

PESTICIDE RESIDUE CONTROL RESULTS

NATIONAL SUMMARY REPORT

Country: Finland

Year: 2014

National competent authority/organisation:

Finnish Food Safety Authority Evira and Finnish Customs

Web address where the national annual report is published:

[http://www.evira.fi/portal/fi/tietoa+evirasta/asiakokonaisuudet/vierasaineet/kasvinsuojeluainejaamat/
valvonta/](http://www.evira.fi/portal/fi/tietoa+evirasta/asiakokonaisuudet/vierasaineet/kasvinsuojeluainejaamat/valvonta/)

1. Country: Finland

1.1. Objective and design of the national control programme

The Finnish pesticide residue control programme is coordinated by Finnish Food Safety Authority Evira and carried out together with the Finnish Customs, Helsinki Environment Centre and National Supervisory Authority for Welfare and Health (Valvira).

The control programme consists of two parts: the EU coordinated multiannual control programme (EUCP, Commission Regulation No 788/2012) and the national control programme based on the dietary intake patterns of Finnish consumers. The control programme consist of two strategies: surveillance of plant and animal origin randomly sampled for the presence of pesticide residues and enforcement of pesticide residue legislation (e.g. where targeting of samples with a history of non-compliances and commodities listed in Regulation (EC) No 669/2009 for pesticide residues).

When defining the food products to be analysed in the national control programme high or low importance was given to factors listed below:

- EU Commissions Regulation concerning a coordinated multiannual control programme of the Union
- Relevance of a food product in national diet and in national agricultural production
- Food products with high non-compliance rate identified in the previous years
- High RASFF notification rate
- Number of organic and conventional products reflects the market shares
- Origin of the food products: domestic, EU or third countries
- Co-operation possibilities in sampling with different contaminant projects
- Needs of the national risk assessment projects

For defining pesticides that should be included in national control programme the following aspects were taken into consideration:

- Pesticides listed in the Regulation concerning a coordinated multiannual control programme are included as far as possible.
- RASFF notifications for a pesticide and frequency of pesticide findings in the EU monitoring reports are used as selection criteria.
- Use pattern of pesticide. Those pesticides which are commonly used and which are known to leave residues in foods are included.
- Pesticides that are authorized for use in Finland are included into the program when relevant.
- Toxicity of the active substances is considered. E.g. many toxic organophosphate compounds which are not commonly used anymore are still included (they may occur in samples originating from the developing countries).
- Cost of analysis. Multiple residue methods 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.
- Capacity of the labs. 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.

1.2. 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 2211, which is 8 % less than previous year. This total number includes 149 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 233.

The distribution of all the samples by origin was: domestic 14 %, EEA 40 %, other countries not EEA 40 % and unknown 2 %.

46 % of all samples had residues of one or more pesticide active ingredients. Exceedances of MRLs were found in 103 samples and 51 of them were non-compliant (measurement uncertainty taken in to consideration; including surveillance and enforcement samples). The percentage of non-compliances (2.3 %) decreased slightly compared to previous year (2.7 %). The non-complying lots originated from 18 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 China (7). 4 non-complying samples originated from EEA countries. All domestic samples were compliant to the Regulations.

The number of samples above MRL was highest in the food groups vegetables, fruits and nuts and other plant products. The product with most exceedances of MRL was tea (29 samples). Only 2 cereal samples had exceedance of MRL. All the samples of animal products and baby food were below MRL.

This year 149 enforcement samples were taken from fruits and nuts (97), vegetables (41) and other plant products (11) (from which 10 were tea samples). Only 8 enforcement samples were from EEA countries. The number of samples above MRL of the enforcement samples was 9 (6 %). Four samples (2.4 %) of these were non-complying.

233 samples were taken under the EU coordinated program. 4 of them exceeded the MRL limits and 2 of them were non-compliant.

A total of 276 samples from organic production were analysed. 25 samples had residues above reporting limit. In 8 samples the residues exceeded the MRLs and 7 samples were non-compliant.

The number of multiresidue compounds analysed from samples of plant origin was 325 active ingredients and metabolites. From animal products 80 compounds were analysed.

Table 1: Summary of samples taken in 2014 by product class and results.

Samples	Total	Without Residues	%	With Residues below MRL	%	Exceeding MRL	%	Non-Compliant	%
Animal products*	33	33	100	0	0	0	0	0	0
Baby food	97	96	99	1	1	0	0	0	0
Cereals*	106	59	56	46	43	1	0.9	0	0
Processed products	284	219	77	53	19	12	4.2	7	2.5
Sum of fruits and nuts, vegetables, other plant products*	1691	786	46	815	48	90	5.3	44	2.6
	2211	1193	54	915	41	103	4.7	51	2.3

*Totals for animal products, cereals and sum of fruits and nuts, vegetables, other plant products are for unprocessed commodities.

Table 2: Summary of samples taken in 2014 by region of origin.

Origin	Samples	%	Exceeding MRL	%	Non-Compliant	%
Domestic	299	14	1	0.3	0	0
EEA (EU Member States, and Iceland and Norway)	889	40	10	1.1	4	0.4
Other Countries not part of EEA	981	44	91	9.3	46	4.7
Unknown	42	2	1	2.4	1	2.4

Table 3: Summary of organic samples taken in 2014 by product class and results.

Samples	Total	Without Residues	%	With Residues below MRL	%	Exceeding MRL	%	Non-Compliant	%
Baby food	47	47	100	0	0	0	0	0	0
Cereals	18	18	100	0	0	0	0	0	0
Fruits and nuts	107	94	87.9	13	12.1	2	1.9	1	0,9
Other plant products	58	52	89.7	6	10.3	4	6.9	4	6,9
Vegetables	46	38	82.6	8	17.4	2	4.3	2	4,3
	276	249	90.2	27	9.8	8	2.9	7	2,5

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

In 2014, 2.3 % of the samples (51 samples in total) were found to be non-compliant with the EU MRLs. For 8 samples RASFF notifications were issued.

The following follow-up actions were taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration):

Table 4: Actions taken

Action taken	Number of non-compliant samples concerned	Comments
Rapid Alert Notification	8	5 border rejection and 3 information notifications
Lot recalled from the market	1	pumpkin seeds/isofenphos-methyl
Rejection of a non-compliant lot at the border	40	
Destruction of non-compliant lot		data not available
Follow-up (suspect) sampling of similar products, samples of same producer or country of origin		Follow-up sampling is regular procedure after rejection but there is no numerical data available.
Warnings to responsible food business operator	58	
Other follow-up investigations to identify reason of non-compliance or responsible food business operator	11	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.
Marketing as organic prohibited	17	Organic-labelled products containing residues

Table 5: Possible reasons for MRL non compliance

Reasons for MRL non-compliance	Pesticide ^(a) /food product	Frequency ^(b)	Comments
GAP not respected: use of an approved pesticide not authorised on the specific crop ^(c)	Bupirimate/dill	1	
	Imidacloprid/spinach	1	
Residues resulting from other sources than plant protection product (e.g. biocides, veterinary drugs, bio fuel)	2-Phenylphenol/tea	3	Possible migration from the packing material

Reasons for MRL non-compliance	Pesticide ^(a) /food product	Frequency ^(b)	Comments
Use of a pesticide on food imported from third countries for which no import tolerance was set ^(d)	Triazophos/tea	3	
	Triazophos/jasmine flower	1	
	Triazophos/Chinese onions	1	
	Anthraquinone/dried pepper powder	2	
	Anthraquinone/dried broccoli	1	
	Propargite/herbal tea	4	
	Lufenuron/tea	3	

(a): Report name as specified in the MatrixTool

(b): Number of cases

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

(d): For imported food only

1.4. Quality assurance

Table 6: Laboratories participation in the control program

Country	Laboratory		Accreditation		Participation in proficiency tests or inter-laboratory tests
	Name	Code	Date	Body	
FI	Finnish Customs Laboratory	FI01	09/02/2015	FINAS-Espoo, Finland	EUPT-FV16, EUPT-CF8, EUPT-FV-SM06, EUPT-FV-T02, FAPAS 19162, BIPEA 05-2619, BIPEA 05-3219, BIPEA 10-0619, BIPEA 05-3119, BIPEA 04-0519, BIPEA 11-0619, BIPEA 06-3019
FI	MetropoliLab Oy	FI02	23/06/2015	FINAS-Espoo, Finland	EUPT-FV16
FI	Finnish Food Safety Authority	FI03	29/11/2013	FINAS-Espoo, Finland	EUPT-SRM9, EUPT-AO09, FAPAS0595

1.5. Processing factors

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

Table 7: Processing factors

Pesticide (report name) ^(a)	Unprocessed product (RAC)	Processed product	Processing factor ^(b)	Comments
All pesticides	Fresh herbs	Dried herbs	10	factors are used for first estimation, in case of
All pesticides	Fresh vegetables	Dried vegetables	10	
All pesticides	Fresh fruits	Dried fruits	5	non-compliance, more detailed information is requested from the stake holder

a) Report name as specified in the MatrixTool

b) Processing factor for the enforcement residue definition.