

**PESTICIDE RESIDUE CONTROL RESULTS**

**NATIONAL SUMMARY REPORT**

**Year: 2022**

Romania

## Table of contents

1.	Romania .....	3
1.1.	Name of the national competent authority/organisation.....	3
2.	Objective and design of the national control programme .....	3
2.1.	Objective.....	3
2.2.	Design .....	3
3.	Key findings, interpretation of the results and comparability with the previous year results .....	4
3.1.	Key findings.....	4
3.2.	Interpretation of the results .....	5
3.3.	Comparability with the previous year results .....	5
4.	Non-compliant samples: possible reasons, ARfD exceedances and actions taken.....	6
4.1.	Possible reasons for non-compliant samples .....	6
4.2.	Actions taken.....	8
5.	Quality assurance.....	9
6.	Processing Factors (PF) .....	10

## 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](http://www.ansvsa.ro), [www.madr.ro](http://www.madr.ro)

## 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.

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 2022, samples from 45 agricultural products were planned 2217 samples and were analyzed 2631 samples. The number of active substances analyzed were 357.

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 2022. 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, pappars, tomatoes, table grapes and wine grapes.

- Origin of food
  - compared with 2021 in 2022 the number of samples analysed for pesticide residues from EU market has been increased (from 62,22% in 2021 to 67,08% in 2022) and for samples from Third Countries the number of samples has been reduced (from 37,17% in 2021 to 32,38 in 2022) - as presented in the table 1

**Table 1:** Summary results by sample origin

<b>Origin of samples</b>	<b>2020(%)</b>	<b>2021 (%)</b>	<b>2022 9%</b>
EU	57,5	62,22	67,08
Third Countries	42,5	37,17	32,38
Unknown	0	0,6	0,54

- 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 notifications and 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 2022 a total number of 4642 samples were taken in order to check the MRL's compliance of pesticide residues in different crops. From these, 4402 samples there were sampled under objective sampling strategy, 223 samples were sampled under selective sampling strategy and 17 samples were sampled under suspect sampling strategy.

A number of 1459 samples were fruit and primary derivatives thereof, 2416 samples were garden vegetables and primary derivatives thereof, 166 were grains and grain-based products, 42 samples of food products for young population and 24 samples of animal products.

From the total number of the 4642 samples that include fruit, vegetables, cereals, processed products (including baby food) and animal products, 2802 were produced in Romania, 3114 samples were produced in EU, and 1503 samples were produced outside of the EU.

**Table 2:** Summary results

<b>Samples</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Total	4289	3941	4642
Without residues (%)	2916 (67,99%)	2668 (67,70%)	2811 (60,56%)
With residues below MRL (%)	1322 (30,82%)	1177 (29,87)	1657 (35,70%)
Exceeding (%)	51 (1,19%)	96 (2,43)	174 (3,74%)
Non compliant (%)	34 (0,79%)	51 (1,29)	81 (1,74)

### 3.2. Interpretation of the results

The most frequent pesticides detected in

- the animal products were: DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT), Diazinon, Lindan ( $\gamma$  HCH), Hexachlorocyclohexane,
- 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, 1831 foodstuffs samples had 2 or more findings. Below there are mentioned some products with different number of pesticide residues:

- apples – 107 samples with a number of residues from 2 up to 7,
- strawberries – 45 samples with a number of residues from 2 up to 6,
- lettuce – 79 samples with a number of residues from 2 up to 9,
- tomatoes – 332 samples with a number of residues from 2 up to 7
- banana – 79 samples with a number of residues from 2 to 5,
- grapefruits and similar – 91 samples with a number of residues from 2 up to 5,
- lemons - 112 samples with a number of residues from 2 up to 6,
- oranges – 70 samples with a number of residues from 2 up to 5,
- pears – 49 samples with a number of residues from 2 up to 7,
- table grapes – 85 samples with a number of residues from 2 up to 12,
- wine grapes – 45 samples with a number of residues from 2 up to 8,
- sweet peppers – 93 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 2021, in 2022 the number of samples with residues below MRL has been increased (from 29,87% in 2021 to 35,75% in 2022) and the number of samples with exceeding has been increased (from 2,43% in 2021 to 3,74% in 2022) – as presented in the table 2 Summary results.. 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 4642 samples in 2022, 81 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 <sup>(a)</sup>	Frequency <sup>(b)</sup>	Comments	Title
GAP not respected: use of a pesticide not approved in the EU <sup>(c)</sup>	chlorothalonil/parsley	1		
	carbendazim/spring onions	1		
	carbendazim/lettuces	2		
	thiophanate-methyl/lettuces	2		
	linuron/parsley	1		
	carbendazim/lovage leaves	1		
	thiophanate-methyl/lovage leaves	1		
	chlorothalonil/spring onions	1		
	imidacloprid/wheat	1		
	diflubenzuron/pears	1		
	imidacloprid/lettuces	1		
	clothianidin/spinaches	1		
	dimethoate/sweet peppers	1		
	chlorpyrifos/spinaches	1		
GAP not respected: use of an approved pesticide not authorised on the specific crop <sup>(c)</sup>	fenhexamid/spring onions	4		
	pirimiphos-methyl/parsley	1		
	fluvalinate /parsley	1		
	propryzamid/spring onions	1		
	penconazole/dill	2		
	fenhexamid/apples	1		
	chlormequat/tomatoes	1		
	Exceeding the MRL for imported products	buprofezin / lemons	1	RO321ANSVSA-30832-3
chlorothalonil / cucumbers		4	RO321ANSVSA-30037-1 RO321ANSVSA-30106-1 RO321ANSVSA-30141-5	Turkey

			RO321ANSVSA-30177-1	
	chlorothalonil / table grapes	1	RO321ANSVSA-30038-1	Moldova
	chlorothalonil / tomatoes	3	RO321ANSVSA-30165-1 RO321ANSVSA-30233-1 RO321ANSVSA-30377-3	Turkey
	chlorpyrifos / oranges	1	RO321ANSVSA-30135-3	Turkey
	imazalil / bananas	2	RO321ANSVSA-30569-1 RO321ANSVSA-30569-3	Ecuador
	iprodione / cucumbers	1	RO321ANSVSA-30141-5	Turkey
	malathion / beans	1	RO321ANSVSA-30068-1	Egypt
	malathion / table grapes	1	RO321ANSVSA-30038-3	Moldova
	metalaxyl / pumpkins	1	RO321ANSVSA-30481-1	Turkey
	prochloraz / oranges	1	RO321ANSVSA-30119-1	Turkey
	prochloraz / tangerines	1	RO321ANSVSA-30467-3	Turkey
	pyridaben / cabbages	1	RO321ANSVSA-30492-1	Turkey
	thiophanate-methyl / table grapes	2	RO321ANSVSA-30038-1 RO321ANSVSA-30096-11	Moldova Turkey
	Acetamiprid/ Granate apples	3	RO223-LSVSA-20417.1 RO223-LSVSA-20624.1 RO223-LSVSA-24178.1	Turkey
	Acetamiprid/ Table grapes less seeds	1	RO223-LSVSA-25133.2	Turkey
	Buprofezin/ Grapefruits and similar	2	RO223-LSVSA-20459.1 RO223-LSVSA-20642.1	Turkey
	Buprofezin/Lemons	1	RO223-LSVSA-25135.1	Turkey
	Chlorpyrifos/ Grapefruits and similar	1	RO223-LSVSA-20348.1	Turkey
	Chlorpyrifos/ Pomelo (Grapefruits and similar)	1	RO223-LSVSA-20415.1	China
	Chlorpyrifos/ Peaches	1	RO223-LSVSA-22361-1	Serbia
	Chlorpyrifos/ Clementines	2	RO223-LSVSA-25101-1 RO223-LSVSA-25231-3	Albania
	Chlorpyrifos/ Sweet peppers	1	RO223-LSVSA-25231-1	Albania
	Chlorpyrifos-methyl/ Lemons	3	RO223-LSVSA-0328.1 RO223-LSVSA-0348.2 RO223-LSVSA-25058-2	Turkey
	Chlorpyrifos-methyl/ Grapefruits and similar	3	RO223-LSVSA-0459.1 RO223-LSVSA-20682-1 RO223-LSVSA-24952-1	Turkey
	Chlorpyrifos-methyl/ Mandarins	1	RO223-LSVSA-25158-1	Turkey
	Chlorpyrifos-methyl/ Tomatoes	1	RO223-LSVSA-25236-1	Turkey
	Diflubenzuron/ Apples	2	RO223-LSVSA-21686.1 RO223-LSVSA-24600.1	Turkey
	Diflubenzuron/ Pears	1	RO223-LSVSA-25091.1	Turkey

	Dimethoate/ Mandarins	1	RO223-LSVSA-25158-1	Egypt
	Dimethoate/ Granate apples	1	RO223-LSVSA-24535-1	Turkey
	Dimethomorph (sum of isomers)/ Granate apples	1	RO223-LSVSA-20669.1	Turkey
	Imidacloprid/ Peach- es and similar	1	RO223-LSVSA-23739.3	Turkey
	Linuron/ Carrots	1	RO223-LSVSA-21764.1	Egypt
	Metalaxyl and met- alaxyl-M (metalaxyl including other mix- tures of constituent isomers including metalaxyl-M (sum of isomers)/ Courgettes	2	RO223-LSVSA-20044.1  RO223-LSVSA-21196.1	Turkey
	Omethoate/ Granate apples	1	RO223-LSVSA-24535-1	Turkey
	Propargite/ Apples	2	RO223-LSVSA-24425-1 RO223-LSVSA-25122-1	Ukraine
	Pyriproxyfen/ Table grapes less seeds	1	RO223-LSVSA-25133-2	Turkey
	Thiophanate-methyl/ Granate apples	1	RO223-LSVSA-24178-1	Turkey

## 4.2. Actions taken

**Table 2:** Actions taken

	Action taken <sup>(a)</sup>	Number of non-compliant samples concerned <sup>(b)</sup>	Comments	Country of origin
<b>Rapid Alert Notification</b>	81	81		
<b>Administrative sanctions (e.g. fines)</b>	1	1		
<b>Lot recalled from the market</b>	27	27		
<b>Follow-up (suspect) sampling of similar products, samples of same producer or country of origin</b>	84	84		
<b>Warnings to responsible food business operator</b>	21	21		

–: 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	LI 1071 16/01/2006 Reaccreditations in 18/12/2021	RENAR- Bucharest	EUPT- CF 16 EUPT- FV 24
RO	Sanitary Veterinary and Food Safety Laboratory Bucharest	RO321-ANSVSA	LI 496 11/04/2007	RENAR- Bucharest	EUPT- CF 16 EUPT- FV 24
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- CF 16 EUPT- FV 24
RO	Environmental hygiene laboratory	MS-RO113-MS	LI 1189/04.10.2018	RENAR- Bucharest	FC 312
RO	Institute of Hygiene and Veterinary Public Health	RO321-IISPV	01/04/2002	RENAR- Bucharest	EUPT - CF 16 = satisfacatory EUPT - AO 17 = satisfacatory PT-FAPAS Test 19349 (2-Chloroethanol) = satisfacatory
RO	Sanitary Veterinary and Food Safety Laboratory Constanta	RO223-LSVSA	Accreditation Certificate no. LI 276/ 17.09.2019 RENAR Accreditation Certificate no. LI 276/ 05.04.2023 (temporary suspended AO pesticides analysis )  Accreditation Certificate no. LI 276/ 04.01.2023 (NAO pesticides analysis)	RENAR Bucharest	IISPV - NAC - PESTICIDE-AO (matrix liquid egg)  EUPT- FV- 24 (matrix tomatoes) PT-FC-836 (LGC AXIO PT)(matrix pear)
RO	Sanitary Veterinary and Food Safety Laboratory Olt	RO41-ANSVSA	LI 1174 05.05.2018	RENAR Bucharest	EUPT- FV 24-
RO	Sanitary Veterinary and	RO113-ANSVSA	LI 456 27.11.2006	RENAR Bucharest	EUPT CF 16 EUPT AO 17

Country	Laboratory		Accreditation		Participation in proficiency tests or inter-laboratory tests
	Name	Code	Date	Body	
	Food Safety Laboratory Cluj				IISPV-NAC-PCB-AO; IISPV-NAC-Pesticide-AO
RO	Sanitary Veterinary and Food Safety Laboratory Suceava	RO215-ANSVSA	Reaccreditation in 31/07/2023	RENAR Bucharest	EURL CRL FREIBURG EUPT AO-18 (HONEY), IISPV-NAC PESTICIDE – AO (EGGS).

**Table 4:** Processing factors

Pesticide(report name) <sup>(a)</sup>	Unprocessed product (RAC)	Processed product	Processing factor <sup>(b)</sup>	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