PESTICIDE RESIDUE CONTROL RESULTS

NATIONAL SUMMARY REPORT

Year: 2019

Country: Romania

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1. Romania

1.1. Name of the national competent authority/organisation

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).

Web address where the national annual report is published: *www.ansvsa.ro, www.madr.r*

2. Objective and design of the national control programme

2.1. Objective

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.

The number of active substances analysed is 150 for fruits, vegetables and cereals, and 139 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 2019, samples from 49 agricultural products were planned 2430 samples and were analyzed 2256 samples. The number of active substances analyzed were 259.

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 41 samples in 2019. All of them complied with the legislative provisions

2.2. Design

The selection of the products that were tested for pesticides residues determination is made taking into consideration the following factors listed below:

- 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, apple, parsley leaves, lemons, grapefruit, mandarins, oranges, pappers, tomates, table grapes and wine grapes.

- Origin of food

- compared with 2017 and 2018, in 2019 the number of samples analysed for pesticide residuesfrom EU market has been increased (from 55,1% in 2018 to 56,2% in 2019) and for samples from Third Countries the number of samples has been reduced (from 44,6% in 2018 to 43,7% in 2019) - as presented in the table 1

Table 1: Summary results by sample origin

Origin of samples	2017(%)	2018(%)	2019(%)
EU	56.6	55,1	56,2
Third Countries	42	44,6	43,7
Unknown	1,2	0,3	0,1

- Sampling at different marketing levels: farm gates, wholesaler, import activities, border inspection activities, farming, slaughtering,
- Sampling of products during main marketing season/outside of main marketing season (e.g. citrus fruits during the autumn and winter),
- Rapid Alert System for Food and Feed notificationsand all other useful information,
- Food for the sensitive consumer groups, e.g. baby food,
- Importance of the commodity in the country production, the national 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

For defining pesticides that are included in national control programmes the following aspects were taken into consideration,

- The pesticides included in the EU coordinated programme,
- Use pattern of pesticides,
- Cost of the analysis: multiple methods,
- capacity of laboratories,
- Toxicity of the active substance.

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

3.1. Key findings

In 2019 a total number of 5166 samples were taken in order to check the MRL's compliance of pesticide residues in different crops. From these, 4829 samples there were sampled under objective sampling strategy, 233 samples were sampled under selective sampling strategy and 100 samples were sampled under suspect sampling strategy.

A number of 1762 samples were fruit and primary derivatives thereof, 2562 samples were garden vegetables and primary derivatives thereof, 229 were grains and grain-based products, 41 samples of baby food and 89 samples of animal products.

From the total number of the 5166 samples that include fruit, vegetables, cereals, processed products (including baby food) and animal products,2504 were produced in Romania, 404 samples were produced in EU, and 2258 samples were produced outside of the EU.

Table 2: Summary results

Samples	2017	2018	2019
Total	5773	4809	5166
Without residues (%)	4754 (82,35%)	3101(64,48%)	3150 (60,98%)
With residues below MRL (%)	1019 (17,65%)	1563(32,50%)	1927 (37.30%)
Exceeding (%)	61 (1%)	145(3,02%)	89 (1,72%)
Non compliant (%)	24 (0,42%)	90(1,87%)	58 (1,12%)

3.2. Interpretation of the results

The most frequent pesticides detected in

- *the animal products* were: Fipronil, Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil, DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT),
- *cereals* were: Bifenthrin (sum of isomers),chlorpyrifos-methyl, Imidacloprid, Propiconazole (sum of isomers),
- *Fruit and Nuts* were: Acetamiprid, Boscalid, Cyprodinil, Fludioxonil, Pyrimethanil,, Thiabendazole, 2-Phenylphenol (sum of 2-phenylphenol and its conjugates, expressed as 2-phenylphenol), Propiconazole (sum of isomers), Imazalil
- Vegetables were: Acetamiprid, Azoxystrobin, Boscalid, Carbendazim and Benomyl, Chlorothalonil, Imidacloprid, Pendimethalin, Pyraclostrobin, Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers), Pyrimethanil, Fludioxonil, Tebuconazole

The highest concentration was for propiconazole (sum of isomers)3.49 mg/kg detected in lemon

From the total number of samples, 1569 foodstuffs samples had 2 or more foundings. Below there are mentioned some products with different number of pesticide residues:

- apples – 128 samples with a number of residues from 2 up to 6,
- strawberries – 48 samples with a number of residues from 2 up to 5,
- lettuce – 39 samples with a number of residues from 2 up to 9,
- tomatoes – 409 samples with a number of residues from 2 up to 9,
- apricots- 34 samples with a number of residues from 2 up to 6,
- grapefruits and similar – 142 samples with a number of residues from 2 up to 7,
- lemons -150 samples with a number of residues from 2 up to 8,
- mandarins – 64 samples with a number of residues from 2 up to 5,
- oranges – 139 samples with a number of residues from 2 up to 5,
- pears – 38 samples with a number of residues from 2 up to 6,
- table grapes – 112 samples with a number of residues from 2 up to 6,
- wine grapes – 61 samples with a number of residues from 2 up to 8,
- cucumbers - 32 samples with a number of residues from 2 up to 6;
- sweet peppers – 173 samples with a number of residues from 2 up to 10,

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

3.3. Comparability with the previous year results

Compared with 2018, in 2019 the number of samples with residues below MRL has been increased (from 32,5% in 2018 to 37,3% in 2019) and the number of samples with exceeding has been reduced (from 3,0% in 2018 to 1,72% in 2019) – as presented in the table 2 Summary results. The number of pesticides reported has been remained the same as 2013 (310). Pesticides were validated according to SANCO 12682/2019.

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

4.1. Possible reasons for non-compliant samples

From 5166 samples in 2019, 58 samples were found non-compliant with the EU MRL. The following follow-up actions were taken in case of sample non-compliant with the EU MRL (measurement uncertainty taken into consideration):

Table 1: Possible reasons for MRL non compliance

Reasons for MRL non-compliance	Pesticide/food product[a]	Frequency[b]	Comments	Title
GAP not respected: use of a pesticide not approved in the EU[c]	Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs	15	RO321-IISPV-20140-1 RO321-IISPV-20140-2 RO321-IISPV-20140-3 RO321-IISPV-20141-1 RO321-IISPV-20351-1 RO321-IISPV-20351-2 RO321-IISPV-24976-1 RO321-IISPV-25577-1 RO321-IISPV-25577-3 RO321-IISPV-25578-1 RO321-IISPV-25578-2 RO321-IISPV-25779-1 RO321-IISPV-25779-2 RO321-IISPV-25783-1 RO321-IISPV-25783-2	Romania
	Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs mixed whole	4	RO321-IISPV-24972-1 RO321-IISPV-24972-2 RO321-IISPV-24973-1 RO321-IISPV-24973-2	Romania

	Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Poultry fat tissue	8	RO321-IISPV-25573-1 RO321-IISPV-25573-2 RO321-IISPV-25573-3 RO321-IISPV-25574-1 RO321-IISPV-25574-2 RO321-IISPV-25574-3 RO321-IISPV-25575-1 RO321-IISPV-25575-2	Romania
	Dimethoate/ Peaches and similar	1	RO321ANSVSA-31002	Romania
	Dimethoate/Granate Apples Omethoate/ Granate Apples	1	RO321ANSVSA-32859-3	Romania
	Chlorpyrifos/ Granate apples	1	RO321ANSVSA-30389	Romania
	Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers)/Courgettes	5		
	Acetamiprid/pomme granates	2		
	Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers), Pyraclostrobin, Boscalid/ pomme granates	1		
	Indoxacarb/quinces	1		
GAP not respected: use of an approved pesticide not authorised on the specific crop[(c)]	Chlorothalonil/lettuces	2	19-0049 19-0135	Romania
	Chlorothalonil/spinaches	1	19-0191	Romania
	Dimethoate/Apples	1	19-1393	Romania
	Dimethoate/parsley	1	19-0034	Romania
	Omethoate/parsley	1	10-0034	Romania
	Spiroxamine(sum of isomers)/dill leaves	2	19-0189 19-0211	Romania Romania
	Tebuconazole/dill leaves	1	19-0189	Romania
	Triadimenol (any ratio of constituent isomers)/dill leaves	2	19-0189 19-0211	Romania Romania

	Propiconazole (sum of isomers)/dill leaves	1	19-0211	Romania
	Chlorpyrifos-methyl/lovage leaves	1	19-0283	Romania
GAP not respected: use of an approved pesticide, but application rate, number of treatments, application method or PHI not respected	Acetamiprid/eggplants	1		
	Acetamiprid/melons	1		
Use of pesticide according to authorised GAP: unexpected slow degradation of residues	Chlorpyrifos/Spring onions/green onions and Welsh onions	1	19-0134	Romania
	Chlorpyrifos/tomatoes	1	19-1066	Romania
	Carbendazim/Spring onions/green onions and Welsh onions	1	19-0164	Romania
	Thiophanate-methyl/Spring onions/green onions and Welsh onions	1	19-0164	Romania
	Fenhexamid/pears	1	19-1071	Romania
Cross contamination: spray drift or other accidental contamination	-			
Contamination from previous use of a pesticide: uptake of residues from the soil (e.g. persistent pesticides used in the past)	-			
Residues resulting from other sources than plant protection product (e.g. biocides, veterinary drugs, bio fuel)	-			
Naturally occurrence (e.g. dithiocarbamates in turnips)	-			
Changes of the MRL	Buprofezin/sweet peppers	3		
Use of a pesticide on food imported from third countries for which no import tolerance was set[(d)]	-			

(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

4.2. Actions taken

Table 2: Actions taken

	Action taken[(a)]	**Number of non-**	**Comments**	Country of

		compliant samples concerned[(b)]		origin
Rapid Alert Notification				
Chlorpyrifos/tomatoes		1		
Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers)/Courgettes		5		TR
Acetamiprid/pommes granates		2		TR
Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers), Pyraclostrobin, Boscalid/ pommes granates		1		TR
Indoxacarb/quinces		1		TR
Acetamiprid/eggplants		1		TR
Acetamiprid/melons		1		TR
Buprofezin/sweet peppers		3		TR
Administrative sanctions (e.g. fines)				
Chlorpyrifos/Spring onions/green onions and Welsh onions		1		
Chlorpyrifos-methyl/lovage leaves		1		
Lot recalled from the market				
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs		15		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs mixed whole		4		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Poultry fat tissue		8		
Rejection of a non-compliant lot at the border		-		
Destruction of non-compliant lot		-		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Eggs (chicken)		-		
Follow-up (suspect) sampling of similar products, samples of same producer or country of origin		-		
Chlorothalonil/lettuces		2		
Chlorothalonil/spinaches		1		
Dimethoate/Apples		1		
Dimethoate/parsley		1		
Omethoate/parsley		1		
Spiroxamine(sum of isomers)/dill leaves		2		

Tebuconazole/dill leaves		1		
Triadimenol (any ratio of constituent isomers)/dill leaves		2		
Propiconazole (sum of isomers)/dill leaves		1		
Carbendazim/Spring onions/green onions and Welsh onions		1		
Thiophanate-methyl/Spring onions/green onions and Welsh onions		1		
Fenhexamid/pears		1		
Dimethoate/ Peaches and similar		1		EG
Dimethoate/Granate Apples Omethoate/ Granate Apples		1		IN
Chlorpyrifos/ Granate apples		1		IN
Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers)/Courgettes		5		TR
Acetamiprid/pommes granates		2		TR
Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers), Pyraclostrobin, Boscalid/ pommes granates		1		TR
Indoxacarb/quinces		1		TR
Acetamiprid/eggplants		1		TR
Acetamiprid/melons		1		TR
Buprofezin/sweet peppers		3		TR
Warnings to responsible food business operator		-		
Other follow-up investigations to identify reason of non-compliance or responsible food business operator		-		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs		15		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Hen eggs mixed whole		4		
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Poultry fat tissue		8		
Other actions (please specify)	0			
Administrative sanctions (e.g. fines)				
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/Heneggs		15		
Fipronil (sum Fipronil and sulfone		4		

metabolite (MB46136) expressed as Fipronil)/ Hen eggs mixed whole				
Fipronil (sum Fipronil and sulfone metabolite (MB46136) expressed as Fipronil)/ Poultry fat tissue		8		

–: no information available; TBC: to be confirmed
(a): Table footnote a

5. Quality assurance

Table 3: Laboratories participation in the national control program

Country	Laboratory		Accreditation		Participation in proficiency tests or inter-laboratory tests
	Name	Code	Date	Body	
RO	Laboratory for Control Pesticide Residues in Plant and Plant Products	RO_321_ LCRPPPV	16/01/2006 Reaccreditation in 18/12/2017	RENAR-Bucharest	EUPT FV 21 EUPT CF 13
RO	Sanitary Veterinary and Food Safety Laboratory Bucharest	RO321-ANSVSA	LI 496 11/04/2007	RENAR-Bucharest	EUPT-FV 21 EUPT-CF 13
RO	Sanitary Veterinary and Food Safety Laboratory Constanta	RO223-ANSVSA	24/05/2004	RENAR-Bucharest	EUPT AO 14
RO	Zonal Laboratory for Pesticides Residues determination in Plants and Vegetables Products – Mures	RO_125_ LZDRPPPV	26/04/2013 Reaccreditation in 18/12/2017	RENAR-Bucharest	EUPT-FV 21 EUPT-CF13
RO	Sanitary Veterinary and Food Safety Laboratory Cluj	RO113-ANSVSA	LI 456 13.03.2020	RENAR-Bucharest	EUPT AO 14 EUPT-CF13 EURL–PT-DPB_1902-EY IISPV –NAC -PESTICIDE – A I 2019 IISPV –NAC -PESTICIDE – A II 2019
RO	Environmental hygiene laboratory	MS-RO113-MS	LI 1189/04.10.2018	RENAR-Bucharest	-
RO	Sanitary Veterinary and Food Safety Laboratory Suceava	RO215-ANSVSA	05/03/2007	RENAR-Bucharest	EUPT AO -14 EURL–PT-DPB_1902-EY Determination of PCBs in Egg yolk powder
RO	Institute of Hygiene and Veterinary Public Health	RO321-IISPV	01/04/2002	RENAR-Bucharest	EUPT AO 14 EUPT CF 13 EUPT SRM 14
RO	Sanitary Veterinary and Food Safety LaboratoryIalomita	RO031-ANSVSA	LI 540/ 01.07.2019	RENAR Bucharest	EUPT FV-21
RO	Sanitary Veterinary and Food Safety LaboratoryOlt	RO41-ANSVSA	LI 1174 05.05.2018	RENAR Bucharest	EUPT FV 21

Country	Laboratory		Accreditation		Participation in proficiency tests or inter-laboratory tests
	Name	Code	Date	Body	

Table 4: Processing factors

Pesticide(report name)[a]	Unprocessed product (RAC)	Processed product	Processing factor[b]	Comments
All pesticides	Oranges	Oranges Juice	1	
All pesticides	Olives for oil production	Oliver Oil	5	
All pesticides	Wheat	Flour	1	
All pesticides	Rye	Flour	1	
All pesticides	Wine grapes	White Wine	1	
All pesticides	Wine grape	Red Wine	1	

a) Processing factor for the enforcement residue definition