



Status of MRLs in Türkiye

Neslihan ALPER

Head of the Department of Plant and Plant Products Border Control Department
General Directorate of Food and Control

Phone: +90 312 287 33 60 (10 lines)

Fax: +90 312 287 72 66

neslihan.alper@tarimorman.gov.tr



Minister

Deputy Minister (4)

Staff (64,231)

Total Agricultural Establishments (3,022,000)

Livestock Establishments (1,716,197)

Food Establishments (706,926)

Feed Establishments (16,060)

CENTRAL UNITS

- General Directorate for European Union and Foreign Relations
- General Directorate of Fisheries and Aquaculture
- General Directorate of Plant Production
- General Directorate of Nature Conservation and National Parks
- General Directorate of Food and Control
- General Directorate of Livestock
- General Directorate of Staff
- General Directorate of Water Management
- General Directorate of Agricultural Reform
- General Directorate of Agricultural Research and Policies
- Directorate of Strategy Development
- Legal Consultancy Department
- Department of Sugar
- Department of Training and Publication
- Department of Information Technologies
- Department of Tobacco and Alcohol
- Department of Guidance and Inspection
- Department of Internal Audit
- Support Services Head of Department

AFFILIATED AND RELATED ORGANIZATIONS

- Ataturk Forest Farm Directorate
- General Directorate of State Hydraulic Works
- General Directorate of Forestry
- Türkiye Water Institute
- General Directorate of Tea Businesses
- General Directorate of Meat and Dairy Institution
- General Directorate of Agricultural Businesses
- Agriculture and Rural Development Support Institution
- General Directorate of Soil Products Office
- General Directorate of Turkey Sugar Factories Inc.

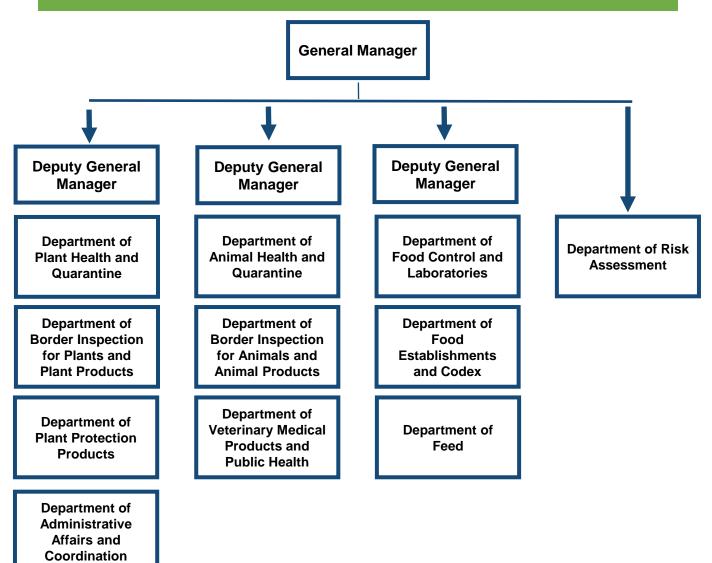
PROVINCIAL UNITS

- Research Institutes
- Regional Directorates
- Education Center Directorates
- Food Control Laboratory Directorate (41)
- Provincial Directorates (81)
- District Directorates (921)
- Kafkas Bee Production Training and Gene Center Directorate
- Agricultural Equipment and Machinery Test Directorate
- Seed Certification Test Directorates (10)
- Veterinary Control Institute Directorates (9)
- Veterinary Border Inspection Post Directorates (22)
- Agricultural Quarantine Directorates (12)





GENERAL DIRECTORATE OF FOOD AND CONTROL







- Forestry (227,400 km2)
- Farm Plants (156,280 km2)- wheat, sugar beet, barley, sweetcorn, patato, sunflower ...
- Meadow and Pasture (146,170 km2)
- Fruits, Beverage and Spice (35,640 km2)- apple, grape, olive, orange, mandarin, lemon, apricot, hazelnut, pistachio, fig....
- Fallow (31,730 km2)
- Vegetables (7,790 km2)- tomato, cucumber, watermelon, pepper, onion, bean, aubergine...
- Ornamental Plants (50 km2)

Agriculture and Forestry Area



Agriculture and rolestry Area



Livestock and Aquaculture

Number of cattle	18,036,117
Number of sheep and goats	57,519,204
Milk production (tonnes)	22,960,379
Meat production (tonnes)	1,201,469
Egg production (million pieces)	19,788
Poultry (tonnes)	2,136,263
Number of hives (pieces)	8,733,394
Honey production (tonnes)	96,344
Aquaculture (tonnes)	785,811











Production	and	export	data	of	Turkev

Foods	Türkiye	World	Production	Türkiye	World	Exports
	5-Year	5-Year	Rate	5-Year	5-Year	Rate
	Average	Average	%	Average	Average	%
	Production	Production		Exports	Exports	
	(Tonnes)	(Tonnes)		(Tonnes)	(Tonnes)	
Dried Vine Fruits	292,000	1,269,565	23	253,174	816,690	31
Dried Figs	78,940	143,527	55	74,731	131,107	57
Dried Apricots	107,702	188,950	57	84,316	118,755	71
Pistachios	127,400	670,526	19	10,867	347,622	3
Hazelnuts	328,500	484,520	68	262,373	348,085	75

*Source: International Nut and Dried Fruit Council - INC









Great Mosque and Hospital of Divriği Sivas UNESCO

PLANT PROTECTION PRODUCTS



PLANT PROTECTION PRODUCTS LEGISLATION

In our country, the licensing, import, manufacture, control, wholesale and retail sale of plant protection products are carried out in accordance with the Veterinary Services, Plant Health, Food and Feed Law No. 5996 and the legislation enacted in accordance with the law. Legislation enacted in this context:

- Regulation on Licensing and Placing on the Market of Plant Protection Products dated 09.11.2017 and numbered 30235,
- ➤ Regulation on Trials of Plant Protection Products, dated 09.11.2017 and numbered 30235,
- Regulation on Classification, Packaging and Labeling of Plant Protection Products dated 25.03.2011 and numbered 27885,
- Regulation on Wholesale and Retail Sale and Storage of Plant Protection Products dated 13.02.2019 and numbered 30685,
- ➤ Regulation on the Import of Plant Protection Products and Raw Materials of Plant Protection Products, dated 14.12.2018 and numbered 30625,
- Regulation on Plant Protection Product Production Sites Procedures and Principles dated 06.07.2011 and numbered 27986,
- ➤ Plant Protection Products Control Regulation dated 20.05.2011 and numbered 27939.





The important point here is that the active ingredient of the PPP to be licensed for the first time in our country must be licensed in the European Union or G8 countries.

Technical (Assessment Commission)



- Biological efficacy,
- Physical and chemical properties,
- Residue studies,
- Durability,
- Side effects,
- Toxicological and ecotoxicological studies

Administrative (Ministry of Agriculture and Forestry)



Information and documents are examined in terms of conformity with the regulation in terms of form and time.

- ✓ License Certificate
- ✓ MRL

LICENSING PPP and DETERMINING MRL

Residue Studies and MRL

- Regulation on Trials of Plant Protection Products
- Standard Trial Methods
- > at least three regions
- ➤ at least eight attempts on major products and at least four attempts on minor products (different growing season)



Licensed plant protection products: 5,183

• Banned active substances: 216

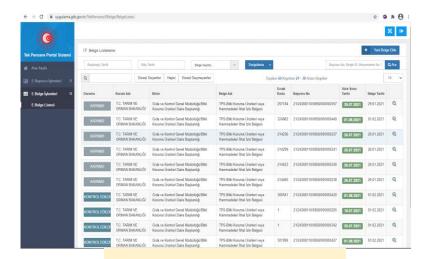
Pesticide use amount: 2.22 kg/ha (World average: 4.48 kg/ha)



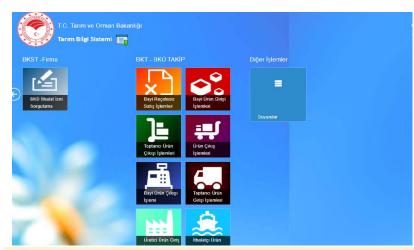
TRACEABILITY SYSTEMS



Plant Protection Products Database



Single Window System



Plant Protection Products Tracking System



Patara Ancient City - Antalya

MAXIMUM RESIDUE LIMITS



Domestic products

MRLs determined by the Regulation on Licensing and Placing on the Market of Plant Protection Products

ANNEX-2

The "Turkish Food Codex Regulation on Maximum Residue Limits of Pesticides" published in the Official Gazette dated 27 September 2021 and numbered 31611

ANNEX-3

Imported products

Within the scope of harmonization with the European Union acquis, MRLs and LODs are generally compatible with the EU Regulation No 396/2005.





EPHASUS- UNESCO World Heritage Centre İzmir/Türkiye

- ✓ Fruits, Fresh or Frozen; Tree Nuts
- ✓ Vegetables, Fresh or Frozen
- ✓ Pulses
- ✓ Oilseeds and Oil Fruits
- ✓ Cereals

ANNEX-1

- ✓ Teas, Coffee, Herbal Infusions, Cocoa and Carobs
- ✓ Hops
- ✓ Spices
- ✓ Sugar Plants
- ✓ Products of Animal Origin -Terrestrial Animals
- ✓ Processed Food Products

ANNEX-4

Banned active substances

ANNEX-5

Active substances not applied MRL

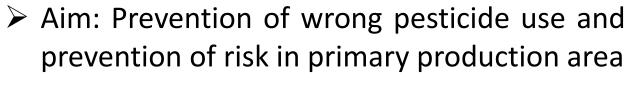




Gastroantep International Gaziantep Gastronomy Festival UNESCO Creative Cities Network (Gaziantep)

OFFICIAL CONTROLS





Sample (pesticides): 24,525 (fresh fruits and vegetables Pre-harvest controls 2021)

➤ Since 2012

> Pre-harvest Official Control Procedure

Annual Control Plan

Pre-harvest Official Control Plan

Sampling

➤ Analytical Quality Control and Method Validation Procedures for Pesticide Residues Analysis in Food and Feed

Analysis

➤ Turkish Food Codex Regulation on Maximum Residue Limits of Pesticides

Evaluation



MANAGING PESTICIDE USE



- Integrated Pest Management (IPM) Projects:
- Prescribing
- Biological and Biotechnical Control Methods
- Training and Publication Studies



POST-HARVEST

Veterinary Services, Plant Health, Food and Feed Law No. 5996

> Regulation on Official Controls of Food and Feed

Annual Control Plan

> Turkish Food Codex Communique Sampling Methods for Official Control of Pesticide Residues in Food

Sampling

> Analytical Quality Control and Method Validation Procedures for Pesticide Residues Analysis in Food and Feed

Analysis

> Turkish Food Codex Regulation on Maximum **Residue Limits of Pesticides**

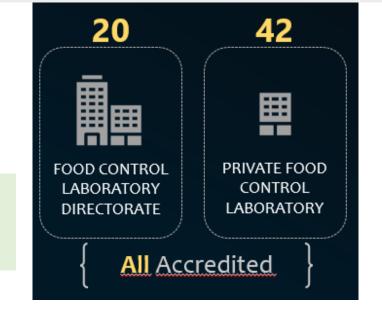
Evaluation





- Inspectors (7,358)
- Food Establishments (706,926)
- Risks
 - ✓ previous year statistics
 - ✓ production and consumption quantities
 - √ feedbacks (RASFF, etc.)
 - ✓ export products
- Control Points
 - manufacturing points
 - wholesale and retail sales points
 - food packaging

- **❖** Laboratory Technical Staff (1,435)
- Minimum 400 active substances
- **❖** ISO/IEC 17025:2017
- Proficiency tests
- GC-MS/MS, LC-MS/MS, GC-MS\MS-HS (Headspace), Orbitrap LC-MS/MS Q Exactive, Orbitrap GC-MS/MS Q Exactive, GC-ECD, etc



Sample (pesticides): 5133 (fresh fruits and vegetables Post-harvest controls 2021)



R

Veterinary Services, Plant Health, Food and Feed Law No. 5996

- Regulation on Official Controls of Food and Feed
- Regulation on Official Controls for Import of Plant Origin Food and Feed
- Pre-Notification, Phytosanitary and/or Health Certificate
- Documentary Check, Identity Check, Physical Check (Sampling and Frequency of Analysis)

As a result of the official control, products which comply with Turkish Food and Feed Legislation are allowed to entry to Turkish terriority.

Legal Basis

Mandatory Documents

Control stages

Evaluation









Veterinary Services, Plant Health, Food and Feed Law No. 5996







➤ Issue of Health Certificate for Food of Plant Origin and Feed Export and Implementing Regulation for Products that Return from Export

Preregistry to the Food Safety Information System (FSIS)

During control, if required, samples are taken by the food controller, Inspection report and analysis report are evaluated according to Recipient country demand and/or Turkish Food and Feed Legislation.

> Issue of Health Certificate.

Legal Basis

Mandatory Documents

Control stages

Evaluation





IMPORT TOLERANCE



Bursa and Cumalıkızık: the Birth of the Ottoman Empire UNESCO World Heritage Centre

MRL Calculation

- GLP/Good Laboratory Practices
- GAP Good Agricultural Practices
 - Certification
 - Accreditation
 - High Cost

MRL Harmonization

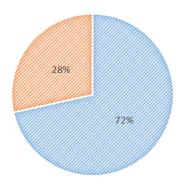
- ✓ External Audit
- ✓ Risk Asssesment

simplified import tolerance system

Fresh fruit and vegetables exported to the EU				
Years	Export	Product Returned		
(Tonnes	s) (Tonnes)	from Export		
		(Tonnes)		
2017	639,200	662	0.10	
2018	817,713	1,340	0,16	
2019	706,864	1,120	0.16	
2020	834,482	1,382	0.16	
2021	950,200	2,329	0.24	
5-vear	s 3.948.459	6.835	0.17	

RASFF NOTIFICATION (2021)

■ >LODMRL ■ >MRI



Total RASFF Notification (2021)	372
>LOD _{MRL}	266
>MRL	106





THANK YOU FOR ATTENTION

Gokpinar lake Sivas