PESTICIDE RESIDUE CONTROL RESULTS

NATIONAL SUMMARY REPORT

Year: 2020

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 2020, samples from 49 agricultural products were planned 2240 samples and were analyzed 2322 samples. The number of active substances analyzed were 260.

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 2020. 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 2019, in 2020 the number of samples analysed for pesticide residues from EU market has been increased (from 56,2% in 2019 to 57,5% in 2020) and for samples from Third Countries the number of samples has been reduced (from 43,7% in 2019 to 42,5% in 2020) - as presented in the table 1

Table 1: Summary results by sample origin

Origin of samples	2018(%)	2019(%)	2020(%)
EU	55,1	56,2	57,5
Third Countries	44,6	43,7	42,5
Unknown	0,3	0,1	0

- 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 2020 a total number of 4289 samples were taken in order to check the MRL’s compliance of pesticide residues in different crops. From these, 4129 samples there were sampled under objective sampling strategy, 124 samples were sampled under selective sampling strategy and 34 samples were sampled under suspect sampling strategy.

A number of 1664 samples were fruit and primary derivatives thereof, 1895 samples were garden vegetables and primary derivatives thereof, 184 were grains and grain-based products, 42 samples of baby food and 20 samples of animal products.

From the total number of the 4289 samples that include fruit, vegetables, cereals, processed products (including baby food) and animal products, 2322 were produced in Romania, 404 samples were produced in EU, and 1822 samples were produced outside of the EU.

Table 2: Summary results

Samples	2018	2019	2020
Total	4809	5166	4289
Without residues (%)	3101 (64,48%)	3150 (60,98%)	2916 (67,99%)
With residues below MRL (%)	1563 (32,50%)	1927 (37.30%)	1322 (30,82%)
Exceeding (%)	145 (3,02%)	89 (1,72%)	51 (1,19%)
Non compliant (%)	90 (1,87%)	58 (1,12%)	34 (0,79%)

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), Pirimiphos-methyl, Diazinon, Permethrin (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, Pirimiphos-methyl, Diazinon, Permethrin (sum of isomers),
- Vegetables were: Acetamiprid, Azoxystrobin, Boscalid, Carbendazim and Benomyl, Chlorothalonil, Metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers), Pyrimethanil, Fludioxonil,

From the total number of samples, 699 foodstuffs samples had 2 or more foundings. Below there are mentioned some products with different number of pesticide residues:

- oranges – 54 samples with a number of residues from 2 up to 6,
- pears – 54 samples with a number of residues from 2 up to 6,
- apples – 130 samples with a number of residues from 2 up to 5,
- apricots- 23 samples with a number of residues from 2 up to 4,
- grapefruits and similar – 98 samples with a number of residues from 2 up to 4,
- lemons -122 samples with a number of residues from 2 up to 6,
- mandarins – 57 samples with a number of residues from 2 up to 5,
- strawberries – 22 samples with a number of residues from 2 up to 5,
- table grapes – 93 samples with a number of residues from 2 up to 6,
- wine grapes – 48 samples with a number of residues from 2 up to 5,
- lettuce – 09 samples with a number of residues from 2 up to 5,
- sweet peppers – 85 samples with a number of residues from 2 up to 6,
- tomatoes – 200 samples with a number of residues from 2 up to 7.

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 2019, in 2020 the number of samples with residues below MRL has been reduced (from 37,3% in 2019 to 30,8% in 2020) and the number of samples with exceeding has been reduced (from 1,72% in 2019 to 1,19% in 2020) – as presented in the table 2 Summary results. The number of pesticides reported has been remained the sameas 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 4289 samples in 2020, 34 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)]	Chlorothalonil/spinaches	1	RO_321_LCRPPPV_0 207	Romania
	Carbendazim/ lettuces	1	RO_321_LCRPPPV_0 259	Romania
	Chlorfenapyr/Cherry tomatoes	1	RO_321_LCRPPPV_ M6	Romania
	chlorfenapyr/tomatoes	1	RO_321_LCRPPPV_ M8	Romania
	Malathion/beans	1		Ethiopia
	Buprofezin/grapefruits	1		Turkey
	Pirimiphos-methyl/mandarins	1		Turkey
	Prochloraz/lemons	2		Turkey
	Prochloraz/pomelo	1		China
	Prochloraz/grapefruits	3		Turkey
	Prochloraz/mandarins	1		Turkey
	Prochloraz/oranges	1		Turkey
	Chlorpyrifos/quinces	1		Turkey
GAP not respected: use of an approved pesticide not authorised on the specific crop[(c)]				
	Dimethoate/lovage leaves	1	RO_321_LCRPPPV_0 109	Romania
	Dimethoate/parsley	1	RO_321_LCRPPPV_0 138	Romania
	Dimethoate/ Aubergines	1	RO_321_LCRPPPV_0 642	Romania
	Dimethoate/ Gherkins	1	RO_321_LCRPPPV_0 650	Romania
	Dithiocarbamates/spinaches	1	RO_321_LCRPPPV_0 207	Romania
	Fenpropimorf (sum of	1	RO_321_LCRPPPV_0	

	isomers)/parsley		093	Romania
	Omethoate/parsley	1	RO_321_LCRPPPV_0 138	Romania
	Spiroxamine (sum of isomers)/dill leaves	1	RO_321_LCRPPPV_0 176	Romania
	Thiophanate-methyl/spinaches	1	RO_321_LCRPPPV_0 096	Romania
	Thiophanate-methyl/ lettuces	1	RO_321_LCRPPPV_0 259	Romania
	Triadimenol (any ratio of constituent isomers)/dill leaves	1	RO_321_LCRPPPV_0 176	Romania
GAP not respected: use of an approved pesticide, but application rate, number of treatments, application method or PHI not respected				
	Buprofezin/Sweet peppers	1	RO_321_LCRPPPV_ M180	Romania
	Imazalil (any ratio of constituent isomers)/ pears	2	RO_321_LCRPPPV_ M115 RO_321_LCRPPPV_ M147	Romania
Use of pesticide according to authorised GAP: unexpected slow degradation of residues	Dimethoate/Strawberries	1	RO_321_LCRPPPV_0 240	Romania
	Dimethoate/tomatoes	1	RO_321_LCRPPPV_0 279	Romania
	Carbendazim/Gherkins	1	RO_321_LCRPPPV_0 627	Romania
	Thiophanate-methyl/Gherkins	1	RO_321_LCRPPPV_0 627	Romania
	Imidacloprid/Oat	1	RO_321_LCRPPPV_0 714	Romania
	Pyridaben/Sweet peppers	1	RO_321_LCRPPPV_ M180	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				
Use of a pesticide on food imported from third countries for which no import tolerance was set[(d)]	-			
	Buprofezin/Tomatoes	1		
	Buprofezin/Sweet Peppers	6		
	Metalaxyl/Courgettes	1		

	Diflubenzuron/Quinces	1		
	Linuron/Carrots	2		
	Acetamiprid/Sweet Peppers	1		
	Imazalil/Bananas	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

4.2. Actions taken

Table 2: Actions taken

	Action taken[(a)]	**Number of non-compliant samples concerned[(b)]**	**Comments**	Country of origin
Rapid Alert Notification				
Carbendazim/ lettuces		1		Romania
Thiophanate-methyl/ lettuces		1		Romania
Administrative sanctions (e.g. fines)				
Carbendazim/ lettuces		1		Romania
Thiophanate-methyl/ lettuces		1		Romania
Lot recalled from the market				
Rejection of a non-compliant lot at the border		-		
Destruction of non-compliant lot		-		
Follow-up (suspect) sampling of similar products, samples of same producer or country of origin		-		
Chlorothalonil/spinaches		1		Romania
Buprofezin/Sweet peppers		1		Romania
Carbendazim/ lettuces		1		Romania
Chlorfenapyr/Cherry tomatoes		1		Romania
chlorfenapyr/tomatoes		1		Romania
Dimethoate/lovage leaves		1		Romania
Dimethoate/parsley		1		Romania

Dimethoate/ Aubergines		1		Romania
Dimethoate/ Gherkins		1		Romania
Dithiocarbamates/spinaches		1		Romania
Fenpropimorf (sum of isomers)/parsley		1		Romania
Imazalil (any ratio of constituent isomers)/ pears		2		Romania
Omethoate/parsley		1		Romania
Pyridaben/Sweet peppers		1		Romania
Spiroxamine (sum of isomers)/dill leaves		1		Romania
Thiophanate-methyl/spinaches		1		Romania
Thiophanate-methyl/ lettuces		1		Romania
Triadimenol (any ratio of constituent isomers)/dill leaves		1		Romania
Dimethoate/Strawberries		1		Romania
Dimethoate/tomatoes		1		Romania
Carbendazim/Gherkins		1		Romania
Thiophanate-methyl/Gherkins		1		Romania
Imidacloprid/Oat		1		Romania
Warnings to responsible food business operator		-		
Other follow-up investigations to identify reason of non-compliance or responsible food business operator		-		
Malathion/beans		1		Ethiopia
Buprofezin/grapefruits		1		Turkey
Pirimiphos-methyl/mandarins		1		Turkey
Prochloraz/lemons		2		Turkey
Prochloraz/pomelo		1		China
Prochloraz/grapefruits		3		Turkey
Prochloraz/mandarins		1		Turkey
Prochloraz/oranges		1		Turkey
Chlorpyrifos/quinces		1		Turkey
Buprofezin/Tomatoes		1		
Buprofezin/Sweet Peppers		6		
Metalaxyl/Courgettes		1		
Diflubenzuron/Quinces		1		
Linuron/Carrots		2		
Acetamiprid/Sweet Peppers		1		
Imazalil/Bananas		1		
Other actions (please specify)	0			
Administrative sanctions (e.g. fines)				

–: 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- CF14 EUPT- FV22 TestQual 133
RO	Sanitary Veterinary and Food Safety Laboratory Bucharest	RO321-ANSVSA	LI 496 11/04/2007	RENAR-Bucharest	EUPT- CF14 EUPT- FV22
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- CF14 EUPT- FV22
RO	Environmental hygiene laboratory	MS-RO113-MS	LI 1189/04.10.2018	RENAR-Bucharest	-
RO	Institute of Hygiene and Veterinary Public Health	RO321-IISPV	01/04/2002	RENAR-Bucharest	EUPT - CF14 EUPT – AO15
RO	Sanitary Veterinary and Food Safety Laboratory Ialomita	RO031-ANSVSA	LI 540/ 01.07.2019	RENAR Bucharest	EUPT-FV-22
RO	Sanitary Veterinary and Food Safety Laboratory Olt	RO41-ANSVSA	LI 1174 05.05.2018	RENAR Bucharest	EUPT-FV-22

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