

**PESTICIDE RESIDUE CONTROL RESULTS**

**NATIONAL SUMMARY REPORT**

**Country: Finland**

**Year: 2015**

**National competent authority/organisation:**

**Finnish Food Safety Authority Evira and Finnish Customs**

Web address where the national annual report is published:

<https://www.evira.fi/yhteiset/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 in collaboration 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 (EU) No 400/2014) and separate national control programmes of the above mentioned authorities based mainly on the dietary intake patterns of Finnish consumers. The control programme consist of two strategies: surveillance of plant and animal origin products 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 programmes 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
- Organic or conventional products as well as origin of the food products (domestic, EU or third countries) are taken into account
- Co-operation possibilities in sampling with different contaminant projects and organic control programme
- 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 EU coordinated and national programmes was 2193, which is about 1 % less than previous year. This total number includes 29 follow-up enforcement samples or samples based on the Regulation (EC) No 669/2009.

The distribution of all the samples by origin was: domestic 18 %, EEA 39 %, other countries not EEA 40 % and unknown 3 %.

45 % of all samples had residues of one or more pesticide active ingredients. Exceedances of MRLs were found in 72 samples and 41 of them were non-compliant (measurement uncertainty taken in to consideration; including surveillance and enforcement samples). The total percentage of non-compliances (1.9 %) decreased slightly compared to previous year (2.3 %). The non-complying lots originated from 15 different countries. Highest number of non-compliances was in Indian (7) and Chinese (7) products. Several non-complying samples were found also in products of Japan (4) and Spain (4). Ten non-complying samples originated from EEA countries. Two domestic organic samples were non-compliant to the Regulations.

The number of samples above MRL was highest in the food groups fruits and nuts, vegetables and other plant products. The product with most exceedances of MRL was teas (11 samples). Five cereal samples had exceedance of MRL. All the samples of animal products were below MRL.

This year a total of 29 enforcement samples were taken from fruits and nuts (5), other plant products (10) (from which 10 were tea samples), other products (4) and vegetables (10). 9 enforcement samples were from EEA countries. The number of samples above MRL of the enforcement samples was 5 and all of them were also non-compliant (17 %).

A total of 343 samples from organic production were analysed. 21 samples of them had residues above reporting level. In 4 samples the residues exceeded the MRLs and also were non-compliant.

The number of multiresidue compounds analysed from samples of plant origin was 325 active ingredients and metabolites. From animal products 78 compounds were analysed.

**Table 1:** Summary of samples taken in 2015 by product class.

<b>Samples</b>	<b>Total</b>	<b>Without Residues</b>	<b>%</b>	<b>With Residues below MRL</b>	<b>%</b>	<b>Exceeding MRL</b>	<b>%</b>	<b>Non-Compliant</b>	<b>%</b>
Animal products*	18	18	100	0	0	0	0	0	0
Baby food	36	36	100	0	0	0	0	0	0
Cereals*	129	78	60	48	37	3	2.3	0	0
Other products	4	3	75	1	25	0	0	0	0
Processed products	407	273	67	124	30	10	2.5	9	2.2
Sum of fruits and nuts, vegetables, other plant products*	1599	801	50	739	46	59	3.7	32	2.0
	<b>2193</b>	<b>1209</b>	<b>55</b>	<b>912</b>	<b>42</b>	<b>72</b>	<b>3.3</b>	<b>41</b>	<b>1.9</b>

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

**Table 2:** Summary of samples taken in 2015 by region of origin.

<b>Origin</b>	<b>Samples</b>	<b>%</b>	<b>Exceeding MRL</b>	<b>%</b>	<b>Non-Compliant</b>	<b>%</b>
Domestic	392	18	2	0.5	2	0.5
EEA (EU Member States, and Iceland and Norway)	862	39	19	2.2	10	1.2
Other Countries not part of EEA	880	40	50	5.7	29	3.3
Unknown	59	3	1	1.7	0	0

**Table 3:** Summary of organic samples taken in 2015 by product class and results.

Samples	Total	Without Residues	%	With Residues below MRL	%	Exceeding MRL	%	Non-Compliant	%
Animal products	3	3	100	0		0	0	0	0
Cereals	51	48	94.1	3		0	0	0	0
Food for infants and young children	9	9	100	0		0	0	0	0
Fruits and nuts	73	69	94.5	3		1	1.4	1	1.4
Other plant products	74	73	98.6	0		1	1.4	1	1.4
Other products	37	29	78.4	7		1	2.7	1	2.7
Vegetables	96	91	94.8	4		1	1.0	1	1.0
	<b>343</b>	<b>322</b>	<b>93.9</b>	<b>17</b>		<b>4</b>	<b>1.2</b>	<b>4</b>	<b>1.2</b>

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

In 2015, 1.9 % of the samples (41 samples in total) were found to be non-compliant with the EU MRLs. For 9 samples RASFF notifications and for 4 organic samples OFIS 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	9	
OFIS Notifications	4	
Lot recalled from the market	1	pomelo fruit/isocarboxophos
Rejection of a non-compliant lot at the border	15	
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	28	
Other follow-up investigations to identify reason of non-compliance or responsible food business operator	19	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	2	Unintentional use of conventional ingredients in organic products

**Table 5:** Possible reasons for MRL non compliance

Reasons for MRL non-compliance	Pesticide <sup>(a)</sup> /food product	Frequency <sup>(b)</sup>	Comments
Cross contamination: spray drift or other accidental contamination	Chlormequat/wheat flour	1	Unintentional use of conventional ingredients in organic products
	Chlormequat/bread	1	
Residues resulting from other sources than plant protection product (e.g. biocides, veterinary drugs, bio fuel)	propargite, tebuconazole, pyraclostrobin, phosmet, methidation/tea	1	residues originate from natural orange flavour (content <5 %) in organic tea
Use of a pesticide on food imported from third countries for which no import tolerance was set <sup>(d)</sup>	Triazophos/tea	1	Data not available
	Triazophos/spices	1	
	Anthraquinone/spices	1	
	Propargite/herbal tea	1	

(a): Report name as specified in the MatrixTool

(b): Number of cases

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

(d): For imported food only

## 1.4. Quality assurance

**Table 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	22/01/2016	FINAS-Espoo, Finland	EUPT-FV17, EUPT-CF9, EUPT-FV-SM07, EUPT-SRM10, FAPAS 05102, FAPAS 19186, BIPEA 07-3019, BIPEA 06-3219, BIPEA 06-3119, BIPEA 09-2919, BIPEA 07-2619
FI	MetropoliLab Oy	FI02	24/05/2016	FINAS-Espoo, Finland	FAPAS19195, EUPT-FV17, EUPT-FV-FH01
FI	Finnish Food Safety Authority	FI03	29/11/2013	FINAS-Espoo, Finland	EUPT-AO10, FAPAS 05109, FAPAS 05108, FAPAS 0996

## 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) <sup>(a)</sup>	Unprocessed product (RAC)	Processed product	Processing factor <sup>(b)</sup>	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