg, MRL 0.01 mg/kg).

As for national import control, there is no chance to do investifgatio on the possible causes of MRL exceedig, thus non-compliant products were rejected to enter the market. Data on actions is presented in Table 18-7.

Table 18-5: MRL exceedings detected and actions taken within the framework of national monitoring programme

Number of non-compliant samples	Action taken	Note
14	Other actions	Results are compliant to the legislation due to measurement uncertainty
1	Warnings and administrative sanctions	Strawberies of Lithuanain origin, sample taken at farming facilities. Product has not been allowed to enter the market
2	RASFF notification	2013-2775Ch, rice, country of origin – Vietnam. Notification No: 2013.BBE 2013-7544Ch, pomegranades, country of origin – Turkey. Notification No.: 2013.BVF

Table 18-6: Non-compliant food cases detected in the framework of national monitoring

Product	Residue	Reason for MRL non compliance	Note
Strawberies	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Other	Possible mistake in timing, when using plant protection products
Rice	carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Other	Product is not locally produced. Impossible to identify cause
Pomegranate	Acetamiprid	Other	Product is not locally produced. Impossible to identify cause

Table 18-7: Non compliant foods in the national import control and actions taken.

Number of non-compliant samples	Action taken	Note
1	RASFF notification	2013-7653Ch, wheet, country of origin – China. Notification No.: 2013.BYQ

18.4. Quality assurance

According to Regulation (EC) No 882/2004 the competent authority shall designate laboratories that may carry out the analysis of samples taken during official controls. Designated laboratories are assessed (Table 18-8) and accredited in accordance with the EN ISO/IEC 17025:2005 (ISO, 2010). The National Food and Veterinary Risk Assessment Institute is accredited by DAkkS.

Table 18-8: Designated laboratories carring out 2013 analysis

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
LT	National Food and Veterinary Risk Assessment Institute	NFVRAI	21/05/2014 No D-PL-14028-01-00	DAkks, Germany	EUPT: FV15 (potatoes), AO08 (poultry meat), SRM8 (potatoes), CF7 (feed material)

19. Luxembourg

19.1. Objective and design of the national control programme

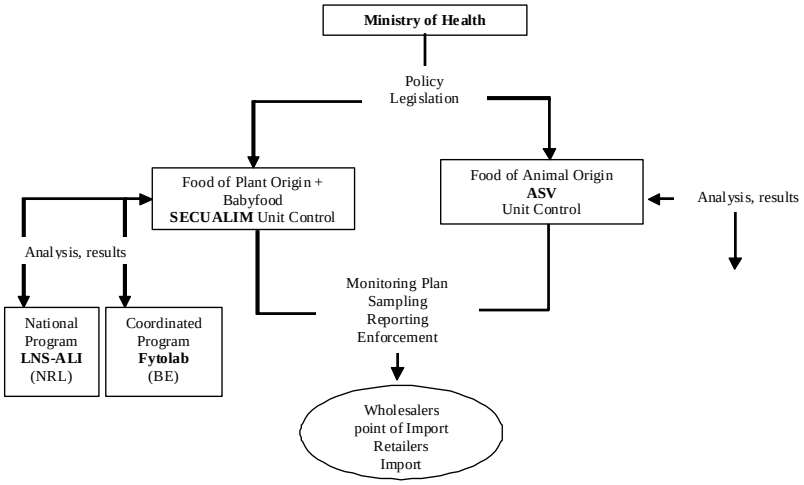
The Ministry of Health is the competent authority for the control of pesticide residues in food of both plant and animal origin. Within this ministry, the Food safety service (Secualim) of the Directorate for public health is the executive, competent authority responsible for the control of pesticide residues in food of plant origin, including cereals and baby food. Secualim is also responsible for transferring notifications to the Rapid Alert System for food and feed (RASFF) via the national contact point (OSQCA) for these same categories of food.

As regards the control of pesticide residues in food of animal origin, the executive competent authority is the veterinary services (ASV). The various roles of these two authorities for the control of pesticide residues in food, both operating under the Ministry of Health, are illustrated in Table 19-1.

Table 19-1: Various roles of the Secualim and ASV departments for the control of pesticide residues in food.

Organisation name	Role	Organisation Address	Products
Food Safety Service (SECUALIM)	Official Reporting Organisation Residue programme design Sample Collection Enforcement agencies	9 Avenue Victor Hugo, L-1750 Luxembourg	Food of plant origin (fruits, vegetables, cereals) and baby food
Administration of Veterinary Services (ASV)	Official Reporting Organisation Residue programme design Sample Collection Enforcement agencies	211 route d'Esch, L-1014 Luxembourg	Food of animal origin

The collected samples are sent to the appropriate laboratories: the samples from food of animal origin are analysed by the laboratory for the products of animal origin (CER). For products of plant origin, samples collected for the coordinated program are sent to Fytolab, laboratroy for pesticide and residue analysis; samples as part of the national program are analysed by the food laboratory of the national health laboratory (LNS-ALI). The role and implementation of the various services during the sample collection process at wholesalers, retailers and during import is represented in Figure 19-1.



Secualim: Food safety service of the Directorate for public health
ASV: administration of Veterinary service
LNS-ALI: Food laboratory of the National health laboratory
CER: Centre d'économie rurale, laboratory for the products of animal origin

Figure 19-1: Role of the various departments involved in the control plan.

- Food of plant origin, including cereals and baby food

The Food safety service (Secualim) is responsible for drafting the sampling plan and for the control of presence of pesticide residues in fruits and nuts, vegetables, cereals, baby food and other plant products.

The control programme included two different programs:

- The Coordinated community control programme based on the Regulation (EC) No 788/2012.

- The national programme based on a risk assessment where several factors were taken into account: results from previous checks, data from the RASFF (rapid alert system for food and feed) over the last three years, toxicological data of residues, national production and available consumption figures.

The EU coordinated programme is the main part of the control programme. Samples included apples, head cabbage, leek, lettuce, tomatoes, peaches, rye/oats, strawberries, wine, cow milk and swine meat and baby food (Regulation (EC) No 788/2012).

For the national programme, samples collected included fruits (melons, abricots), citrus fruits, exotic fruits, vegetables (celery, Chinese cabbage, scarole, witloof, cultivated fungi) as well as fresh herbs (parsley, thyme, celery leaves, basil).

For both parts of the programme, the national production was taken into account, as well as food originating from other EEA countries and from third countries. Furthermore, where available, samples were taken from products originating from organic farming that reflect the market share of organic products. Sampling was done mainly at wholesalers but also on retail level and during import. The choice of the matrices is based largely on fresh products to conduct the controls at the origin of the food chain and avoid the need of having to use a processing factor.

As far as the use pattern of pesticides and the toxicity of the active substances are concerned, Luxembourg focuses mainly on the laboratory responsible for controlling the samples for the choice of pesticides to be screened for as regards to a specific matrix (in function of their toxicity).

- Import samples and the samples for the coordinated community control programme are sent to an external laboratory in Belgium (Fytolab).

- The samples for the national annual programme are analysed by the food laboratory of the National health laboratory of Luxembourg.

All results for food of plant origin are reported to the Food safety service.

- Food of animal origin:

The annual control programme for food of animal origin is drafted by the Administration of the Veterinary Services (ASV) in compliance with Directive 96/23/EC and Decision 97/747/EC.[28] The number of samples per matrix to be analysed is defined by these regulations.

[28] Commission Decision of 27 October 1997 fixing the levels and frequencies of sampling provided for by Council Directive 96/23/EC for the monitoring of certain substances and residues thereof in certain animal products. OJ L 303, 06.11.1997, p. 12–15.

All results were transmitted to DG SANCO Unit 5 through a special database application available online 'Residues – Monitoring plan and result'.

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

In 2013, a total of 254 samples were analysed for pesticide residues (174 samples within the coordinated community control programme and 51 samples within the national programme; 29 samples were collected during enforcement). 13.6 % less samples have been analysed than in 2012.

- Enforcement

For enforcement, 29 samples were collected, which represents an 80 % increase compared to 2012. The Food Safety Service (Secualim) follows a voluntary policy to enforce the import control.

One sample was exceeding the MRL but compliant taking into account the measurement uncertainty (3.4 %). It was non-organic strawberries from Egypt, unprocessed, with a concentration of 0.13 mg/kg of thiophanate-methyl (MRL = 0.1 mg/kg) (border inspection activities, according to Regulation (EC) No 669/2009).

Two samples were non-compliant (6.9 %). One non-organic peas with pods from Kenya, unprocessed, with a concentration of 0.12 mg/kg of dimethoate (MRL = 0.02 mg/kg) (border inspection activities, according to Regulation (EC) No 669/2009). The other non-organic strawberries from Egypt, unprocessed, with a concentration of 0.21 mg/kg of carbendazim and benomyl (MRL = 0.1 mg/kg) and a concentration of 0.13 mg/kg procymidone (MRL = 0.02 mg/kg) (border inspection activities, according to Regulation (EC) No 669/2009).

- Surveillance

For the surveillance programme (national and coordinated), 225 samples were collected (Table 19-3), being a decrease of 19 % compared to 2012. On the one hand, the samples collected for the national programme decreased by 56 %, on the other hand, 7 % more samples have been analysed for the coordinated programme.

The decrease of the number of sampling sent to the national laboratory (national programme) can be explained by the relocation of the national laboratory, what implied a suspension of accreditation status.

For the national laboratory, it seems difficult to maintain the accreditation status for all pesticides for the multi-residue analysis. It appeared therefore more interesting to transfer the multi-residue analysis to a private laboratory and maintain more specific single residue analysis at the national laboratory. This transition also required a lot of planning and a long period of discussion.

Of the 225 samples, 38 % of were of domestic origin (increase of 8 % compared to 2012), 37 % originated from other EU member states (including Norway and Iceland), 7.50 % from third countries and 5.90 % were of unknown origin.

For many products, both for the coordinated and national plan, domestic production has largely been taken into account. To note that there is no MRL exceedance for any of the national samples, compared to 2.4 % in 2012, although the samples were all compliant taking into account the measurement uncertainty.

Table 19-2 lists the major categories of food with their contribution to the total amount of samples collected for surveillance.

Table 19-2: Major food surveillance samples taken

Food category	Total % of samples	% of domestic samples	% of EU countries samples	% of third countries samples
Animal products	15.6 %	100 %		
Baby food	4.4 %		30 %	
Cereals	9.8 %	45 %	55 %	
Fruits	31.1 %	34 %	50 %	16 %
apples		53 %		
wine		100 %		
Vegetables	33.8 %	35 %	50 %	1 %
lettuce		43 %		
leek		40 %		
head cabbage		33 %		
Other plant products	5.3 %			58 %

For the national programme, fruits were screened at import level for 422-451 pesticides (based on the matrices) and fresh herbs were screened for 450 pesticides (according to Regulation (EC) No 882/2004).

For the coordinated programme, baby food was screened for 461 pesticides (13 % less than in 2012), cereals for 426 pesticides (same as in 2012), fruits for 431-459 pesticides and vegetables for 451-461 pesticides (9 % less than in 2012)

N.b.: for cereals, the aim was to cover the national production for food, not for feed. In Luxembourg, the destiny of grains is not yet decided at harvest. Therefore flour samples with clear food destination were taken.

- Residues detected (in non-organic and organic samples)

In 46.3 % of the non-organic surveillance samples, no residues above the LOQ were detected. In 52.1 % of the samples, pesticide residues were quantified but these were in compliance with the maximum residue limits (MRLs). MRLs were exceeded in three of the samples (1.6 %); two of those were compliant when measurement uncertainty was taken into account. These samples with numerical exceedance of the MRL relate to strawberries, one from Belgium (0.085 mg/kg flonicamid; MRL = 0.05 mg/kg) and one from France (0.82 mg/kg trifloxystrobin; MRL = 0.5 mg/kg).

Hence, only one sample (0.5 %) was found to be non-compliant (according to Regulation (EC) No 396/2005); the levels were too high with respect to five pesticide residues for a sample of chrysantheme (other herbal infusions: flowers) from China. It contained residues of acetamiprid (0.83 mg/kg), carbendazim and benoyml (3.3 mg/kg), dimethomorph (1.8 mg/kg) and imidacloprid (0.49 mg/kg). Metalaxyl was also exceeding the MRL (0.46 mg/kg).

For organic samples, the percentage of samples with residues below the LOQ lies at 89.2 %. The remaining four samples (10.8 %) have residues between the LOQ and the maximum residue limit (LOQ). None of the organic samples collected exceed the MRL.

In one sample, spinosad was detected and in another sample pyrethrins were detected. Spinosad was detected in peaches from France (unprocessed).This insecticide is produced by micro-organisms and authorised only as a measure to minimise the risk of resistance development. Pyrethrins were detected in rye from Luxembour (milling, refined flour). This insecticide is authorised only when it is extracted from Chrysanthemum cinerariaefolium.

However, in two other samples, pesticide residues not authorised in organic farming were detected. One was chlormequat in oats from the EU (milling) and the other was QACs in strawberries from DE (unprocessed).

The group of Quaternary Ammonium Compounds (QACs) is both authorised as a plant protection product in ornamental crops and as biocide for disinfection. A likely cause of the presence of these residues is generally a cross contamination due e.g. to contact of the crops with surfaces treated with biocidal products containing DDAC, and/or to the use of DDAC to disinfect washing water in pack houses or to disinfect irrigation water.

Although these samples are compliant as regards to Regulation (EC) No 396/2005, they are non-compliant with respect to Regulation (EC) No 889/2008[29] on organic production and labelling of organic products.

Table 19-3: Summary of results for samples in the framework of surveillance strategy

Matrix	Total samples	Organic samples	< LOQ	LOQ> Residue <MRL	Result >MRL but compliant considering uncertainty	Result non-compliant	raw	processed	domestic	EEA	Third countries	Origin not know
Animal products	35	0	35	0	0	0	35	0	35	0	0	0
Milk products	20	0	20	0	0	0	20	0	20	0	0	0
Swine meat	15	0	15	0	0	0	15	0	15	0	0	0
Baby food	10	4	10	0	0	0	0	10	0	3	0	7
Fruits	70	5	13	55	2	0	55	15	24	35	11	0
Apples	17	1	3	14	0	0	17	0	9	3	5	0
Peaches	13	1	2	11	0	0	13	0	0	13	0	0
Strawberries	16	1	1	13	2	0	16	0	0	15	1	0
Wine	15	0	4	11	0	0	0	15	15	0	0	0
Other	9	2	3	6	0	0	9	0	0	4	5	0
Vegetables	76	17	43	33	0	0	73	3	27	45	1	3
Head cabbage	15	4	10	5	0	0	15	0	5	10	0	0
Leek	10	4	7	3	0	0	10	0	4	6	0	0
Lettuce	14	4	4	10	0	0	14	0	6	8	0	0
Tomatoes	15	1	8	7	0	0	15	0	2	12	1	0
Other	22	4	14	8	0	0	19	3	10	9	0	3
Cereals	22	11	9	13	0	0	0	22	10	12	0	0
Other plant products	12	0	10	1		1	6	6	0	0	7	5
Total	225	37	120	102	2	1	169	56	96	95	19	15
TOTAL (%)	100	16.4	53.3	45.3	0.9	0.4	75.1	24.9	42.7	42.2	8.4	6.7

19.3. Non-compliant samples: possible reasons and actions taken

In 2013, 1.20 % of the samples collected were non compliant (three samples) with the MRL set in EU legislation (compared to 1.40 % in 2012) (Table 19-4). Thereof, two of the samples were collected for enforcement during import, representing 6.90 % of the samples collected for enforcement reasons. The lots were not released onto the market. For surveillance, domestic and EU originating samples were all

[29] Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control. OJ L 250, 18.9.2008, p. 1–84.

compliant; one non-compliant sample with third country origin. This sample was sampled during border inspection activities according to Regulation (EC) No 882/2004. An alert was issued even though the sample has not been released onto the market, as shown below. Table 19-5 gives the reasons for MRL non compliance.

Table 19-4: Action taken with the non-compliant samples

Number of non-compliant samples	Action taken	Note
1	alert	
2	lot not released onto the market	

Table 19-5: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Enforcement			
Strawberries	procymidone	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 1097/2009[30]
	carbendazim and benomyl	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 559/2011[31]
Peas with pods	dimethoate	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 1097/2009
Surveillance			
Chrysantheme (herbal infusions: flowers)	acetamiprid	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 500/2013[32]
	carbendazim and benomyl	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 559/2011
	dimethomorph	GAP not respected: use of pesticide authorised on the specific crop - application rate and/or application method not respected	Regulation (EC) No 35/2013[33]
	imidacloprid	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 893/2010[34]
	metalaxyl	GAP not respected: use of pesticide non-authorised on the specific crop	Regulation (EC) No 441/2012[35]

[30] Commission Regulation (EC) No 1097/2009 of 16 November 2009 amending Annex II to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for dimethoate, ethephon, fenamiphos, fenarimol, methamidophos, methomyl, omethoate, oxydemeton-methyl, procymidone, thiodicarb and vinclozolin in or on certain products. OJ L 301, 17.11.2009, p. 6–22.

[31] Commission Regulation (EU) No 559/2011 of 7 June 2011 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for captan, carbendazim, cyromazine, ethephon, fenamiphos, thiophanate-methyl, triasulfuron and triticonazole in or on certain products. OJ L 152, 11.6.2011, p. 1–21.

[32] Commission Regulation (EU) No 500/2013 of 30 May 2013 amending Annexes II, III and IV to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for acetamiprid, Adoxophyes orana granulovirus strain BV-0001, azoxystrobin, clothianidin, fenpyrazamine, heptamaloxyloglucan, metrafenone, Paecilomyces lilacinus strain 251, propiconazole, quizalofop-P, spiromesifen, tebuconazole, thiamethoxam and zucchini yellow mosaik virus - weak strain in or on certain products. OJ L 151, 4.6.2013, p. 1–32.

[33] Commission Regulation (EU) No 35/2013 of 18 January 2013 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for dimethomorph, indoxacarb, pyraclostrobin and trifloxystrobin in or on certain products. OJ L 25, 26.1.2013, p. 49–73.

[34] Commission Regulation (EU) No 893/2010 of 8 October 2010 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for acequinocyl, bentazone, carbendazim, cyfluthrin, fenamidone, fenazaquin, flonicamid, flutriafol, imidacloprid, ioxynil, metconazole, prothioconazole, tebufenozide and thiophanate-methyl in or on certain products. OJ L 266, 9.10.2010, p. 10–38.

[35] Commission Regulation (EU) No 441/2012 of 24 May 2012 amending Annexes II and III to Regulation (EC) No 396/2005 of the European Parliament and of the Council as regards maximum residue levels for bifenazate, bifenthrin, boscalid, cadusafos, chlorantraniliprole, chlorothalonil, clothianidin, cyproconazole, deltamethrin, dicamba, difenoconazole, dinocap, etoxazole, fenpyroximate, flubendiamide, fludioxonil, glyphosate, metalaxyl-M, meptyldinocap, novaluron, thiamethoxam, and triazophos in or on certain products. OJ L 135, 25.5.2012, p. 4–56.

19.4. Quality assurance

Table 19-6 shows the laboratories analysing samples in 2013.

Table 19-6: Laboratories reporting data in 2013

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
BE	Centre d'économie rurale - BE	CER	073-TEST 13/06/2012	BELAC - Belgium	EUPT: A07 Fapas: 0581
BE	Fytolab - BE	FYTOLAB	057-TEST 09.06.2009 (V4) 26.4.2011 (v7) 21.06.2011 (v8)	BELAC - Belgium	EUPT: FV15, SRM8
LU	Laboratoire National de Santé, Laboratoire de contrôle alimentaire - LU	LNS-ALI	1/002 27.05.2008	OLAS – Luxembourg	EUPT : CF7, FV15, SRM8

20. Malta

20.1. Objective and design of the national control programme

The National Monitoring Programme for pesticide residues in product of plant and animal origin in 2013 was based on a number of factors which determined the type and frequency of monitoring for the particular produce. These factors included:

- Commission Regulation (EU) No 788/2012.
- Local production/imports of commodities.
- Past findings that may indicate a historical residue problem.
- In the light of new risks (e.g. knowledge on use of banned pesticides) or other country monitoring schemes.

A total of 11 different food commodities (including fruit and vegetables, food of animal origin and baby food) were analysed during 2013. The commodities analysed included the following: wine, tomatoes, lettuce, head cabbage, strawberries, leek, apples, peaches, swine meat, cow's milk, and baby food for infants and young children. The sampling strategy adopted was mainly objective sampling except where there was a reasonable suspicion on specific produce and thus a Selective or Suspect sampling strategy was adopted.

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

In 2013, a total of 159 products have been analysed for pesticide residues compared to a total of 169 products analysed in 2012 and 170 in 2010. All of the 159 samples were objective sampling.

Out of the 159 samples analysed in 2013, six samples were of organic production origin, 88 samples were of non-organic production origin whilst for 71 samples the production method was unknown. These were mainly imported samples, samples of food of animal origin and baby foods for infants and young children.

134 of the samples analysed in 2013 were unprocessed. 15 samples of grapes had been subjected to wine production. 10 samples of baby food for infants and young children were processed.

In 2013, the percentage of domestic samples amounted to 58 % compared to 39.0 % in 2012 and 58.8 % in 2011. Samples from other member states amounted to 39 % and the amount of samples from third countries amounted to 1.9 % compared to 9.5 % in 2012 and 4.7 % in 2011. During 2013, 1.3 % of the samples had an unknown origin. Rye and oats were not tested since there is no direct growth in Malta and imports are very limited.

In 2013, 57.0 % of the samples analysed resulted without pesticide residues. 40 % of the samples analysed resulted with pesticide residues below the EU-MRL and 2.5 % of the samples exceeded the EU-MRL level to nothing in 2012 and the 5.3 % of samples that exceeded the EU-MRL in 2011.

One sample resulted containing pesticide residues of a non approved active ingredient (procymidone). This accounts for 0.6 % of all the samples. Three samples contained an active ingredient which is not approved to be used on the specific fruit. This accounts for 1.9 % of all the samples. In all three samples the level of active ingredient found exceeded the EU-MRL.

20.3. Non-compliant samples: possible reasons and actions taken

In 2013, three samples were found were found non-complaint with the EU MRL and one of the samples had a non-approved status according to Regulation (EC) No 1107/2009.[36]

Table 20-1 shows the follow-up actions taken in case of non-compliant samples and Table 20-2 the reasons for MRL non compliance.

Table 20-1: Number of non-compliant samples

Number of non-compliant samples	Action taken	Note
4	Court action	The farmers were taken to court on breach of the Pesticides Control Act, Malta

Table 20-2: Reasons for MRL non compliance

Product	Residue	Number of commodities	Reason for MRL non compliance	Note
Strawberries	procymidone	1	GAP not respected: Use of pesticide non authorised on the specific crop	Sample of domestic origin. The use of procymidone is no longer authorised in Europe.
Peaches	dimethoate	3	GAP not respected: Use of pesticide non authorised on the specific crop	Sample of domestic origin. The use of dimethoate on peaches is not authorised. Levels of dimethoate found in the peaches samples exceeded the MRL value

20.4. Quality assurance

Table 20-3 shows the laboratories in charge of analysing official samples in 2013.

Table 20-3: Official laboratories in 2013

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Laboratorio de la Consellería de Agricultura, Pesca y Alimentación de la Generalitat Valenciana	Generalitat Valenciana	October 1999	ENAC Entidad Nacional de Acreditacion	Yes
DE	Eurofins GFA	Eurofins	October 2010	Akkreditierungsstelle GmbH	Yes
UK	LGC Limited	LGC	September 2011	United Kingdom Accreditation Services	Yes

[36] Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC. OJ L 309, 24.11.2009, p. 1–50.

21. The Netherlands

21.1. Objective and design of the national control programme

In the national control program choices were made concerning kind and number of samples to be taken for analysis as many different pesticides, vegetables and fruits are involved. Therefore, a number of considerations are of importance:

- Consumption of the commodity.
- Production or import volume of the commodity.
- Experience from the previous years concerning violations. These experiences do not only extend to type of products and country of origin, but take into account results of sampling at individual companies as well
- The occurrence of pesticide/crop combinations that might lead to exceedances of the acute reference dose (ARfD).
- The degree of sampling and analysis, performed by the producer/importer.
- Availability of cost-effective analytical methods, preferably multi-residue method (MRM).

The maximum residue limit (MRL) Regulation (EC) No 396/2005 mentions two main objectives of the official control program: enforcement of MRLs and obtaining data to be able to assess consumer exposure. For the latter objective representative sampling is a prerequisite whereas the first objective is optimised by searching for high risk products. The Dutch program is a mixture of both strategies. Sampling in the market is in general representative for the product present in the market at that time and can be used for intake calculations. The choice of products to be sampled, however, is risk based. Products sampled at border control and importers of high risk products are typically non-representative and selected from an enforcement point of view. High violation rates can indicate both an efficient sampling strategy and problems in the agricultural practice.

The national control program is primarily directed to major products in the consumption pattern. These products are in line with the products the EU has chosen for the multi annual rolling program of the control Regulation (EU) No 788/2012. In addition endive, broccoli, red beet and kiwi were planned to be sampled as major Dutch consumption items. The latter two are of special interest, because they are frequently eaten by young children. Considerable capacity is reserved to minor products especially from import products, because they show frequent non-compliances. For 2013, this number was 1 200 samples of fruits and vegetables within the total number of 3 300.

The main sampling points are distribution centres of retail chains, importers, warehouses and for both domestic and non-domestic products and the premises of the auction system for Dutch products. At those inspection points, it is clear who is responsible for the product, so that appropriate legal action can be taken in case of non-compliance.

The control program involves both Dutch and foreign production. The EU-harmonisation results in such a lowering of exceedance rates of EU-products that less attention is needed for that market segment and can be redistributed to more riskful imports from non-EU countries. As the main consumption products come from the European market, their sampling has been reduced, unless a reasonable high violation rate exists.

In general control based on the primary product is preferred over that of processed food. It is useful to monitor processed products in the following cases:

- Toxic metabolites can originate (ETU, PTU).
- The primary product is not accessible. Examples are:
  - Products processed in other countries, e.g. fruit juices, wines and vegetable oil.
  - Products obtained by the processing industry directly from the grower.
- Processed food gives a good overview of the situation of the market as to dietary intake, e.g. flour and baby food

The VWA applies as much as possible MRMs for the analysis of pesticide residues. The main procedure is extraction with acetone, followed by solvent partitioning with dichloromethane/petroleum ether. The extract is analysed with GC-MSD and LC-MS/MS. Depending laboratory capacity these apparatus are run in different modes. GC-MSD can be applied in wide scope full scan mode of an ion trap detector or in a narrower scope in MS/MS mode with better sensitivity. For the LC-MS/MS a choice had to be made between a short run narrow scope and a long run extensive scope, depending capacities. Whenever possible, LC-MS/MS was applied in negative mode. Dry products and babyfood have been analysed using the quechers-method, followed by triple-quad GC-MS/MS, both in electron impact and negative chemical ionisation mode, and LC-MS/MS. Depending choices made, scopes applied to the samples varied from 175 to more than 500. For pesticides outside the scope of MRMs Single Residue Methods (SRMs) must be applied. As these give only information on one analyte, they are much less cost-effective than MRMs, and only applied when the following criteria are met:

- For the commodity-pesticide combination an MRL above the LOQ exist, indicating that residues may be expected.
- For the commodity-pesticide combination improper use of the pesticide is expected.
- The pesticide is part of the EU coordinated control program

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

During 2013, about 5 300 samples, both domestic and non-domestic products, were analysed for pesticide residues. The national and co-ordinated control plan accounted for about 3 300 samples. In the framework of the import control Regulation (EC) No 669/2009 about 2,000 samples were analysed. Within the national control plan domestic fresh produce made up 33 % of the samples, 22 % of the samples came from other EU countries and 44 % from non-EU countries. Dutch products show residues above the reporting limit in about 44 % of the samples, whereas non-domestic products contain residues in 67 % (EU) and 69 % (non-EU) of the cases, respectively. These percentages are comparable with the year before, slightly less for European and slightly higher for non-EU-products. Non-EU products sampled in the frame work of the Regulation (EC) No 669/2009 contained residues in 85 % of the cases.

In about 5 300 samples 10 608 residues of 167 different analytes were found. The percentage of the residues found within the scope of the EU program remained at the level of 98 %. For a majority of the found residues it has been established whether an Acute Reference Dose (ARfD) is necessary or not (Table 21-1). When food safety issues are involved in pesticide residues, it is mainly with respect to acute effects. Therefore, it is important to notice to what extent pesticides that give acute intake hazards are used. For product/pesticide combinations the Critical Crop/Pesticide Concentration (CCPC) has been evaluated. At the CCPC-limit 100 % of the ARfD is reached based on a point-estimate and a product is considered to be unsafe and ‘injurious to health’ in the meaning of the

General Food Law (Regulation (EC) No 178/2002[37]). In such cases the product is recalled when possible, and a Rapid Alert is issued. The Netherlands issued 16 rapid or information alerts on pesticide residues, as indicated in Table 21-5 based on official control samples. Additionally, Genaral Food Law notifications accounted for nine alerts.

Table 21-1: Pesticide residues found in the EU-coordinated and Dutch monitoring program.

Program	Active substances	Number of residues of pesticides in samples			Total
		with ARfD	no ARfD needed	ARfD unknown	
EU-coordinated	131	7 314	3 056	0	10 370
Dutch national	36	128	106	4	238
Total	167	7 442	3 162	4	10 608

21.3. Non-compliant samples: possible reasons and actions taken

As a result of the harmonisation of the MRLs in the EU, the percentage of non-compliances of products from EU countries has decreased strongly since 2008 (Figure 21-1). In 2013, MRL violations remained at this low level. Imports from third countries showed MRL-violations decreasing, as the year before. Samples taken in the framework of Regulation (EC) No 669/2009 control show a lower non compliance rate than national control plan samples from the same countries. Possibly stronger requirements by importers play a role. Products from South-East Asia still often violate limits. Table **21-2** gives the most frequently non-complying pesticide/crop combinations with the main countries of origin for the samples in the nation control plan. Table 21-3 gives this overview for Regulation (EC) No 669/2009 on import controls. In spite of these measures for some products the new import regime still detects considerable numbers of non-compliances (Table 21-3). However, especially with pomelos from China a considerable progress in compliance has been achieved. For example, the highly toxic pesticides triazophos and methidathion were found less often. Table 21-4 gives results on main products in the year 2013. A comparison is made with the results of previous years. For the main products in the national program, fewer violations were observed with most of the products, as in general compliance increased.

Some minor products, not planned within the national program show still a considerable violation rate. Examples are tropical products, like herbs and fruits.

In case an intake above the ARfD may occur RASFF-notifications (Table 21-5) are issued and companies are obliged to recall the products. Action taken is summarised in Table 21-6.

[37] Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. OJ L 31, 1.2.2002, p. 1–24.

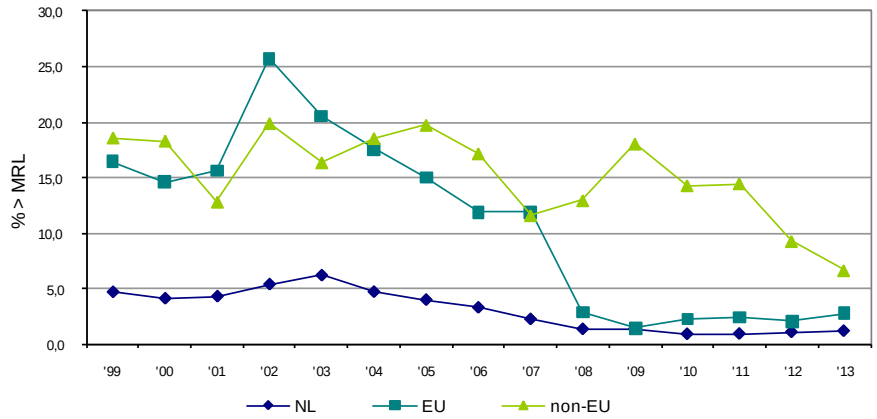


Figure 21-1: Percentage of MRL violations not including '669/2009 import control'

Table 21-2: Main products with high percentages of non-compliances, with corresponding pesticides and countries of origin of national control plan samples.

Product	Pesticides	% > MRL	Countries
Tea	acetamiprid, monocrotophos	15.2	India
Various herbs	various	11.8	Spain, Kenya
Peas with pod	dimethoate, omethoate	10.0	various
Beans with pod (fresh)	dimethoate, omethoate	9.6	various
Pepper	profenophos, ethion, various	6.7	South-East Asia

Table 21-3: Main products with high percentages of non-compliances, with corresponding pesticides and countries of origin for samples in the framework of '669/2009 import control'.

Product	Pesticides	% > MRL	Countries
Strawberry	methomyl, oxamyl	24.1	Egypt
Tea	acetamiprid, imidacloprid, various	23.9	China
Pepper	carbendazim, various	15.6	Dominican Republic, Vietnam
Okra	various	13.6	India
Herbs	various	13.3	Marocco, Thailand

Table 21-4: Samples of crops taken in the national control program 2013, with trends in percentage MRL violations, comparing origin and previous years.

PRODUCT	Consumption (g/day)	Year EU-coordinated program	Dutch program 2013	samples realised 2013	% samples > MRL 2013	% samples > MRL 2013 Dutch	% samples > MRL 2013 EU	% samples > MRL 2013 non-EU	Samples per year 2008-2012	% samples > MRL 2008-2012
Mandarin	11.2	05/08/11	100	100	1.0	0.0	0.0	1.5	90	2.7
Orange	15.6	05/08/11	100	114	5.3	0.0	0.0	7.9	146	5.3
Apple	64.8	07/10/13	75	97	0.0	0.0	0.0	0.0	121	1.5
Pear	12.2	05/08/11	50	66	0.0	0.0	0.0	0.0	67	1.5
Peach/ nectarine	2.8	07/10/13	50	34	0.0	0.0	0.0	0.0	34	2.4
Plum. including damson	2.5		50	49	0.0	0.0	0.0	0.0	50	2.0
Grape	16.5	06/09/12	100	176	3.4	0.0	6.7	2.7	181	6.5
Strawberry	5.6	07/10/13	50	64	6.3	4.7	20.0	0.0	77	2.8

PRODUCT	Consumption (g/day)	Year EU-coordinated program	Dutch program 2013	samples realised 2013	% samples > MRL 2013	% samples > MRL 2013 Dutch	% samples > MRL 2013 EU	% samples > MRL 2013 non-EU	Samples per year 2008-2012	% samples > MRL 2008-2012
Banana	19.2	06/09/12	50	48	0.0	0.0	0.0	0.0	49	0.4
Kiwi fruit	3.4		25	39	2.6	0.0	4.5	0.0	52	2.3
Beetroot	4.1		25	16	0.0	0.0	0.0	0.0	28	0.7
Carrot	14.2	05/08/11	50	42	2.4	0.0	7.7	0.0	74	3.8
Onion	14.4	04	50	34	2.9	0.0	0.0	8.3	51	2.0
Tomato	27.6	07/10/13	50	84	1.2	2.9	0.0	0.0	125	2.1
Sweet pepper	3.5	06/09/12	75	109	0.0	0.0	0.0	0.0	110	2.0
Pepper	0.0	06/09/12	75	70	17.1	0.0	0.0	25.0	94	35.2
Cucumber	8.0	05/08/11	75	63	0.0	0.0	0.0	0.0	102	4.1
Melon	2.8	99/03	50	60	3.3	0.0	0.0	4.9	59	4.1
Broccoli	3.7	12	50	45	8.9	0.0	6.7	66.7	68	7.9
Cauliflower	12.6	06/09/12		33	0.0	0.0	0.0	0.0	49	0.0
Red cabbage	3.8	07/10/13	25	13	0.0	0.0	0.0	0.0	14	0.0
White cabbage	5.5		0	12	0.0	0.0	0.0	0.0	16	0.0
Lettuce	2.8	07/10/13	50	42	7.1	7.7	7.7	0.0	74	1.1
Iceberg lettuce	3.3		0	24	0.0	0.0	0.0	0.0	73	1.4
Endive	6.5		50	32	0.0	0.0	0.0	0.0	71	2.0
Spinach	10.0	05/08/11	75	37	5.4	4.3	7.1	0.0	49	2.0
Beans(fresh)	16.4	05/08/11	75	73	9.6	0.0	0.0	12.1	159	13.4
Peas (fresh)	4.8	06/09/12	50	35	11.4	0.0	0.0	11.8	41	17.1
Leek	8.4	07/10/13	25	26	0.0	0.0	0.0	0.0	55	1.8
Potato	159.9	05/08/11	50	52	0.0	0.0	0.0	0.0	52	0.4
Rice	8.9	05/08/11	0	0	0.0	0.0	0.0	3.3	41	3.9
Cereals	127.2	07/10/12/13	0	0	0.0	4.2	0.0	0.0	33	3.0
Babyfood			90	92	0.0	0.0	0.0	0.0	69	0.0
Processed products			310	261	4.6	2.0	0.0	11.9	273	2.3
Products in program	695.4		1 975	2 042	3.3	1.2	2.0	5.9	2 650	4.8
Total	838.8		3 300	3 285	4.1	1.2	2.4	6.5	3 780	6.4

Table 21-5: Notifications to the RASFF system issued by the Netherlands.

Product	Pesticide (concentration in mg/kg)	Country	Action taken
Strawberry	methomyl (0.16)	Egypt	RASFF, destroyed at EU-border
Chinese Broccoli	pyridaben (6.7)	China	RASFF, destroyed at EU-border
Oak leaf lettuce	triadimenol (1.5)	Spain	RASFF, administrative sanction
Orange	dimethoate (0.13)	Egypt	RASFF, destroyed at EU-border
Starfruit	carbendazim (0.8)	Malaysia	RASFF, administrative sanction
Jackfruit	methamidophos (0.56), monocrotophos (0.76)	Malaysia	RASFF, administrative sanction
Chinese Broccoli	imidacloprid (1.8), pyridaben (2.0)	China	RASFF, destroyed at EU-border
Chinese Broccoli	acetamiprid (3.2)	China	Insufficient tracing data to take action

Product	Pesticide (concentration in mg/kg)	Country	Action taken
Chinese Broccoli	acetamiprid (6.2), prochloraz (0.64), pyraclostrobine (0.65), flusilazol (0.095)	China	RASFF, destroyed at EU-border
Chinese Broccoli	chlorfenapyr (0.26), acetamiprid (1.8)	China	RASFF, destroyed at EU-border
Yard long beans	dimethoate (0.42), omethoate (0.27)	Dominican Republic	RASFF, destroyed at EU-border
Chinese Broccoli	flusilazole(1.1), chloorfenapyr (0.21), acetamiprid (5.8), carbendazim (0.32)	China	RASFF, destroyed at EU-border
Chinese Broccoli	flusilazole(0.68), carbendazim (2.3)	China	RASFF, destroyed at EU-border
Pitahaya	carbendazim (0.6)	Vietnam	RASFF, destroyed at EU-border
Pomelo	carbofuran (0.023)	China	RASFF, destroyed at EU-border
Grape	Dimethoate (0.031), omethoate (0.087)	Italy	RASFF, administrative sanction

Table 21-6: Action taken in case of non compliances.

Number of non-compliant samples	Action taken	Note
31	Administrative sanctions	
16	RASFF notification	5 in the framework of the national control plan, 11 as a result of '669/2009 import control'
28	Letter to importer	Sample taken before customs release
82	Import refused	11 samples led to a RASFF-notification as well

21.4. Quality assurance

Information on laboratories reporting data in 2013 can be seen in Table 21-7.

Table 21-7: Information about the laboratories

Country Code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
NL	Dutch Food and Consumer Product Safety Authority	NVWA	1.8.1998	RvA	EUPT FAPAS

22. Norway

22.1. Objective and design of the national control programme

The Norwegian Food Safety Authority (NFSA) is the competent authority for the enforcement of the pesticide residues monitoring in Norway.

The Norwegian monitoring programme for pesticide residues in fresh fruit and vegetables, cereals, baby food, animal products and some other products have the last years included approximately 1 400 samples. In addition to the monitoring programme, this report also includes official controls on imports of certain feed and food of non-animal origin, Regulation (EC) No 669/2009 (border control samples).

The number of each commodity and the percentage of imported vs. domestic samples are based on Norwegian statistic of food consumption rates, the risk for residues, previous RASFF notifications and the national three years plan. The criteria for taking organic grown samples are dependent on their market share and the availability on the market. The sampling includes products which are important in the Norwegian diet, but more sporadic products are included as well.

The balance of organic and conventional products in the national monitoring programme was almost like earlier years in Norway. In 2013 a number of 86 organic samples were analysed.

The inspectors from the Norwegian Food Safety Authority are taking the monitoring samples mainly at importers` and wholesalers` warehouses in different parts of Norway. Some samples were also collected at farmers or retail sale.

In 2013, Norway gave five RASFF notifications, one of them from the national monitoring programme and four from the border control.

The Norwegian Institute for Agricultural and Environmental Research (Bioforsk) was responsible for the analysis of the samples of fruit, vegetables, baby food and cereals. The sampling plan and the annual reports were produced by Bioforsk in cooperation with the NFSA. Norwegian School of Veterinary Science analysed samples of animal origin.

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

A total of 1 526 samples were analysed for pesticide residues in Norway in 2013. 137 of these samples were from the border control (in line with Regulation (EC) No 669/2009). The rest of the samples (1 389) were from the national monitoring programme.

In the ordinary monitoring programme (border control not included) the samples came from 63 different countries and included about 102 different commodities. 22 samples had residues above the MRLs. It was found 27 pesticide residues in these 22 samples, and 12 of these results were considered as non-compliant after the measurement uncertainty was taken into account. One of the samples with exceeded MRL was assessed to cause acute health risk. In 2013, there were four follow-up samples in the monitoring programme.

In addition to the samples from the monitoring programme, it was detected residues from different pesticides above MRL in 29 samples taken as a part of the border control. Four of the samples from border control had RASFF notifications in 2013. All commodities under this regulation are stopped until documents and the analysis results are accepted.

There were no findings of pesticide residues in the samples of animal origin or in baby food.

Every sample, except samples of animal origin, were analysed by two multi methods and covered 321 different pesticides including some isomers and metabolites. Some samples were also analysed by single residue methods. No domestic samples had residue levels that exceeded the MRLs. There have not been any domestic samples exceeding the MRLs (after subtraction of the analytical uncertainty) since 2007.

The reported higher MRL exceedance rate in enforcement samples of imported food is ascribed to the increased control of certain imported food according to Regulation (EC) No 669/2009.

22.3. Non-compliant samples: possible reasons and actions taken

In total, 2.2 % of the samples (34 samples) were found non-compliant with the EU MRL (Table 22-1). There were RASFF notifications for five of the samples. All products from the monitoring programme (not from the border control) which samples were found MRL non-compliant (Table 22-2) were already released on the market. These consignments were withdrawn as soon as possible from the market. The pesticides found are compared with the MRLs and the measurement uncertainty has been taken into consideration for all samples.

Table 22-1: Number of non-compliant samples

Number of non-compliant samples	Action taken	Note
29 (11 monitoring and 18 from border control)	Warnings and administrative sanctions	
5 (1 monitoring and 4 from border control)	RASFF notification	Sample code: 2013.1655, 2013.ACV, 2013.AJE, 2013.AJG, 2013.BGW

Table 22-2: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Aubergines	Acephate	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Aubergines	Dimethoate	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Aubergines	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Beans with pods	Abamectin	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Courgettes	Chlorothalonil	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Parsley	Mepanipyrim	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Passion fruit	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Peas with pods	Acetamiprid	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Peas with pods	Dimethoate	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Pithaya	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Pomegranate	Chlorothalonil	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Tea	Acetamiprid	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Tea	Imidacloprid	NFSA has no comment on the cause of the exceedance	Samples from monitoring
Wine	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from monitoring

Product	Residue	Reason for MRL non compliance	Note
Basil	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Basil	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Basil	Chlorpyriphos	NFSA has no comment on the cause of the exceedance	Samples from border control
Basil	Myclobutanil	NFSA has no comment on the cause of the exceedance	Samples from border control
Basil	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Beans with pods	Dimethoate	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Fenproathrin	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Fipronil	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Hexaconazole	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Hexaconazole	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Isoprothiolane	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Chili pepper	Tricyklazol	NFSA has no comment on the cause of the exceedance	Samples from border control
Mint	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Mint	Carbendazim and benomyl	NFSA has no comment on the cause of the exceedance	Samples from border control
Mint	Dichlorvos	NFSA has no comment on the cause of the exceedance	Samples from border control
Mint	Hexaconazole	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Chlorpyriphos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Chlorpyriphos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Chlorpyriphos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Phenthoate	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Phenthoate	NFSA has no comment on the cause of the exceedance	Samples from border control

Product	Residue	Reason for MRL non compliance	Note
Parsley	Hexaconazole	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Hexaconazole	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Permethrin	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Profenofos	NFSA has no comment on the cause of the exceedance	Samples from border control
Parsley	Pyridaben	NFSA has no comment on the cause of the exceedance	Samples from border control

22.4. Quality assurance

Table 22-3 shows the laboratories reporting data in 2013.

Table 22-3: Laboratory details

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
NO	Bioforsk, Pesticide chemistry	BIOFORSK	24.04.1995 Valid to 29.11.2017	Norwegian Accreditation	EUPT: FV15, SRM8, FV-T01, CF7 IMEP-37
NO	Norwegian School of Veterinary Science (NVH)	NVH 971 033 525	30.06.1999 Valid to 12.12.2017	Norwegian Accreditation	EUPT: AO-08

23. Poland

23.1. Objective and design of the national control programme

The State Sanitary Inspection acting under the Ministry of Health authority is competent for the control of pesticide residues in food of plant and animal origin, including baby food. It is also responsible for the elaboration of the national programme for pesticide residue control and coordination of all activities. The national control plan includes monitoring and official control as well as coordinated EU monitoring programme.

The objectives of this programme is to control food available in the Polish market for the possible presence of pesticide residues in order to establish levels of compliance with the MRLs and to monitor pesticide residues surpassing admissible level as a basis for follow-up and enforcement actions.

The 2013 national programme was designed to monitor 265 compounds, including isomers, breakdown products and metabolites, in 49 different food commodities.

The National Plan for 2013 was developed taking into considerations several factors: specific conditions of Polish agriculture, consumption data, findings for previous years, the balance of organic and conventional production, origin of food, reports of the RASFF system. Food consumed by infants and children, as well as the capacity of laboratories was also taken into account.

The food samples were collected, according to the sampling plan, by trained inspectors of Sanitary-Epidemiological Stations at different marketing levels, mainly from the market, at wholesalers or importers, sometimes from food producers. The sampling strategy was mainly random sampling except when it was suspected that the product does not meet the requirements.

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

In 2013, a total number of 2 279 samples: 2 204 surveillance samples and 75 enforcement samples (including border control) of food commodities were taken in order to check the MRL's compliance.

Fruit and vegetables, cereals, tea, processed food, baby food and animal products were taken and analysed for the presence of pesticide residues. The samples included: 1 492 samples of fresh or frozen fruit and vegetables, 151 samples of cereals, 158 samples of baby food, 264 samples of animal products and 214 samples of processed products. Above figures include 25 samples of ecological products. The results of the national monitoring programme for pesticide residues in 2013 are presented in Table 23-1.

Out of the total number 1 448 (63.5 %) samples taken were of domestic origin, 492 (21.6 %) samples originated from EU countries and 399 (17.5 %) samples were from third countries. Compared to previous years, more samples were collected from EU countries and third countries. It reflects an increased amount of these products on the market.

No residues were found in 1 494 (65.6 %) of all samples. In samples of animal origin, baby food and samples from organic production no pesticides were found. The residue level at or below the MRL was found in 733 (32.1 % of the samples) and was higher than in 2012 (23 %). The residues exceeding MRL set in EU legislation were found in 52 samples (2.3 %). Taking into account the measurement uncertainty, only 14 samples were non-compliant (surveillance 11 samples, enforcement three samples).

The range of pesticides tested has been expanded compared with the previous year.

In total, 105 different pesticides out of 265 sought were detected. A large number of samples containing residues above the MRL are broccoli and cauliflower samples with dithiocarbamates residues in amount of 1.2 – 2.3 mg/kg (the MRL = 1.0 mg/kg). Residues of dithiocarbamates can occur as a consequence of the natural sulphur compounds present in broccoli.

The highest number of pesticides found was 17 and these were found in samples of green tea from Sri Lanka and China. In sample of grapes from Italy 12 pesticides were found in a single sample. Multiple residues were found and quantified in 36.8 % of all samples.

In 2013, 75 enforcement samples of fruit, vegetables and tea were tested. The majority of those samples were targeted products collected as 'border control samples' (tea, fresh herbs and pomelo) in the framework of the Regulation (EC) No 669/2009. Pesticide residues were detected in 48 enforcement samples.

Table 23-1: Results of the national monitoring programme for pesticide residues in 2013

	Total number of samples	Samples without residues	Samples with residues ≤ MRL	Samples with residues > MRL[(a)]
Fruits	615	204	404	7
Vegetables	877	629	213	35
Cereals	151	131	20	0
Animal products	264	264	0	0
Baby food	158	158	0	0
Processed products (tea, juices, olive oil, wine)	214	108	96	10
Summary	2 279	1 494 (65.6 %)	733 (32.1 %)	52 (2.3 %)

(a): measurement uncertainty not taken into account

23.3. Non-compliant samples: possible reasons and actions taken

In 2013, the overall number of non-compliant samples was decreased: 14 samples in total (0.5 %) were found exceeding the MRL after inclusion of 50 % uncertainty of measurements.

In the case of nine samples, warnings and appropriate administrative actions were taken after evaluation of the risk for the consumer. It was confirmed that these exceedances of the residues do not pose hazard to human health. Two samples have not been subjected to estimation of risk for consumers because the whole volume was already sold.

Table 23-2 shows the follow-up actions taken in the case of samples non-compliant with the EU MRL (measurement uncertainty taken into consideration).

Table 23-2: Follow-up actions taken in the case of samples non-compliant

Number of non-compliant samples	Action taken	Note
9	Risk assessment activities. Warnings and administrative sanctions	there was no risk for consumers
2	No action	the whole volume was sold
3	Lot rejected at the border, not released on the market	Border control

The information about possible reasons for non-compliance, in most cases, was not available (Table 23-3).

Table 23-3: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Lettuce	carbendazim, thiophanate-methyl		Residues of carbendazim can occur as a consequence of use of authorised thiophanate-methyl as it decomposes to carbendazim
Lettuce	chlorpyrifos		Reason for non compliance is not known
Grapes	metoxyfenozide		Reason for non compliance is not known
Pomelo	methidathion		Reason for non compliance is not known
Pepper	thiophanate-methyl		Reason for non compliance is not known
Cauliflower	chlorpyrifos		Reason for non compliance is not known
Tea	acetamiprid, imidacloprid, triazophos		Reason for non compliance is not known
Tea	bifenthrin		Reason for non compliance is not known
Tea	buprofezin, chlorpyrifos, imidacloprid, methomyl, fipronil		Reason for non compliance is not known
Tea	dithiocarbamates		Reason for non compliance is not known
Plums	dimethoate/omethoate		Reason for non compliance is not known
Mushrooms	thiophanate-methyl	GAP not respected: use of pesticide authorised on the specific crop – application rate and/or application method not respected	
Spinach	chlorpyrifos		Reason for non compliance is not known
Raspberries	dithiocarbamates		Reason for non compliance is not known

23.4. Quality assurance

The analyses of samples in the frame of the national control programme for 2013 were done by five accredited laboratories (Table 23-4).

Table 23-4: Laboratories analysing samples of the 2013 national control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PL	Voivodship Sanitary – Epidemiological Station in Warszawa	Lab No 1	19/10/2004	The Polish Centre for Accreditation	EUPT: FV15, SRM7, AO8, FV-T01 COIPT-13
PL	Voivodship Sanitary – Epidemiological Station in Łódź	Lab No 2	03/01/2006	The Polish Centre for Accreditation	EUPT: FV15

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PL	Voivodship Sanitary – Epidemiological Station in Opole	Lab No 3	15/11/2004	The Polish Centre for Accreditation	EUPT: FV15
PL	Voivodship Sanitary – Epidemiological Station in Rzeszów	Lab No 4	18/06/2004	The Polish Centre for Accreditation	EUPT: AO8
PL	Voivodship Sanitary – Epidemiological Station in Wrocław	Lab No 5	08/12/2005	The Polish Centre for Accreditation	EUPT: FV15

24. Portugal

24.1. Objective and design of the national control programme

The 2013 National Monitoring Programme for pesticide residues in food of plant origin was elaborated by the General Directorate for Food and Veterinary (DGAV) that is the National Competent Authority for Pesticide Residues Control in Food of Plant Origin, with the collaboration of all the intervening bodies in the control: the National Authority for Food and Economical Safety (ASAE) and the corresponding Regional Services, the Pesticide Residues Laboratory of the National Institute of Agrarian and Veterinary Research (LRP-INIAV), the Veterinary and Food Safety Laboratory of the Regional Directorate of Agriculture and Rural Development of Madeira (LRVSA-Madeira or DAR) and the Department of Agriculture and Veterinary of the Autonomic Region of Azores.

The Programme was designed taking into consideration the following objectives:

- To comply with articles 30 and 31 of Regulation (EC) No 396/2005.
- To comply as much as possible with the multiannual coordinated pesticide residues control programme of the Regulation (EU) No 788/2012.
- To follow the binomials plant product/pesticide with repeated infractions in the previous years.
- To take in consideration the capacities of the laboratories.
- To have a representative sampling plan, that includes national products, products from EU and from third countries, proportional to the consumption and to the quantities of those products in the market.

So, the 2013 National Monitoring Programme for products of plant origin was based on the EU coordinated monitoring programme, which was extended to other pesticides, considering the laboratory's capacity and other commodities, such as carrots, spinach, citrus fruit, turnips and chestnuts, according to the national and regional needs.

Concerning organic products, the number of samples to be taken must be proportional to its market share.

The Monitoring Programme for animal products is not included in this part.

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

In 2013, a total of 355 samples were analysed for residues of up to 300 pesticides and relevant metabolites. This number of samples comprised 289 fruits and vegetables, 18 cereals, 33 processed products (mainly wine and tomato products) and 15 baby foods.

The number of samples analysed in 2013 decreased significantly compared to 2012 and the previous years due to the fact that the execution of the Programme began very late in the year due to budgetary reasons and reduction on the initial programme were done. In 2010 and 2011 were analysed about 800-900 samples and in 2012, 512.

From the 355 samples analysed, in 140 samples (39 %) no residues were detected, 194 (55 %) with residues below the MRL and 21 samples (5.9 %) with residues exceeding the MRL; from these

15 samples from conventional farming and one sample from organic production were non-compliant samples taking into consideration the measurement uncertainty, which represent 4.5 % of the total of the analysed samples.

Comparing with 2012, the percentage of samples without residues (39 %) decreased (57 % in 2012 and 61 % in 2011) and the number of samples with residues below the MRL increased, the percentage of samples exceeding the MRL (5.9 %) had slightly increased (3.9 % in 2012 and 2.8 % in 2011) but the percentage of non-compliances (4.5 %) was slightly higher than in the previous years (2.9 % in 2010, 2.3 % in 2011 and 2.1 % in 2012), if we consider the case of dithiocarbamates in turnips.

The majority of the samples were analysed in the framework of the EU coordinated monitoring programme and were from surveillance strategy.

The majority of samples were from domestic origin (92 %), 6.8 % were from the EU and 0.56 % from third countries. The difference is explained because the commodities included in the 2013 coordinated programme are predominantly of domestic production.

For the same reason, practically all the non-compliant samples were from domestic production.

For fruit, vegetables and other plant products a total of 318 samples were analysed, 21 samples (19 domestic and two from EEA), (6.6 %), were exceedences, which is according to the fact that fruit and vegetables were the majority of the samples.

For cereals no infringements to the respective MRL occurred, the same situation as in the previous years. From the 18 samples of cereals (oats and rye), eight samples were of domestic origin and 10 from the EU.

Concerning baby food, 15 samples were here reported, which were analysed by the laboratory of Madeira and by Neotron laboratory. In all the 15 samples no residues were detected. From these 15 samples, 10 were from domestic origin and 5 from EEA.

Residues were detected in two of the 25 samples from organic production (one sample of leek with pendimethalin (one non-compliant) and other sample of leafy brassicas with dithiocarbamates (numerical exceedence).

The two most frequent residues detected in fruits and vegetables were thiabendazol, followed by dithiocarbamates, acrinathrin and chlorpyrifos (the same compounds as in 2012 and in the same products), and also lambda-cyhalothrin, imazalil and dimethoate.

Leek (organic production) and apples were the product with higher percentage of infractions (33 % and 32 % respectively), followed by strawberries and bananas (5 %). In 5 turnips samples the MRL of dithiocarbamates was overloaded (0.4, 0.5, 1.3, 1.4, 2.1 mg/kg). However the natural occurrence of CS_2 in brassicas is the reason we have not considered as non-compliances. These compounds are not systemic and turnip is a root.

Multiple residues occurred in 72 samples of fruits and vegetables. The maximum number of residues found in one sample was 11, which occurred in one sample of apples, and the residues were: lambda-cyhalothrin, diphenylamine, imazalil, chlorpyrifos-methyl, thiabendazole, captan, chlorpyrifos, boscalid, deltamethrin, pyrachostrobin and cyfluthrin, followed by another sample of apples with seven residues.

In two samples of strawberries five compounds were detected (one sample from Spain with tebuconazole, methiocarb (sum), dimethoate (sum), cyprodinil and chlorpyrifos and the other sample from domestic production with pyrimethanil, fludioxonil, fenhexamid, chlorothalonil and cyprodinil.

24.3. Non-compliant samples: possible reasons and actions taken

In 2013, 4.5 % of the samples analysed in the framework of the National Monitoring Programme (includes National and Coordinated programmes) for products of plant origin (16 samples in a total of 355 samples) were found non-compliant with the EU MRL (Table 24-1), higher percentage than in 2012 and 2011.

Values detected above MRL, are reported as compliant if the achieved value minus the respective estimated uncertainty not exceeds the MRL and are reported as non-compliant if the achieved value minus the respective estimated uncertainty exceeds the MRL.

In the 325 samples of domestic origin occurred 19 exceedences (5.8 %), 13 of them were non-compliant (4 %). In the 24 sample from EEA countries, two were non- compliant (8.3 %). The two samples from third countries were compliant.

All the non-compliant samples were fruit and vegetables samples, one part from the coordinated monitoring programme and other from the national and regional programme. In only one case it was estimated risk for the consumers.

The use of non-authorised products was associated with 10 non-compliance cases. One case occurred in strawberries from Spain. According to the traceability done, the five cases of non-compliance of dithiocarbamates in turnips quite probably result from the natural presence of CS_2 in the product (Table 24-2).

ASAE, IRAE-Madeira and IRAE-Azores have the responsibility for the enforcement actions, such as official warnings, levying of fines or preparation of prosecutions to the court (criminal-proceedings), according to the severity of the infringements.

Warnings and technical advices were given to the producers and when applicable the authorities proceeded to a follow-up sampling (that is the case of the stored apples, where in the case of repetition of the infraction, the product was destroyed).

Table 24-1: Actions taken on the non-compliant samples

Number of non-compliant samples	Action taken	Note
Nine in domestic products (without estimated risk to consumers)	Proceeded a follow-up sampling and in the case of repetition of the infraction, the product was destroyed and warnings to the producers	
One in an EU product (without estimated risk to consumers)	Legal proceedings	
One (with estimated risk to consumer)	Stored apples: the product was retained. A follow-up sampling was done and in the case of new infraction, the product would be destroyed and warnings to the producers.	
Five cases of dithiocarbamates in turnips	Traceability	It gave us the evidence that the values found result from natural presence of CS_2 in the product and not a result of applications.

Table 24-2: Possible reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Apples	methomyl	GAP not respected: use of pesticide non-authorised on the specific crop	One case
Apples	dimethoate (sum)	GAP not respected: use of pesticide non	Four cases
Apples	fenthion	GAP not respected: use of pesticide non	One case
Bananas	carbendazim	GAP not respected: use of pesticide non	One case
Bananas	dimethoate (sum)	GAP not respected: use of pesticide non	One case
Carrots	chlorpyrifos	GAP not respected: use of pesticide non	One case
Leek	pendimethalin	Other (please see 'Note' column)	One case of a product not authorized in organic farming
Strawberries	dimethoate (sum)	Other (please see 'Note' column)	One case of a product from Spain
Turnips	dithiocarbamates	Other (please see 'Note' column)	Five cases of natural ocurrance have to be taken into consideration

24.4. Quality assurance

Table 24-3 shows the laboratories participating in 2013 control programme.

Table 24-3: Laboratories participating in the control programme

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
PT	Pesticide Residues Laboratory from INIAV (LRP-INIAV)	LRP INRB	03/06/2005	IPAC – Portugal	EUPT: FV15 IMEP-37
PT	Veterinary and Food Safety Laboratory of the Regional Directorate of Agriculture and Rural Development of Madeira (LRVSA-Madeira)	DAR	08/07/2011	IPAC – Portugal	EUPT: FV15, CF7 IMEP-37
PT	Private laboratory in Italy - NEOTRON Spa[(a)]	NEOTRON		ACCREDIA – Italian Accreditation System (Accreditation No 0026)	

(a): external laboratory was contracted by DGAV (the body responsible for the baby food control)

24.5. Additional Information

In Portugal different bodies and services are involved in the National Pesticide Residues Control Programme in Products of Plant Origin, they are:

- The Directorate General for Food and Veterinary (DGAV), the National Competent Authority for Pesticide Residue Control in Food, is responsible to prepare and promote the

implementation and execution of the pesticide residues program in products of plant origin as well in animal products.

- The Pesticide Residues Laboratory of the National Institute of Agrarian and Veterinary Research (LRP-INIAV) is the National Reference Laboratory for Fruits, Vegetables and Cereals. Is responsible for the execution of part of the analysis as well by the coordination between all the national official laboratories participating in the Pesticide Residues Official Control. Until now was also the responsible to compile all the results of all the national laboratories participating in the Pesticide Residues Official Control in Food of Plant Origin and for the submission to EFSA.

- From the Autonomous Region of Madeira, the Veterinary and Food Safety Laboratory of the Regional Directorate of Agriculture and Rural Development of Madeira (LRVSA-Madeira or LDAR) is responsible for the execution of part of the analysis. Since 2014 is the National Reference Laboratory for Single Residues Methods.

- The National Authority for Food and Economical Safety (ASAE), from Ministry of Economy and Employment, responsible for sampling collection in the mainland, according to the procedures laid down in Directive 2002/63/EC, and for enforcement actions.

- In the Autonomic region of Madeira sampling was carried out by the Agricultural Department for Markets and Food Safety (DSMSA) and by the Regional Inspectorate of Economical Activities (IRAE), the regional bodies responsible for enforcement actions.

- - The autonomic region of Azores also participated in the Program, with sampling carried out by Department of Agriculture and Veterinary and by the respective IRAE, the regional body that is responsible for enforcement actions.

25. Romania

25.1. Objective and design of the national control programme

In Romania three Competent Authorities are involved in elaboration and implementation of National Control Programme for pesticides residues: National Sanitary Veterinary and Food Safety Authority (NSVFSA), Ministry of Agriculture and Rural Development (MARD) and Ministry of Health (MH).

National Sanitary Veterinary and Food Safety Authority (the coordinator) has the responsibility for preparing the National Multiannual Control Programme for pesticides residues in cooperation with the other two CAs. NSVFSA also has the responsibility for elaboration and implementation of its own National Programme for Surveillance and Control for food of plant and animal origin.

Implementation of National Programme for Surveillance and Control for food of plant and animal origin is performed by Sanitary Veterinary and Food Safety County Divisions and BIPs.

The Programme sets the samples of food of plant origin from Member States and third countries, the point of sampling, the active substances to be analyzed.

In the monitoring programme for 2013 have been included 36 commodities.

The number of active substances analised is 145 for fruits, vegetables and cereals, and 150 (145 and chlorfenapyr, trifluralin, mandipropamid, formetanate hydrochloride, fipronil) for olive oil and tea.

Romanian Ministry of Agriculture and Rural Development has the responsibility for national monitoring plan of pesticides residues in fruits, vegetables, cereals from domestic market.

Implementation of monitoring programme is performed by MADR through Laboratory for Pesticides Residues Control in Plants and Vegetable Products and Zonal Laboratory for Pesticides Residues determination in Plants and Vegetables Products – Mures, which analyses the samples taken by Counties and Bucharest Phytosanitary Units

In the monitoring programme of MARD for 2013, 1 509 samples from 43 agricultural products were planned and 1 711 samples were analysed. The number of active substances has been increased from 179 (in 2012) to 220.

From the total number of the 1 711 surveillance samples that include 491 fruit, 1 055 vegetables and 165 cereals, 237 samples had pesticide residues with values lower than MRL and four samples had pesticides with values higher than MRL. In 2013 were analysed five organic samples.

Ministry of Health is responsible for food for special nutritional purposes.

MH realises monitoring and control of pesticide residues in food for special nutritional purposes within the National Program for monitoring of environmental and worklife determinants – subprogram for public health protection by preventing diseases associated with food and nutrition risks factors.

Ministry of Health analysed 42 samples in 2013. All of them complied with the legislative provisions.

The following factors were considered in designing the national control plan:

- Food commodities with high residues/non-compliance rate in previous monitoring years; all data from the last three years were compared and the products with high residues levels were selected to be analysed at a higher frequency: lettuce, spinach, lemons, grapefruit, mandarins, oranges, pappers, tomates, table grapes and wine grapes.

- Origin of food; compared to 2012, in 2013 the number of samples analysed for pesticide residues from domestic market has been reduced (from to 69 % in 2012 to 50 % in 2013) and the one from EEA has been reduced (from 9.9 % in 2012 to 9.7 % in 2013). For samples from third countries the number of samples has been increased (from 18 % in 2011 and 21 % in 2012 to 40 % in 2013) - as presented in Table 25-1.

Table 25-1: Number of samples analysed in the last three monitoring years

Origin of samples	2011 (%)	2012 (%)	2013 (%)
Domestic market	64	69	50
European Economic Aria	17	9.9	9.7
Third Countries	18	21	40
Unknown	1	0.15	0.28

- Sampling at different marketing levels: farm gates, wholesaler, import activities, border inspection activities, farming, slaughtering.
- Seasonal availability of food commodities.
- RASFF notifications.
- Food for the sensitive consumer groups, e.g. baby food.
- Importance of the commodity in the country production.

These products choosen for analysing pesticides residues were taking into consideration the statistical data presented by National Institute of Statistics (production of the main agricultural products per inhabitant). Thus a great number of samples were planned for cereals (wheat), fruits (apples, grapes) and vegetables (potatoes, tomatoes).

- Food commodities not included in the EU coordinated programme.
- The pesticides included in the EU coordinated programme.
- For the pesticides from the national control programmes, Romania considers for inclusion in this programme the following factors: use pattern of pesticides, cost of the analysis: multiple methods, capacity of laboratories.

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

Compared to 2011 and 2012, in 2013 the number of samples with residues below MRL has been increased (from 24 % in 2011 and 25 % in 2012 to 30 % in 2013) and the number of samples non-compliant has been reduced (from 0.9 % in 2012 to 0.2 % in 2013) – as presented in Table 25-2. The number of pesticides reported has been increased from 268 in 2012 to 310 in 2013. Pesticides were validated according to SANCO 12495/2011 (EU, 2011).

Table 25-2: Number of samples without residues, with residues below and above the MRL

Samples	2011	2012	2013
Total	3 775	3 367	4 528
Without residues	2 815 (75 %)	2 497 (74 %)	3 167 (70 %)
With residues below MRL	924 (24 %)	839 (25 %)	1 351 (30 %)
Exceeding	35 (1.0 %)	31 (0.9 %)	10 (0.2 %)
Non compliant	24 (1.0 %)	31 (0.9 %)	10 (0.2 %)

In 2013, a total number of 4 528 samples were taken in order to check the MRL's compliance of pesticide residues in different crops. From these, 4 485 samples there were sampled under surveillance strategy and 43 samples were under enforcement strategy. 47 organic samples were analysed.

1 828 samples were vegetables, 1 859 were fruits and nuts, 224 cereals and 470 samples of animal origin.

From the total number of the 4 485 surveillance samples that included fruit, vegetables, cereals, processed products (including baby food), animal products, 2 245 were produced in Romania, 437 samples were produced in EU, and 1 795 samples were produced outside of the EU.

From the 4 528 analysed samples 3 167 (70 %) were without pesticides residues foundings, 1 351 (30 %) had residues below the MRL, 10 (0.28 %) had residues exceeding MRL's and all were non-compliant. The most frequent pesticides detected in the analysed samples were (boscalid, imazalil, thiabendazole, chlorpyrifos and pyrimethanil); the highest concentration was for chlorothalonil 7.83 mg/kg detected in lettuce.

From the total number of samples, 602 foodstuffs samples had two or more foundings. Below there are mentioned some products with different number of pesticide residues:

- grapefruit – 108 samples with a number of residues from two up to five, 92 of them (85.19 %) were originated from Turkey;
- lemons – 126 samples with a number of residues from two up to four, 119 of them (94.33 %) were originated from Turkey;
- apples – 26 samples a number of residues from two up to four, 21 of them (80.77 %) were originated from Romania
- mandarins - 115 samples with a number of different residues from two up to four, all of them were originated from Turkey;
- oranges – 82 samples with two to four residues, 31 of them (37.80 %) were originated from Turkey and 18 of them (21.95 %) were originated from Egypt,
- peppers – 38 samples with two to five residues, 27 of them (71.05 %) were originated from Turkey

All the data presented above will be taken into account in amending of the National Control Programme for pesticides residues during the next years.

25.3. Non-compliant samples: possible reasons and actions taken

In 2013, 0.2 % of the samples (10 samples in total) were found non-compliant with the EU MRL. For seven samples was issued a RASFF notification and for three samples no action was taken.

Table 25-3 shows the follow-up actions taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration) and Table 25-4 the reasons for MRL non compliance.

Table 25-3: Follow-up action taken in non-compliant samples

Number of non-compliant samples	Action taken	Note
7	RASFF notification	Sample code: 13-0079; 13-0078; 13-0273; 13-0127. RASFF ref: AE/01.04.2013; AEU/01.04.2013; AGG/25.04.2013; AER/01.04.2013 Sample code: 30599; 30689; 32641. RASFF ref: 022/29.03.2013; 026/18.04.2013; 056/20.12.2013;
3	No action	Sample code: 30672; 30717; 31108

Table 25-4: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Lettuce	chlorothalonil	GAP not respected: use of pesticide non-authorised on the specific crop	Sample of EU origin. The use of chlorothalonil is not authorised in lettuce
Lettuce	procymidone	GAP not respected: use of non-authorised pesticide on all crops	Sample of EU origin. The use of procymidone is no longer authorised in Europe
Peppers	carbofuran	Other (please see 'Note' column)	GAP not respected
Pomegranates	prochloraz	Other (please see 'Note' column)	GAP not respected
Apples	dimethoate	Other (please see 'Note' column)	GAP not respected
Strawberries	carbendazim	Other (please see 'Note' column)	GAP not respected
Beans (dry)	malathion	Other (please see 'Note' column)	GAP not respected
Table grapes	procymidone	Other (please see 'Note' column)	GAP not respected

25.4. Quality assurance

In Table 25-5 the laboratories submitting data in 2013, are listed.

Table 25-5: Laboratory detaills

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
RO	Sanitary Veterinary and Food Safety Laboratory Bucharest	RO321 ANSVSA	11/04/2007	RENAR-Bucharest, Romania	EUPT: CF07, FV15, FV-SM05 IMEP 37, T01
RO	Sanitary Veterinary and Food Safety Laboratory Constanta	RO223 ANSVSA	24/05/2004	RENAR-Bucharest, Romania	EUPT: A08
RO	Laboratory for Control Pesticide Residues in Plants and Products Plants	RO321 LCCRPPPV	16/01/2006-11/01/2010 18/12/2013	RENAR-Bucharest, Romania	EUPT: CF07, FV15, FV-SM05 IMEP 37
RO	Zonal Laboratory for Pesticides Residues determination in Plants and Vegetables Products – Mures	RO125 LZDRPPPV	26/04/2013	RENAR-Bucharest, Romania	BIPEA
RO	Sanitary Veterinary and Food Safety Laboratory Cluj	RO113 ANSVSA	13/06/2013	RENAR-Bucharest, Romania	EUPT: A08, CF07

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
RO	Environmental and food chemistry and microbiology laboratory	RO321 MS	LI 353/2011	RENAR-Bucharest, Romania	
RO	Sanitary Veterinary and Food Safety Laboratory Calarasi	RO312 ANSVSA	11/28/2005	RENAR-Bucharest, Romania	EUPT: A08
RO	Sanitary Veterinary and Food Safety Laboratory Suceava	RO215 ANSVSA	05/03/2007	RENAR-Bucharest, Romania	EUPT: A08
RO	Sanitary veterinary and food safety laboratory Iasi	RO213 ANSVSA	17/04/2006	RENAR-Bucharest, Romania	EUPT: CF07, FV15 IMEP 37
RO	Institute of Hygiene and Veterinary Public Health	RO321 IISPV	01/04/2002	RENAR-Bucharest, Romania	EUPT: A08, CF07

26. Slovakia

26.1. Objective and design of the national control programme

In the year 2013, the pesticide residue control was conducted in compliance with the Multi-annual Control Programme for Pesticide Residues in Food and Baby Food in SK, issued for the years 2013-2015, (hereinafter referred to as the 'Programme'), in which Commission Implementing Regulation (EU) No 788/2012 was incorporated. In developing the national plan we focused on several priorities. For a selection process as regards types and number of samples to be collected and analysed certain criteria were set such as: knowledge from sample analyses from the previous year, consumption and production of a given commodity in Slovakia, as well as the RASFF information. In selection of commodities we focused on fresh fruit and vegetables. Within the scope of the EU monitoring 2013, the following commodities were sampled: apples, head cabbage, leek, lettuce, tomatoes, peaches or nectarines, rye or oat, strawberries, grape wine (red or white), cow´s milk and pork. Further 60 other food types were sampled and analysed. In compliance with legislative requirements, a total of 18 samples of organic foods and 41 samples of baby foods were collected and analysed. Within the sampling in trade network, the samples from third countries were preferred. Sampling of food of domestic origin was preferentially done at growers' distribution warehouses but also at trade network level. The percentage of samples upon their origin for the purpose of pesticide residue analysis reflected food offer in the Slovakian market and herewith also consumption trends in Slovakia (food of domestic origin – 28.5 %, third countries – 24.3 %, EU countries – 46.2 %).

The extention of analyses in 2013 by other types of pesticides was based on the requirements of Regulation (EU) No 788/2012. In all the collected samples, 376 analytes (pesticides, metabolites or isomers) were determined. Collected samples were analysed in two official laboratories. Food samples were analysed in the State Veterinary and Food Institute in Bratislava and food for infants and young children samples were analysed in the Laboratory of the Public Health Authority of the SR. Two multiresidue methods (MRM) and seven single residue methods (SRM) were used for food analyses (besides baby foods). Four MRMs and three SRMs were used to analyse foods for infants and young children samples.

Owing to the fact that the number of pesticides to be analysed is continuously increasing, equally financial demands for analyses are going up. This is especially in the case when some analytes must be determined by single residue methods that are financially demanding. The samples covered by the EU monitoring were analysed for pesticide residues to the extent required by legislation. MRM methods were preferentially applied to analyse most other food samples.

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

A total of 671 samples were analysed in 2013 (Table 26-1), thereof 503 samples of fresh or frozen fruit and fresh or frozen vegetables and potatoes. No pesticide residues were detected in 262 samples representing 39.1 % of all analysed samples (the values below the LOQ of analytical methods). One or more pesticide residues under the MRL (at LOQ) were detected in 398 samples representing 59.3 % of all analysed samples. Residues exceeding MRL were found in 11 analysed samples, thereof five samples of fruit, two samples of vegetable, one sample of oilseeds and three samples of teas (after taken in the account a 50 % measurement uncertainty in the results).

Table 26-1: Total number of samples analysed in 2013

Year	Total number of samples	Samples with no measurable residues (%)	Samples below the MRL (%)[(a)]	Samples with MRL exceedances (%)
2013	671	39.1	59.3	1.6

(a): including the samples with MRL exceedances after taken in the account a 50 % measurement uncertainty in the results

In compliance with the legislative requirements, a total of 18 samples of organic foods were collected. In three samples of organic honey, one sample of organic flour and one sample of organic raisins the presence of the pesticide was detected which is not permitted for the usage in the organic farming upon the production of organic foods.

Upon the control of food consignments from third countries Regulation (EC) No 669/2009 is applied to a full extent.

The multiresidual findings were detected in 235 samples. The multiresidual findings with the highest number of detected pesticide residues, as much as 17 different types, were detected in two samples of dried goji (Lycium chinensis) originating from China.

Multiresidual findings with a possible risk for a consumer: within the commodity dried fruit or vegetable in total, five samples of dried goji (Lycium chinensis) originating from China were collected, recommended to customers as a product of a healthy diet. In all five samples the multiresidual findings from 11 to 17 types of pesticide residues above the LOQ limit were detected, whereby MRL was not exceeded in any pesticide. Based on the risk assessment of the multiresidual finding, in four samples the risk for a consumer was determined (hazard index > 1). The notifications in relation with the mentioned hazardous foods were sent to the European Rapid Alert System for Food and Feed (RASFF) that were subsequently published.

26.3. Non-compliant samples: possible reasons and actions taken

In 2013, in total 11 samples were non-compliant (Table 26-2).

Table 26-2: Samples non-compliant

Sample number	Food	Country of origin	Pesticide residue name above the MRL (amount of pesticide detected (mg/kg))
BA2434_13	pomelo	China	triazophos (0.035)
BA12770_13	dark blum	Spain	tetrametrin (0.196)
BA16074_13	Asian pears	Korea	fenitrothion (0.031)
BA13357_13	white grape	Turkey	Imazalil (0.12)
BA18717_13	pomegranate	Turkey	acetamiprid (0.03)
BA11582_13	round beans	Morocco	difocol (0.087)
BA6592_13	parsley (tops)	Italy	thiamethoxam (0.63)
BA15890_13	green tea	Vietnam	acetamiprid (0.41); imidacloprid (0.34)
BA17810_13	green tea	EU	acetamiprid (0.3); imidacloprid (0.35)
BA20852_13	green tea	Poland	imidacloprid (0.27)
BA12300_13	blue poppy seed	Czech Republic	chlorpyrifos-methyl (0.14)

In compliance with the national food legislation in all cases the respective administrative procedures and sanctions against the subjects were carried out (Table 26-3). In total, four notifications on non-compliant samples were sent to the RASFF. Further three notifications to the European RASFF were sent in connection with the hazardous food goji. In case of non-compliant sample of poppy seed the exceeding finding of chlorpyrifos-methyl was solved by the bilateral exchange of information with the Czech Republic found to be the country of origin of the poppy seeds.

Table 26-3: Number of non-compliant samples

Number of non-compliant samples	Action taken	Note
4	Administrative sanctions and RASFF notification	Sample code: BA2434_13, BA12770_13, BA16074_13, BA11582_13

Number of non-compliant samples	Action taken	Note
7	Administrative sanctions	BA13357_13, BA18717_13, BA6592_13, BA15890_13, BA17810_13, BA20852_13, BA12300_13

Table 26-4 gives details on the samples with an ARfD exceedance.

Table 26-4: ARfD exceedance

Pesticide	Crop	Sample number	Sample origin	Residue level (mg/kg)	ARfD (mg/kg bw)	ARfD (%)	Population exposue worst case scenario	Model used	RASFF notification
triazophos	pomelo	BA3978_12	China	0.035	0.001	135	children	(EU, 2004)	2013.0403
dicofol	round beans	BA11582_13	Morocco	0.087	ADI = 0.002	%ADI = 235	children	(EU, 2004)	2013.1131

26.4. Quality assurance

Table 26-5 shows the laboratories reporting data in 2013.

Table 26-5: Laboratory details

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SK	State Veterinary and Food Institute Bratislava	156434	16.7.2013 Last re-accreditation	SNAS	EUPT: FV 15, SRM08, CF07, T1, AO08
SK	Public Health Authority of the SR	607223	29.5.2013 Last re-accreditation	SNAS	EUPT: FV-15, CF07

26.5. Other information

For seven samples, was not possible to identify the country of origin. It concerned the samples collected in trade network. The country of origin of the food or raw material for its production was not indicated on the packages (apple juice, dried raisins, rice and wheat flour).

27. Slovenia

27.1. Objective and design of the national control programme

The selection of commodities included into the monitoring programme was based on the following criteria:

- staple food (presenting most important food in national food consumption as well as food for sensitive group of population-baby food);
- food included in EU coordinated programme;
- food offered on the Slovenian market, where also data of Statistical Office of RS on average annual quantity of purchased food and beverages per household member are taken into account, this is covered as part of national rolling programme;
- commodities found non-compliant previous year;
- problematic commodities as evident within the CIRCA-RASFF database.

The inspection services responsible for official control sampled commodities at primary production and at other stages of the food chain - wholesale, retail, open markets, and shops. Sampling had taken into account seasonal availability of product. However if commodities were present on the market throughout the year then sampling period was extended. For this reason samples taken were of domestic, EU and of third countries origin. Where commodities from organic production were available, they were included into sampling. Beside fresh commodities also processed products were included into the sampling program.

The selection of pesticides to be sought was primarily determined on data on national use of pesticides, potential for residues based on use pattern, toxicological profiles of pesticides, preference list of active substance prepared by reference laboratories, data from CIRCA RASFF database, analytical capabilities of the laboratories and those mentioned in Regulation (EU) No 915/2010[38] on EU coordinating programme and financial constrains as well.

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

In 2013, total 1 067 samples of food were analysed on pesticide residues in Slovenia. Samples included: 38 samples of animal products, 10 samples of baby food 368 samples of fruits and nuts, 594 samples of vegetables, 57 samples of other products of plant origin. There were 617 (57.8 %) samples without detectable residues, 440 (41.2 %) samples with residues below or at EU-MRL and 18 (1.7 %) samples with residues exceeding the EU-MRL, eight of these (0.75 %) samples were non compliant. 533 (49.9 %) samples originated from domestic production, 368 (34.5 %) originated from EEA countries, and 103 (9.7 %) from third countries.

Samples of animal products were analysed for the presence of up to 38 (38 in 2012) pesticides. From 38 surveillance samples, 38 (100 %) samples were without detectable residues.

All 10 samples of baby food analysed for the presence of pesticides in 2013 were from group of baby food for infants and young children (ready-to-eat meals for children, mainly fruit, vegetable or meat-based). Regarding the origin, eight samples (80 %) were from other EU countries, and two samples

[38] Commission Regulation (EU) No 915/2010 of 12 October 2010 concerning a coordinated multiannual control programme of the Union for 2011, 2012 and 2013 to ensure compliance with maximum levels of and to assess the consumer exposure to pesticide residues in and on food of plant and animal origin. OJ L 269, 13.10.2010, p. 8–18.

(20 %) from Slovenia. Samples of baby food were analysed for the presence of up to 364 parameters (352 in 2012) of pesticides including other active substances, metabolites or breakdown products where the residue definition of a pesticide include those substances. All 10 surveillance samples (100 %) were without detectable residues.

Samples of fruits and nuts were analysed for the presence of up to 331 (325 in 2012) pesticides. From 368 surveillance samples 88 (24 %) samples were without detectable residues, 280 (75.7 %) with residues below or at EU-MRL and eight (2.2 %) with residues exceeding the EU MRL out of this three (0.8 %) samples were non compliant.

Samples of other plant products were analysed up to 321 pesticides. From 57 surveillance samples 37 (64.9 %) samples were without detectable residues, 20 (35.1 %) with residues below or at EU-MRL.

Samples of vegetables were analysed for the presence of up to 333 (325 in 2012) pesticides. From 495 surveillance samples 458 (77.1 %) samples were without detectable residues, 136 (27.5 %) with residues below or at EU-MRL and seven (1.4 %) with residues exceeding the EU-MRL out of these, five (1 %) samples were non compliant.

27.3. Non-compliant samples: possible reasons and actions taken

In 2013, 0.75 % of the samples (eight samples in total, from 1 067 samples taken) were found non-compliant with the EU-MRL. Three of them were assessed as unsafe for the consumers and three non-compliant consignments were rejected at border (two oranges and one of peppers) for which RASFF notifications were issued. For eight samples administrative sanctions and follow-up activities were undertaken.

The following actions were taken (Table 27-1) in case of samples non-compliant with the EU-MRL: control inspections for checking internal control of the FBO. Table 27-2 shows the reasons for MRL non compliance.

Table 27-1: Action taken in case of samples non-compliant

Number of non-compliant samples	Action taken
8	Warning and/or administrative sanctions
	3 RASFF notifications

Table 27-2: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance
Spinach	tetraconazole	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Peaches	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Oranges	dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Oranges	thiacloprid	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Peppers	chlorfenapyr	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected

Product	Residue	Reason for MRL non compliance
Lettuce	flonicamid (sum of flonicamid, TNFG and TNFA)	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Courgettes	etofenprox	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected
Kohlrabi	indoxacarb as sum of the isomers S and R	GAP not respected: use of pesticide not authorised on the specific crop - application rate and/or application method not respected

27.4. Quality assurance

Table 27-3 show the laboratories reporting data in 2013.

Table 27-3: Laboratories reporting 2013 data

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SI	National Institute of Public Health, Ljubljana	IPH Ljubljana	22.Aug.2003, Last update: 19. Aug. 2011	SA – Ljubljana, Slovenia	EUPT: FV13, C5, SRM6 Aquacheck: Group 8 (Round 400, 420) Group 1H, 2H, 3 (Round 405, 417)
SI	Institute of Public Health Maribor	IPH Maribor	December 2001, Last update: 19. Jun 2012	SA – Ljubljana, Slovenia	FAPAS 19135 EUPT: C6, FV14, SRM7, FV-SM04

28. Spain

28.1. Objective and design of the national control programme

The objectives of the national control programes are to ensure that official controls are carried out in order not to place on the market food products treated with unauthorised pesticides neither with pesticide residues levels above those established in regulations in force, so they can pose a health risk for consumers.

The responsibilities are shared. The elaboration and implementation of the National Control Programme involves the units from the Directorate-General of Public Health, Quality and Innovation of the Ministry of Health, Social Services and equal opportunities (in Spanish MSSSI) and the unit from the sub-directorate General of the Coordination of Alerts and Programming Official Control of Spanish Agency for Consumer Affairs, Food Safety and Nutrition (in Spanish AECOSAN).

Each unit has assigned its duties about coordination or execution within its scope.

AECOSAN is an autonomous body under the Ministry of Health, Social Services and Equal opportunities and acts as liaison with the Commission and the European Food Safety Authority (EFSA).

A specific working group consisting in members of Autonomous Communities, Ministry of Health, Social Services and Equal opportunities (MSSSI), AECOSAN, the Ministry of Agriculture, Food and Environmental affairs (MAGRAMA) and Laboratories, has been created in January 2014 in order to improve the risk-based programming and setting common criteria in different control Units throughout Spain.

The design of the National Programme is made up of two sub-programmes based on the point where the samples are collected:

- Market Sub-program, coordinated by AECOSAN.
- Imports Sub-program, coordinated by MSSSI.

The National Pesticide Residues Control Programme integrates controls performed by the ACs. AECOSAN is responsible for the coordination of controls. The annual plans developed by ACs and coordinated by AECOSAN, include monitoring of unauthorised products.

The criteria taken into account in the designing of the program are:

- The products listed in the Regulation concerning a Coordinated Multiannual Control Programme of the European Union for 2013, 2014 and 2015, aimed at ensuring the enforcement of maximum residue limits pesticides in food of animal or plant origin and on them, and to assess the degree of consumer exposure to these residues.
- The Spanish diet model for determining exposure to consumer chemicals.
- Food intended for populations at risk (baby food).
- Products with a high consumption in each region.
- RASFF notifications.
- Non compliant results obtained in previous years.

The sampling is carried out by inspectors of the Autonomous Communities. The samples taken at the border inspection posts/points of entry are taken by staff from the General Directorate of Public Health.

Taking into account the conclusions of the working group mentioned, some changes are planned (or expected) for the 2016 Programme.

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

In 2013, a total of 2 159 samples were analysed for pesticide residues compared to a total of 2 210 samples analysed in 2012. Out of the 2 159 samples, 2 061 were surveillance samples and 98 were enforcement samples. Regarding sampling strategy, 95.46 % were objective and 4.54 % were suspects. The 4.54 % (98 samples in total) suspect samples included three domestic samples and 95 samples from third countries, mainly fruits and vegetables. There has been an increase in the number of samples from third countries because of the application of Regulation (EC) No 669/2009 regarding the increased level of official controls on imports of certain feed and food of non-animal origin.

In 2013, 1.7 % of the samples analysed shown pesticide residues levels exceeding the EU-MRL, compared with 1.2 % of the samples which exceeded EU-MRL in 2012.

Some new detection methods were implemented in Spanish laboratories en order to increase the number of pesticide residues measured and to bring down some of their detection limit.

Most of the samples were analysed by multirresidue methods. The methods used were:

- Gas chromatography (GC) with different detectors: GC-(P)FPD, GC-ECD, GC-FID, GC-MSD, GC-MS/MS and GC-QqQ-MS/MS.
- High Performance Liquid Chromatography (HPLC)/Liquid Chromatography (LC) with different detectors: LC-MS, LC-MS/MS and LC-QqQ-MS/MS.

All the labs have procedures to estimate analytical uncertainty, which is taken into account to decide any enforcement action. Document SANCO/12495/2011 (EU, 2011) is also considered.

In 2013, 100 % of the analytical determinations were performed in accredited laboratories compared to 97.5 % in 2012. Our main objective has been reached.

28.3. Non-compliant samples: possible reasons and actions taken

The total number of samples in the Coordinated Programme and the National Spanish Programme in 2013 was 2,159; 1,030 (47.7 %) samples were taken from fruits, vegetables and other plant products, 235 (10.9 %) from processed product, 25 (1.2 %) from cereals, 123 (5.7 %) from baby food, 746 (34.5 %) from animal products.

In total, 36 samples (1.7 %) were found non-complaint with the EU MRL. For fruits, vegetables and other plant products the number of samples that exceeded the MRL was 31 (3.0 %), for animal products was four (0.5 %), for processed products one (0.4 %). No samples for cereals, and baby food were above the MRL. Out of the 36 samples non-compliant, 21 were from domestic production and 15 were imported samples.

The pesticides found above the MRLs were:

- In/on fresh or frozen fruit: carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim); amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz); chlormequat; iprodione; imazalil; triadimefon; dimethoate (sum of dimethoate and omethoate expressed as dimethoate); 2-phenylphenol; phosmet (phosmet and phosmet oxon expressed as phosmet) and fenthion.

- In/on vegetables fresh or frozen: parathion-methyl; profenofos, propiconazole, difenoconazole, oxamyl, thiophanate-methyl, acephate, buprofezin, cypermethrin, fenvalerate/esfenvalerate (sum), triazophos, mecarbam, carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim), BAC (sum of BAC 10, BAC 12, BAC 14 and BAC 16); BAC 12; BAC 14, chlorpyrifos and cypermethrin.

- In/on animal products: methoxychlor and permethrin (sum of isomers).

Information about samples, reason for MRL non-compliance and actions taken regarding non-compliant samples are given in Table 28-1 and Table 28-2.

Table 28-1: Action taken

Number of non-compliant samples	Action taken	Note
9	Administrative consequences	Samples codes: 13ES523-000000011729, 13ES705-000000012082, 13ES422-000000012092, 13ES243-000000012264, 13ES620-000000012463, 13ES705-000000012466, 13ES300-000000012773, 13ES300-000000012774, 13ES300-000000012863
28	Lot not released on the market	Samples codes: 13ESZZZ-000000010745, 13ESZZZ-000000010805, 13ES522-000000010891, 13ES523-000000010915, 13ES523-000000011024, 13ES523-000000011126, 13ES523-000000011126, 13ES523-000000011147, 13ES523-000000011147, 13ES523-000000011349, 13ES523-000000011354, 13ESZZZ-000000011375, 13ESZZZ-000000011375, 13ESZZZ-000000011375, 13ESZZZ-000000011435, 13ESZZZ-000000011506, 13ESZZZ-000000012022 13ESZZZ-000000012022, 13ESZZZ-000000012022, 13ESZZZ-000000012022, 13ESZZZ-000000012043, 13ESZZZ-000000012053, 13ESZZZ-000000012053, 13ESZZZ-000000012053, 13ESZZZ-000000012053, 13ESZZZ-000000012053, 13ESZZZ-000000012072, 13ESZZZ-000000012073
4	No action taken	13ES522-000000011725, 13ES522-000000011728, 13ES523-000000011735, 13ESZZZ-000000012356
6	Others: special follow, official sampling, comunication to the Competent Authority of sample´s origin	13ES511-000000011398, 13ES617-000000011893, 13ESZZZ-000000012217, 13ESZZZ-000000012269, 13ESZZZ-000000012273, 13ES423-000000012512

Table 28-2: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance/Notes
Olive oil	Chlorpyrifos	Bad Practices
Celery	Linuron	Drift
Aubergine	Acephate	Pesticide misuses
Broccolis	Chlorpyrifos	Incorrect use, e.g. use of too concentrated solution and incorrect dosage

Product	Residue	Reason for MRL non compliance/Notes
Strawberry	Triadimenol	Incorrect use, e.g. use of too concentrated solution and incorrect dosage
Poultry chicken, geese, duck, turkey and Guinea fowl ostrich, pigeon fat	Methoxychlor	Unknown
Lettuce	Acrinathrin	Bad Practices
Lettuce	Procymidone	Post-harvest treatment and crop packed for immediate consumption
Lemon	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses
Lemons	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses
Lemons	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses
Lemons	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses
Peaches	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Bad Practices
Peaches	Fenthion	Bad Practices
Yam	BAC (sum of BAC 10, BAC 12, BAC 14 and BAC 16)	Pesticide misuses
	BAC 12	Pesticide misuses
	BAC 14	Pesticide misuses
Yam	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim)	Pesticide misuses
Other herbs	Cypermethrin	Pesticide misuses
Other herbs	Chlorpyrifos	Pesticide misuses
Other legume vegetables (dry)	Parathion-methyl	Pesticide misuses
Other legume vegetables (dry)	Parathion-methyl	Pesticide misuses
Cucumber	Oxamyl	Bad Practices
Pears	Phosmet (phosmet and phosmet oxon expressed as phosmet)	Bad Practices
Pears	2-phenylphenol	Bad Practices
Pears	Dimethoate (sum of dimethoate and omethoate expressed as dimethoate)	Bad Practices
Pears	Triadimefon	Bad Practices
Pears	Triadimenol	Bad Practices
Pears	Chlormequat	Bad Practices
Pears	Amitraz (amitraz including the metabolites containing the 2,4-dimethylaniline moiety expressed as amitraz)	Bad Practices
Pepper	Difenoconazole	Pesticide misuses
	Oxamyl	Pesticide misuses
	Profenofos	Pesticide misuses
	Propiconazole	Pesticide misuses
	Thiophanate-methyl	Pesticide misuses

Product	Residue	Reason for MRL non compliance/Notes
Pineaple	Imazalil	Bad Practices
	Iprodione	Bad Practices
Wild fungi	Dicofol (sum of p, p' AND o,p' isomers)	Bad Practices
Stem vegetables, fresh	Myclobutanil	Bad Practices
Tea	Buprofezin	Pesticide misuses
	Cypermethrin	Pesticide misuses
	Fenvalerate/Esfenvalerate (sum)	Pesticide misuses
	Triazophos	Pesticide misuses
Swine Fat free of lean meat	Permethrin (sum of isomers)	Unknown
Swine Fat free of lean meat	Permethrin (sum of isomers)	Unknown
Swine Fat free of lean meat	Permethrin (sum of isomers)	Unknown
Tomatoes	Mecarbam	Pesticide misuses

28.4. Quality assurance

The laboratories submitting data in 2013 can be seen in Table 28-3.

Table 28-3: Details on the laboratories

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Laboratorio Químico microbiológico S.A de Murcia	Laboratorio Químico microbiológico S.A de Murcia	04.06.10	ENAC No Exp. 498/LE	FAPAS, EUPT, Test-Qual
ES	Labs & technological Services AGQ, S.L.	Labs & technological Services AGQ, S.L	19.01.07	ENAC and IAS No Exp. 305/LE1323 and TL-475	FAPAS, Test-Qual
ES	Laboratorio Tecnológico de las Palmas de Gran Canarias (Gobierno de Canarias)	Laboratorio Tecnológico de las Palmas de Gran Canarias (Gobierno de Canarias)	yes	ENAC No Exp. 937/LE 1845	FAPAS, EUPT
ES	Laboratorios ECOSUR, S.A.L.	Laboratorios ECOSUR, S.A.L.	14.03.03	ENAC No Exp. 354/LE709	FAPAS, Test-Qual, EUPT
ES	Laboratorio Regional de la Comunidad Autónoma de La Rioja	Laboratorio Regional de la Comunidad Autónoma de La Rioja	16.11.12	ENAC No Exp. 168/LE399	FAPAS, Test-Qual, EUPT
ES	Laboratorio Químico Microbiológico S.A., de Mairena de Aljarafe, de Sevilla	Laboratorio Químico Microbiológico S.A., de Mairena de Aljarafe, de Sevilla	16.12.05	ENAC No Exp. 498/LE767	FAPAS
ES	Laboratorio Oficial de Salud Pública de la Delegación de Salud y Bienestar Social de Cuenca	Laboratorio Oficial de Salud Pública de la Delegación de Salud y Bienestar Social de Cuenca	2.12.11	ENAC No Exp. 952/LE1862	FAPAS, EUPT

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
ES	Laboratorio Normativo de Salud Pública de Bilbao	Laboratorio Normativo de Salud Pública de Bilbao	18/05/12	ENAC No Exp. 132/LE/326	FAPAS
ES	Laboratorio KUDAM S.L	Laboratorio KUDAM S.L	14.01.02	ENAC No Exp. 324/LE670	FAPAS, Test-Qual
ES	Laboratorio ISP de Navarra	Laboratorio ISP de Navarra	30.07.13	ENAC No Exp. 194/LE404	FAPAS
ES	Laboratorio Fitosoil. Antonio Abellán Caravaca S.L.	Laboratorio Fitosoil. Antonio Abellán Caravaca S.L.	03.10.03	ENAC No Exp. 387/LE619	Test-Qual,
ES	Laboratorio de Salud Pública de Valencia	Laboratorio de Salud Pública de Valencia	06.10.00	ENAC No Exp. 234/LE371	FAPAS, EUPT
ES	Laboratorio de Salud Pública de Palma de Mallorca	Laboratorio de Salud Pública de Palma de Mallorca	10.01.14	ENAC No Exp. 603/LE1307	FAPAS, EUPT
ES	Laboratorio de Salud Pública de Badajoz	Laboratorio de Salud Pública de Badajoz	12/05/14	ENAC No Exp. 1044/LE2020	FAPAS, EUPT
ES	Laboratorio de Salud Pública de Almería (Junta de Andalucía)	Laboratorio de Salud Pública de Almería (Junta de Andalucía)	27.03.09	ENAC No Exp. 480/LE568	FAPAS, EUPT, Test-Qual
ES	Laboratorio de Salud Pública Madrid Salud. Ayuntamiento de Madrid	Laboratorio de Salud Pública Madrid Salud. Ayuntamiento de Madrid	04.01.06	ENAC No Exp. 216/LE/406/LE1915	FAPAS
ES	Laboratorio del S. Inspección SOIVRE (D.P.C) Almería	Laboratorio del S. Inspección SOIVRE (D.P.C) Almería	yes	ENAC No Exp. 557/LE997	EUPT
ES	Laboratorio de la Agencia de Salud Pública de Barcelona (LASPB)	Laboratorio de la Agencia de Salud Pública de Barcelona (LASPB)	09.04.14	ENAC No Exp. 227/LE459-227/LE1338	FAPAS, EUPT
ES	Laboratorio COEXPHAL de El Viso (Almería)	Laboratorio COEXPHAL de El Viso (Almería)	16.02.01	ENAC No Exp. 254/LE537	FAPAS, Test-Qual
ES	Laboratorio Analítico bioclínico S.L.	Laboratorio Analítico bioclínico S.L.	25.11.05	ENAC No Exp. 493/LE1019	FAPAS
ES	Laboratorio Agroalimentario y de Sanidad Animal (LAYSA) de Murcia	Laboratorio Agroalimentario y de Sanidad Animal (LAYSA) de Murcia	16.10.09	ENAC No Exp. 745/LE1502	FAPAS, EUPT, Test-Qual
ES	Laboratorio Agroalimentario de Zaragoza	Laboratorio Agroalimentario de Zaragoza	31.02.14	ENAC No Exp. 758/LE1462	FAPAS, Test-Qual, EUPT
ES	Laboratorio Agroalimentario de Burjasot-Valencia (Comunidad	Laboratorio Agroalimentario de Burjasot-Valencia (Comunidad	22.10.99	ENAC No Exp. 184/LE405	EUPT, Test-Qual

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
	Valenciana)	Valenciana)			
ES	Laboratorio Agrario y Fitopatológico de Galicia	Laboratorio Agrario y Fitopatológico de Galicia	15.06.01	ENAC No Exp. 281/LE609	EUPT, Test-Qual
ES	Laboratorio Agrario Regional de Burgos (Junta de Castilla y León)	Laboratorio Agrario Regional de Burgos (Junta de Castilla y León)	16.10.12	ENAC No Exp. 277/LE416	EUPT, Test-Qual
ES	Analytica Alimentaria GmbH Sucursal en España	Analytica Alimentaria GmbH Sucursal en España	yes	DAKKS//IAS No Exp. D-PL-14156-01-00 TL-38	Test-Qual
ES	AINIA	AINIA	20.12.96	ENAC No Exp. 97/LE670	EUPT

29. Sweden

29.1. Objective and design of the national control programme

The National Food Agency (NFA) has developed a point system (score model) to clarify the criteria that form the basis for the prioritization of the products included in the national monitoring program for pesticide residues. The score model is valid for a period of three years and revised every third year. The score model is based on that 20 of the most important products, taking the risk of the consumers into consideration, shall be included annually and constitute to about 60 percent of the control program. Other products shall recur on a regular basis, such as every three years.

In order to find out which products that belongs to the 20 most important the following criteria are included in the score model:

- Acute consumption, 97.5 percentile, for adults and children.
- Positive results from pesticide control in relation to the number of samples taken over a three year period. This is done on product basis. A minimum of 30 selected samples during the three years is required for the product to be included in this criterion.
- The proportion of samples with residues above MRL over three year's period, expressed in percentage.
- Whether products are processed or not before consumption.
- RASFF messages.
- If the measured levels has led to the intake of acute toxic substances above 50 or 100 percent of the acute reference dose (ARfD).

In 2013 the sampling distribution between the origins of the food was roughly 26 % domestic, 29 % EU and 45 % from third country.

Fresh fruits and vegetables were sampled at wholesalers' warehouses in the first trade channel. The imported cereal grains were sampled at the port where the shipment was discharged. Samples of domestic produced cereal grains were collected at the mill. Most of the samples of processed or frozen fruit and vegetables, juices, fruit drinks, rice and cereal products were collected in retail shops or department stores.

The number of samples from the organic sector was roughly dependent on its share of the market and availability on the market.

All samples were analysed by a multi-residue method. Depending on the use pattern of pesticides and the products to be analysed we complement the multi residue method by using one or more single residue methods. Overall we used 14 analytical methods. In all, by using both multi-residue methods and single residue methods it was possible to determine 464 analytes which of about a hundred is metabolites or break down products.

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

In 2013, a total of 1 838 selective samples of fruits, vegetables, baby food, juices, wine, cereal grains, swine meat and cattle milk were analysed for residues of 464 analytes (pesticides, metabolites and break down products). EU harmonised Maximum Residue Limits (EU-MRLs) were exceeded in

19 samples (1.04 %). The exceeding level has decreased with 1.76 % compared to 2012 level of 2.8 %.

Table 29-1 shows the total number of samples taken for each category, the number of samples where the concentration of pesticides were below the LOQ, i.e. no residues are found, number of samples with residues located between the LOQ and the limit (MRL), and the samples where concentrations over the limit was noted (not taking the measurment uncertainty into account).

Table 29-1: Results from the national monitoring program for pesticide residues in 2013

	Total samples	Samples < LOQ	Samples > LOQ	Samples > MRL[(a)]
Fruits and berries (fresh or frozen)	895	198 (22.1 %)	684 (76.4 %)	13 (1.5 %)
Vegetables (fresh or frozen)	496	277 (55.8 %)	216 (43.5 %)	3 (0.6 %)
Baby food	37	37 (100 %)	0 (0 %)	0 (0 %)
Cereal grains and cereal products	241	175 (72.6 %)	64 (26.6 %)	2 (0.8 %)
Products of animal origin	62	62 (100 %)	0 (0 %)	0 (0 %)
Wine	30	14 (46.7 %)	16 (53.3 %)	
Others (e.g. juice, concerves, dryed products, processed)	77	53 (68.8 %)	23 (29.9 %)	1 (1.3 %)
Total	1 838	816 (44.4 %)	1 003 (54.6 %)	19 (1.04 %)

(a): measurement uncertainty not taken into account.

When measurement uncertainty was taking into consideration only seven samples, of the 19 samples, were non-compliant samples. These samples were papaya from Brazil, green tea from China, carrots from Albania, rice from Macedonia, apples from Brazil, chili pepper from Thailand and sugar peas from Peru.

The suspect samples were 50 and included 13 enforcement samples and 37 samples according to Regulation (EC) No 669/2009. Two (5.4 %) of the samples in Regulation (EC) No 669/2009 contained residues above the MRL.

The short-term intake was estimated for all acute toxic pesticides with an acute reference dose (ARfD) set by EU or WHO. The calculation was based on the residue found in a selective (composite) sample and EFSA calculation model PRIMo was used. Two samples exceeded the ARfD and RASFF notifications were sent to the Commissions RASFF-team.

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

In 2013, 0.04 % of the samples (seven samples in total) were found non-compliant with the EU MRL (measurement uncertainty taken into consideration). In all cases where administrative action was taken the competent authority in the country of origin was informed through their embassies.

The following follow-up actions (Table 29-2) were taken in samples non-compliant with the EU MRL (measurement uncertainty taken into consideration).

All lots except one from the selective sampling which were found non-compliant with the MRL were released on the market.

Table 29-2: Follow-up actions taken in non-compliant samples

Number of non compliant samples	Action taken	Note
7	Warnings and administrative sanctions	Sanctions in terms of enforcement sampling on next coming consignments from the same origin.
2	RASFF notification	Sample code:85590, RASFF ref: 2013.0386, Released on the market Sample code:86015, RASFF ref: 2013.0767, Not released on the market
2	Lot rejected at the border	Within the frame of Regulation (EC) No 669/2009
1	Not released on the market and sent for destruction	17 063 kg of apples (Royal Gala) from Brazil

RASFF-notifications were issued in two cases due to possible health risk (Table 29-3).

Table 29-3: ARfD exceedance

Pesticide	Crop	Sample number	Sample origin	Residue level (mg/kg)	ARfD (mg/kg bw)	ARfD %	Population exposed (worst case scenario)	Model used	RASFF notification
Dieldrin	carrots	85590	Albania	0.12	0.003	254	UK infant 8.70 bw (kg)	PRIMO	2013.0386
Dimethoate (sum)	apples (Royal Gala)	86015	Brazil	0.20[(a)]	0.01	196	UK infant 8.70 bw (kg)	PRIMO	2013.0767

(a): Risk assessment based on B-sample with residues of dimethoate of 0.12 mg/kg and omethoate of 0.0134 mg/kg (6 times more toxic compared to dimethoate, 6 x 0.0134 + 0.12 = 0.20).

Table 29-4 shows the reasons for MRL non compliance.

Table 29-4: Reasons for MRL non compliance

Product	Residue	Reason for MRL non compliance	Note
Papaya	famoxadone	GAP not respected: application rate and/or application method not respected	Origin: Brazil
Green tea	fipronil (sum)	GAP not respected: application rate and/or application method not respected	Origin: China
Carrots	dieldrin	GAP not respected: use of pesticide non-authorised on the specific crop	Origin: Albania
Rice	chlorpyrifos-ethyl	GAP not respected: application rate and/or application method not respected	Origin: Macedonia
Apples (Royal Gala)	dimethoate (sum)	GAP not respected: application rate and/or application method not respected	Origin: Brazil
Chili pepper	amitraz	GAP not respected: use of pesticide non-authorised on the specific crop	Origin: Thailand
Sugar peas	methoxyfenozide	GAP not respected: application rate and/or application method not respected	Origin: Peru

29.4. Quality assurance

Table 29-5 shows the laboratories reporting data in 2013.

Table 29-5: Laboratory details

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
SE	Eurofins Food & Agro Sweden AB	Eurofins	02/09/1991	SWEDAC	EUPT: AO08, CF07, FV15, FV-SM05, SRM08 EUPT: PCB 2013 IMEP-37 Table Grapes COIPT-13 Olive oil APLAC Chicken fat FAPAS: 19143, 19152, 19156, 19158, 19160, 0586, 0587, 0592, 0593, 0984, 0985
SE	National Food Agency, Chemistry Division 1	SLV/Kem1	02/26/2007	SWEDAC	EUPT: FV-SM05, FV15, CF07, SRM08, AO08 T01

30. The United Kingdom

30.1. Objective and design of the national control programme

The UK national control programme is made up of surveys of commodities selected every year on the basis of an established prioritisation system.

HSE proposals for the 2013 programme were reviewed by the Defra Expert Committee on Pesticide Residues in Food (PRiF - a committee of independent experts), who also sought comments from stakeholders before the programme was finalised.

Full details of the programme and supporting justification were previously provided to EFSA and the Commission. Information about the 2013 programme was also published at http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/PRiF-archive/2013/2013_surveydetails.htm

Factors of particular importance in determining surveys for this year's programme were:

- EU monitoring programme – all foods covered by the required EU monitoring for 2013 were classified as high priority for incorporation into the national programme.
- Staple foods – potatoes, bread and milk are always included in the UK programme. Cheese and yoghurt were also surveyed in 2013.
- Foods of high dietary importance, whether for the whole population or for vulnerable sub-groups in particular infants and children.
- Foods for which RASFF notifications were issued for pesticide residues.
- During 2012 and/or where previous results showed a high rate of non-compliance with MRLs.
- Lower priority foods which had not been surveyed for some years.
- In addition, certain foods were selected for 'rolling reporting', that is sampling by government inspectors and faster turn-around of results. An archive of rolling reporting results is at http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/PRiF-archive/2013/2013_Rolling_Reports. However it should be noted that these are also covered by the main reports.

Other minor adjustments were made to the programme during the course of the year, which affected the balance of sample numbers between surveys.

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

Of the 3 549 samples tested, 81 (2.25 %) contained one or more residues above the relevant MRL. Since the UK programme is made of surveys of different foods each year, it is not statistically appropriate to compare results to previous years.

The samples containing residues above the MRLs (Figure 30-1) were generally samples of fruit and vegetables, apart from one sample of oats, one sample of tinned strawberries and one sample of fruit and vegetable based on infant food.

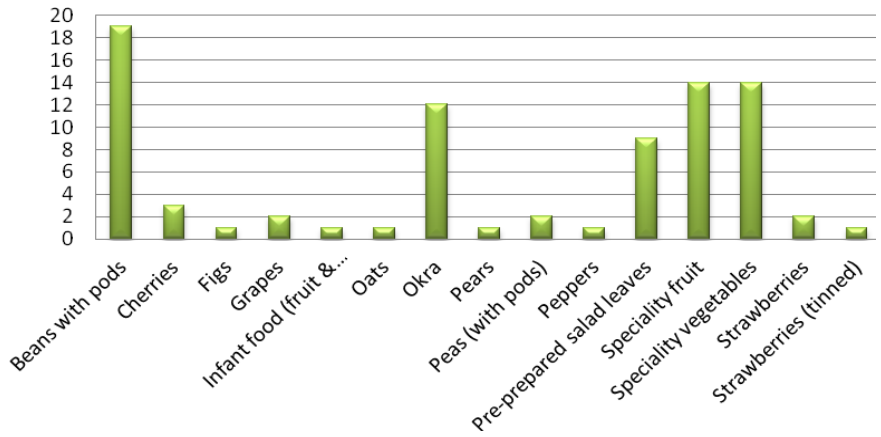


Figure 30-1: Samples above the MRL

Detailed interpretation of results is provided in the Expert Committee on Pesticide Residues in Food's quarterly reports at http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/PRiF_Results_and_Reports/2013++Programme

- Fresh fruit and vegetables (including potatoes)

A total of 1 993 samples were tested. Within these category residues above MRLs (without taking account of measurement uncertainty) was at 3.91 % the same as 2012. This is attributed mostly to high rates of non-compliance in certain vegetables as discussed below.

We continued to find a relatively high percentage of samples with residues over the MRL in beans with pods (both speciality and non-speciality varieties) and okra. Both will be surveyed again in 2014 as rolling reporting surveys.

During 2013 within speciality vegetables we concentrated on sampling starchy root vegetables, and saw a reduction in the numbers of non-compliant samples and RASFFs in most types. The exception was eddoes. We are therefore in 2014 continuing to sample eddoes but otherwise have moved to sampling speciality gourds and curcubits.

Residue of dithiocarbamates detected in mooli (daikon) were interpreted as of natural origin and therefore not evaluated for compliance with MRLs.

Residues of DDAC and BAC were detected in several fruits and vegetables. They were particularly frequent in pre-packed salads as was expected given the key use of QAC biocides to ensure microbiological safety of such foods. These findings were evaluated for compliance only where they were over the trading limit of 5 mg/kg agreed

- Animal products

Residues detected in animal products were below MRLs and consistent with environmental contamination and previous findings. No residues were above MRLs were detected.

- Cereals and grains

Residues were detected in the majority of bread including pesticides used on wheat and those used on wheat or flour in storage. It should be noted that the country of origin for these products that where they were manufactured and not necessarily the origin of the flour or the grain from which the flour was milled. Wheat MRLs with the appropriate processing factors were applied to bread from 2013.

Many of the organic oat samples contained residues which are not approved for use on organic crops. All were below the MRL. Defra, as the competent authority for controls on organic production and the relevant registration companies were advised of htse results.

- Baby (infant) food

Whilst results have been reported in line with requirements for general foods, compliance was evaluated against specific baby food legislation.

One residue, above the MRL set in infant legislation, was detected. This was residues of BAC and DDAC above the 0.01 mg/kg MRL set in infant food legislation. (The temporary guideline of 0.5 mg/kg was not extended to infant food).

- Other groceries

Only one sample of tinned strawberries contained a residue above the MRL. The MRL for fresh strawberries was applied to these samples

30.3. Non-compliant samples: possible reasons and actions taken

115 samples were found to contain 160 residues above the MRL.

41 residues of BAC and DDAC above the MRL, but within an EU trading limit, were not viewed as non-compliant. Within data submitted to EFSA these have been coded as 'not evaluated'.

Otherwise 83 samples were found to contain 119 residues above the MRL. 89 of those residues were still a breach of the MRL after measurement uncertainty was taken into account.

Advisory letters were issued to sampling points about all residues above the MRL, including all samples containing BAC or DDAC above the legal MRL. In addition samples where residues were in breach of the MRL after measurement uncertainty was taken into account were in most cases highlighted as non-compliant when brand name details were published. Brand-name details are routinely published for all UK samples taken from the supply chain.

RASFF notifications were prepared about 11 samples (Table 30-1). Brand name details of these samples were also published separately.

For samples of non-UK food the appropriate authorities were also notified. For UK samples results were where possible investigated and/or referred for action under cross-compliance rules.

Reasons for non-compliance were not generally provided. However in the case of BAC and DDAC packers and suppliers were already aware of the need to minimise residues but due to the importance of ensuring microbiological safety were not able to take simple steps to comply quickly with MRLs.

In general for foods from outside the EU it appeared likely, although representations were not made to this effect, that the food had been grown in accordance with local GAP for local markets that is not to a specification that was compliant with EU requirements.

In the case of residues of BAC on eddoes, information was received via one UK importer that indicated suppliers had been using disinfectant at too strong a concentration post-harvest. The importer indicated that they had asked their suppliers to change this practice. It was not clear whether this use was intended as a hygiene measure or to protect the roots from fungal attack in transit. All residues detected in organic samples were referred to the appropriate agriculture department and to organic certification bodies.

Table 30-1: Summary of RASFF notifications

Sample ID	Food	Country of origin	Pesticide detected	Detected residue (mg/kg)	MRL (mg/kg)	Rapid Alert number
13866/2013	Red bell peppers	Poland	Ethephon	4.4	0.05*	Not raised
Speciality fruit						
13906/2013	Lychee	China	Acetamiprid	0.02	0.01*	2014.0039
			Carbendazim	0.02	0.1*	
			Chlorfenapyr	0.05	0.01*	
			Chlorpyrifos	0.1	0.05*	
			Cypermethrin	0.08	2	
			Difenoconazole	0.07	0.1	
			Dimethomorph	0.2	0.05*	
			Imazalil	0.02	0.05*	
			Lambda-cyhalothrin	0.3	0.02*	
			Prochloraz	0.03	0.05*	
13849/2013	Lychee, black leaf	China	Carbendazim	0.08	0.1*	2014.004
			Chlorpyrifos	0.4	0.05*	
			Cypermethrin	0.2	2	
			Dithiocarbamates	2.2	0.05*	
			fenpropathrin	0.3	0.02*	
			pyraclostrobin	0.03	0.02*	
Speciality vegetables						
13133/2013	Eddoes	Colombia	BAC	17	0.01*	2013.0967
13542/2013	Eddoes	Costa Rica	BAC	29	0.01*	2013.0972
13605/2013	Eddoes	Costa Rica	BAC	37	0.01*	2013.0971
13639/2013	Eddoes	Costa Rica	BAC	32	0.01*	2013.0969
13738/2013	Eddoes	Costa Rica	BAC	28.1	0.01*	Not raised
13933/2013	Eddoes	Costa Rica	BAC	1.1	0.01*	2014.0041
13641/2013	Eddoes	Costa Rica	BAC	1.7	0.01*	2014.0036

(*): MRL at the LOQ

In addition, for the following samples intakes above ARfDs were identified however, RASFF notifications could not be raised (Table 30-2) as the residues were judeged compliant when measurement uncertainty was taken into account.

Table 30-2: Samples above the ARfD

Sample ID	Food	Country of origin	Pesticide detected	Detected residue (mg/kg)	MRL (mg/kg)	Rapid Alert number
13552/2013	Flame seedless grapes	South Africa	ethephon	0.9	0.7	Not raised
18630/2013	Yam	Jamaica	carbendazim	0.4	0.1*	Not raised
			thiophanate-methyl	0.3	0.1*	

(*): MRL at the LOQ

30.4. Quality assurance

Table 30-3 shows the laboratories reporting data in 2013.

Table 30-3: Laboratory details

Country code	Laboratory Name	Laboratory Code	Accreditation Date	Accreditation Body	Participation in proficiency tests or interlaboratory tests
GB	Food and Environment Research Agency (FERA) (United Kingdom National Reference Laboratory for fruit and vegetables, cereal products and infant foods)	Fera	1996	UKAS	EUPT: FV15, CF07, AO08, SRM08, FV-SM05; FAPAS series 5: rounds 89, 90, 91, 92, 93, 94, 95, 96; FAPAS series 9: rounds 82, 83, 84, 85, 86, 87, 88; FAPAS series 19: rounds 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168
GB	Eurofins	EUAL	06/10/1995	UKAS	EUPT: FV15 FAPAS: 19150, 19151, 19152, 19153, 19156, 19157, 19158, 19160, 19161, 19163, 19164, 19165, 19166, 19168
GB	LGC Ltd, (United Kingdom National Reference Laboratory for animal prdocucts)	LGC	01/04/1984	UKAS	EUPT: C6, FV14 FAPAS: 19-124, 19-125, 19-127, 19-130, 19-132, 19-134, 19-136
GB	Agri-food and Biosciences Institute (AFBI)	AFBI	11/11/2010	UKAS	EUPT: AO09 FAPAS: 0587, 0589, 0590, 0591 and 0593
GB	Science and Advice for Scottish Agriculture (SASA)	SASA	18/07/1994	UKAS	EUPT: FV15, SRM08 FAPAS: 19-156, 19-161, 19-163

30.5. Additional Information

Results for 2014 are being published through the year at:
http://www.pesticides.gov.uk/guidance/industries/pesticides/advisory-groups/PRiF/PRiF_Results_and_Reports/2014_+Programme

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ABBREVIATIONS

AB	Estonia Agricultural Board.
AC	Autonomous Communities
ACCREDIA	Italy Accreditation Body
ADI	Acceptable Daily Intake
AECOSAN	Spanish Agency for Consumer Affairs, Food Safety and Nutrition
AESAN	Spanish Nutrition and Food Safety Agency
AFBI	Agri-food and Biosciences Institute
AGES	Austrian Health and Food Safety Agency
ANSES	French Agency for Food, Environmental and Labour Safety
ARC	Agricultural Research Centre. Laboratory for residues and contaminants of Saku
ARfD	Acute Reference Dose
ASAE	Authority for Food and Economical Safety of Portugal
ASV	Veterinary Administration Services of Luxembourg
AT	Austria
BAC	Benzalkonium chloride
BE	Belgium
BELAC	Belgium Accreditation Council
BFSA	Bulgarian Food Safety Agency
BG	Bulgaria
BIOFORSK	Norwegian Institute for Agricultural and Environmental Research
BIOR	Institute of Food Safety, Animal Health and Environment of Latvia
BIP	Border Inspection Post
BIPEA	International Bureau for Analytical Studies
BMWA	Federal Ministry of Labour, Health and Social Affairs of Austria
BVL	Federal Office of Consumer Protection and Food Safety
CA	Competent Authorities
CAI	Czech Accreditation Institute
CAFIA	Czech Agriculture and Food Inspection Authority
CCPC	Critical Crop Pesticide Concentration
CC-PSRM	Agency for Health and Food Safety Risk Assessment competence-centres for pesticide-analyses
CC-RANA	Agency for Health and Food Safety, Area Data, Statistics competence-centres for pesticide-analyses
CLCTC	Central Laboratory for Chemical Testing and Control of Bulgaria
CLVCE	Central Laboratory of Veterinary Control and Ecology of Bulgaria
COFRAC	French Committee for Accreditation
COIPT	Olive Oil Proficiency Test
CY	Cyprus
CZ	Czech Republic
DA	Department of Agriculture of Cyprus
DAFM	Department of Agriculture, Food and the Marine of Ireland
DAKKS	German Accreditation Body
DANAK	Danish Accreditation body
DDAC	Didecyldimethylammonium chloride
DE	Germany
DGAL	French General Directorate for Food
DGAV	Directorate General for Food and Veterinary
DGCCRF	French General Directorate of Competition, Consumption and Fraud Repression
DK	Denmark
DPPSCA	Directorate of Plant Protection, Soil Conservation and Agri-environment of Hungary

DRAAF	French Regional Directorate of Food, Agriculture and Forestry
DSMSA	Agricultural Department for Markets and Food Safety of Portugal
EABAS	Executive Agency Bulgarian Accreditation Service
EAK	Estonian Accreditation Centre
EC	European Commission
EE	Estonia
EEA	European Economic Area
EFSA	European Food Safety Authority
ENAC	Spanish Accreditation Body
ES	Spain
ESYD	Greek Accreditation body
EU	European Union
EUPT-AO	European Union Proficiency Test in Animal Origin
EUPT-CF	European Union Proficiency Test in Cereals and Feed
EUPT-FV	European Union Proficiency Test in Fruit and Vegetables
EUPT-SRM	European Union Proficiency Test in Single Residue Methods
FAPAS	Food Analysis Performance Assessment Scheme
FASFC	Federal Agency for the Safety of the Food Chain
FBO	Food business operators
FERA	Food and Environment Research Agency
FFSD	Food and Feed Safety Directorate of Hungary
FI	Finland
FINAS	Finnish Accreditation Service
FR	France
FSAI	Food Safety Authority of Ireland
FVS	Food and Veterinary Service of Latvia
FYTBG	Fytolab Bulgaria Ltd.
FYTOLAB	Laboratory for Pesticide and Residue Analysis
GAP	Good Agricultural Practice
GC	Gas chromatography
GC-ECD	Gas chromatography with electron capture detector
GC-FID	Gas chromatography with flame ionization detector
GC-FPD	Gas chromatography with flame photometric detector
GC-MSD	Gas chromatography with mass spectrometry detector
GC-MS/MS	Gas chromatography with tandem mass/mass spectrometer
GC-NPD	Gas chromatography with nitrogen phosphorous detector
GC-(P)FPD	Gas chromatography with pulsed flame photometric detector
GC-TOF-MS	Gas chromatography time of flight with mass spectrometry detector
GR	Greece
HB	Tartu Laboratory of Estonian Health Board
HBC	Central Chemistry Laboratory of the Health Board of Estonia
HCH	Hexachlorociclohexane
HPLC	High Performance Liquid Chromatography
HSE	Health and Safety Executive of United Kingdom
HU	Hungary
HSE CRD	Health and Safety Executive Chemicals Regulation Directorate
IAS	International Accreditation Service
IE	Ireland
INAB	The Irish National Accreditation Board
IPAC	Portuguese Accreditation Institute
IPH	Institute of Public Health
IRAE	Portuguese Regional Inspectorate of Economical Activities
IS	Iceland

ISO	International Organization for Standardization
IT	Italy
IUNA	Irish Universities Nutrition Alliance
JMD	Joint Ministerial Decisions
LATAK	Latvian National Accreditation Bureau
LC	Liquid Chromatography
LC-LR-MS	Liquid chromatography for microcystin with mass spectrometry detector
LC-MS/MS	Liquid chromatography with tandem mass/mass spectrometer
L-DRAPN	Laboratory of the Northern Regional Agricultural Directorate of Portugal
LOQ	Limit of Quantification
LRP-INIAV	Pesticide Residues Laboratory of the National Institute of Agrarian and Veterinary Research
LRVSA	Veterinary and Food Safety Laboratory of the Regional Directorate of Agriculture and Rural Development of Madeira
LU	Luxembourg
LUA3	Regional Institute for Food Control in Vienna
LT	Lithuania
LU	Luxembourg
LV	Latvia
MAF	Ministry of Agriculture and Food of Bulgaria
MAGRAMA	Ministry of Agriculture, Food and Environmental Affairs of Spain
MANRE	Ministry of Agriculture, Natural recourses and Environment of Cyprus
MARD	Romanian Ministry of Agriculture and Rural Development
MH	Ministry of Health
MPHS	Department of Medical and Public Health Services of Cyprus
MRL	Maximum Residue Limits
MRM	Multiresidue Method
MS	Member State
MSSSI	General Directorate of Health Affairs of the Ministry of Health, Social Services and Equal Opportunities
MT	Malta
NAT	National Accreditation Body of Hungary
NFA	Swedish National Food Agency
NFCSO	National Food Chain Safety Office of Hungary
NFSA	Norwegian Food Safety Authority
NFVRAI	National Food and Veterinary Risk Assessment Institute of Lithuania
NL	Netherlands
NO	Norway
NRCP	National Residue Control Plan of Iceland
NSVFSA	National Sanitary Veterinary and Food Safety Authority
NVH	Norwegian School of Veterinary Science
OP	Organphosphorous pesticides
OSQCA	Organism for the Security and Equality of the Food Chain of Luxembourg
PCB	Polychlorinated biphenyls
PCD	Pesticide Controls Division of Ireland
PCL	Pesticide Control Laboratory
PL	Poland
POP	Persistent organic pollutant
PPP	Plant protection products
PR	Pesticide residues
PRCD	Pesticide Registration and Controls Division of Ireland
PRiF	Defra Expert Committee on Pesticide Residues in Food
PRIMo	Pesticide Residue Intake Model

PR-SGL	Pesticide Residues of the State General Laboratory
PT	Portugal
PTPR	Proficiency test in pesticide residues
QAC	Quaternary ammonium compounds
QuEChERS	Quick, Easy, Cheap, Effective, Rugged and Safe method
RASFF	Rapid Alert System for Food and Feed
RENAR	Romanian Accreditation Association
RFSD	Regional Food Safety Directorates of Bulgaria
RHI	Regional Healthy Inspectorate
RO	Romania
RvA	Dutch Accreditation Council
SA	Slovakian Accreditation Body
SASA	Science and Advice for Scottish Agriculture
SCoFCAH	Standing Committee on the Food Chain and Animal Health
SCL	Common Laboratory Network of France
SE	Sweden
Secualim	Food Safety Service of the Direction of Public Health of Luxembourg
SFVS	State Food and Veterinary Authority of Lithuania
SGL	State General Laboratory of Cyprus
SI	Slovenia
SK	Slovakia
SNAS	Slovak National Accreditation Service
SPA	State Plant Administration of the Czech Republic
SR	Slovakian Republic
SRM	Single residue method
SVA	State Veterinary Administration of the Czech Republic
SWEDAC	Swedish Board for Accreditation and Conformity Assessment
TC	Third country
UK	United Kingdom
USMAF	Office of the Maritime Health, Air and Border of the Ministry of Health of Italy
VFB	Veterinary and Food Board of Estonia
VWA	Netherlands Food and Consumer Product Safety Authority
WHO	World Health Organization