



REPUBLIC OF TURKEY
MINISTRY OF AGRICULTURE
AND FORESTRY

The Status of Plant Health and Quarantine in Turkey

General Structure and Activities Regarding Phytosanitary Measures

The IPPC High-level Symposium on Cooperation of the Phytosanitary Measures
among the Chinese Initiative “One Belt” Countries,
27-30 May 2019 in Xián, Shaanxi, China

Murat Şahin
Head of Plant Health and Quarantine Department



Turkey
Centre of Eurasia

Where we are ...

Some Economic Parameters Of Turkey

- Total land area is 783.562 km²
- Population is 82 million,
- Gross domestic product \$ 851 billion
- Per Capita Income \$ 10.546

- ✓ Value domestic agricultural product \$ 51.8 billion,
- ✓ import \$ 12.6 billion,
- ✓ export \$ 17.7 Billion,

- The agricultural area is 38 million hectares.
- Forestry area is 22 million hektars
- Meadows and pasture 14.6 million hektars
- Arable area 24 million hektars
- Crop field 20 million hektars
- Orchard area 4 million hektars



Products Of Turkey In The Top Ten In The World

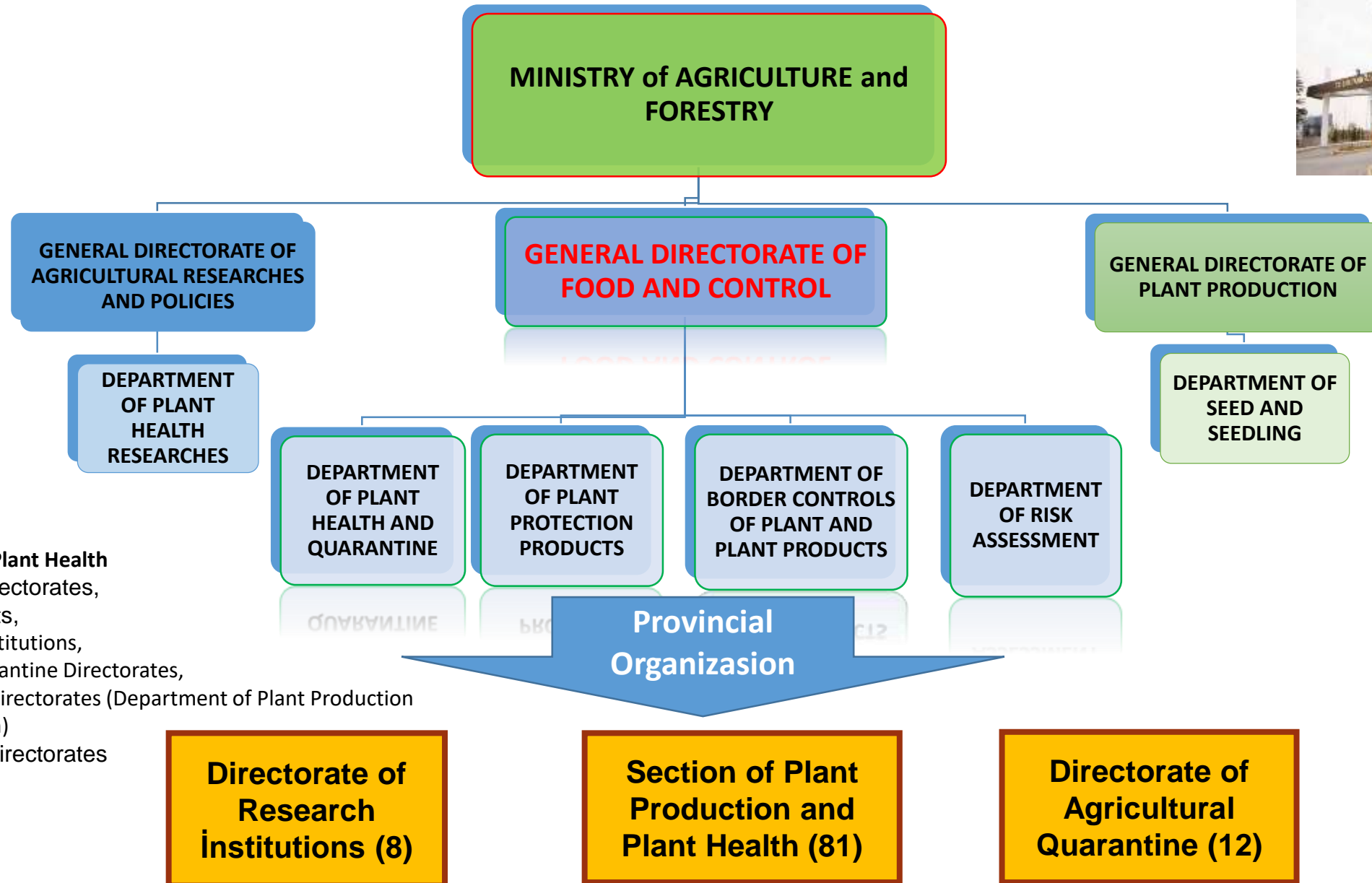
- ✓ Turkey is sufficient country in terms of food
- ✓ 1,707 agricultural / food products were exported in 190 countries

IN PRODUCTION	
Hazelnut, Apricot and Cherry	1st
Melon, Water Melon, Strawberry, Fig, Lentil, Olive, Apple, Tomatoes, Tea, Pistachio, Walnut, Aubergine, Sheep milk, sugar beet and honey	2nd-5th
Wheat, Barley, Grapes, peach, Mandarin, Lemon, Almond, Olive oil and sheep meat.	6th-10th



IN EXPORT	
Hazelnut, Apricot, grapes, fig and quince	1st
Wheat flour, cherry , Yoghurt, Macaroni, Lentil, lemon, Mandarin, Chickpea, Orange, Olive and Tomatoes	2nd-5th
Grape, Tobacco, Chess nut, Strawberry, Olive oil, Egg, Aubergine and Peach	6th-10th

Plant Health Structure



Authorities on Plant Health

- 3 General Directorates,
- 6 Departments,
- 8 Research Institutions,
- 12 Plant Quarantine Directorates,
- 81 Provincial Directorates (Department of Plant Production and Plant Health)
- 922 District Directorates

Responsibilities of Departments

Department of Planth Health and Quarantine

- Preparation and implementation of Control Programmes,
- Control of harmful organisms through government funded programmes (573 Harmful Organism),
- Prevent of contamination and spread of quarantine pests into the pest free areas,
- Surveys,
- Protected zones, pest free areas
- Plant Passport studies,
- Pest Risk Analysis,
- Implementation of ISPMs

Responsibilities of Departments

Department of Plant and Plant Products Border Inspection

- Controls of import and export,
- Issuing of Plant Health Certificates,
- Establishment of Border Inspection Posts,
- Determination of plant health requirements for entry into the Country,
- Preparation of International Cooperation Agreements,
- Declaration of recently detected quarantine pests to international organizations...

Entry and exit ports of plant and plant products

➤ Points of exit; 56 Provinces.

➤ Points of entry;

• **Production Material;13 Provinces**

(Adana, Ankara, Antalya, Bursa, Edirne, Hatay, İstanbul, İzmir, Mersin, Sakarya, Samsun, Trabzon, Yalova)

• **Forestry Products; 16 Provinces**

(Antalya, Artvin, Bartın, Bursa, Edirne, Hatay, İstanbul, İzmir, Kastamonu, Kocaeli, Mersin, Ordu, Samsun, Tekirdağ, Trabzon, Zonguldak)

• **Others; 23 Provinces**



▲ Plant quarantine services (12)

▲ Plant protection research institute (8)

- Countrywide Plant production and plant health office (81)

Department of Plant Protection Products;

- Preparation of legislation regarding plant protection products and equipment-machinery,
- Issuing of authorizations and approvals regarding plant protection products and equipment-machinery,
- Controls of production, storage and marketing of plant protection products and equipment-machinery,
- Cooperation with related national and international organizations,
- Preparation of legislation regarding the sale of prescribed plant protection products.

Regional Plant Protection Research Institutes

Analysis Laboratories (12)

➤ Research Institutions;

(Ankara, Adana, İzmir, Diyarbakır,
Yalova, Samsun, Erzincan, Antalya)

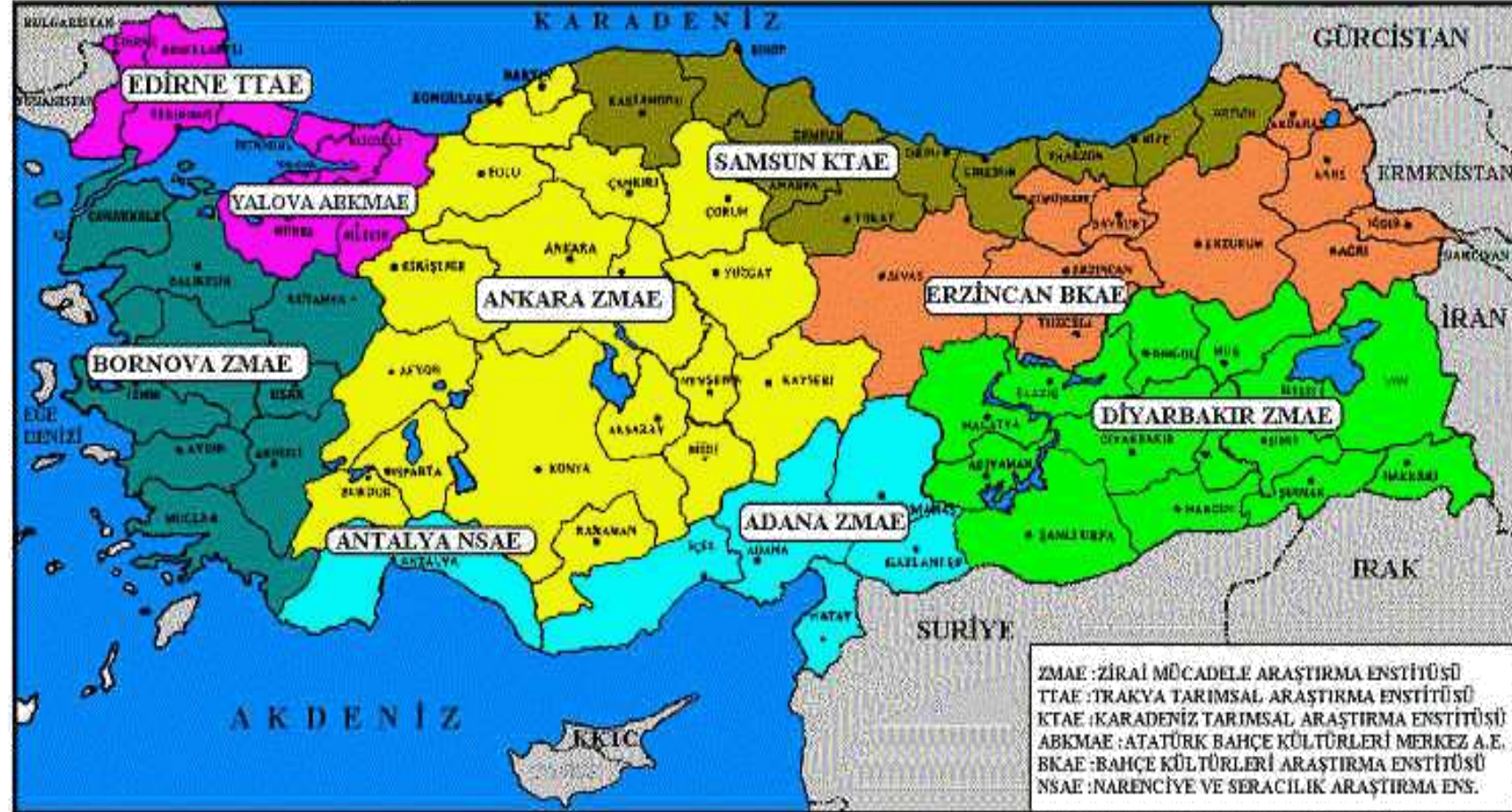
➤ Quarantine Directorates;

(İzmir, İstanbul, Mersin, Antalya)

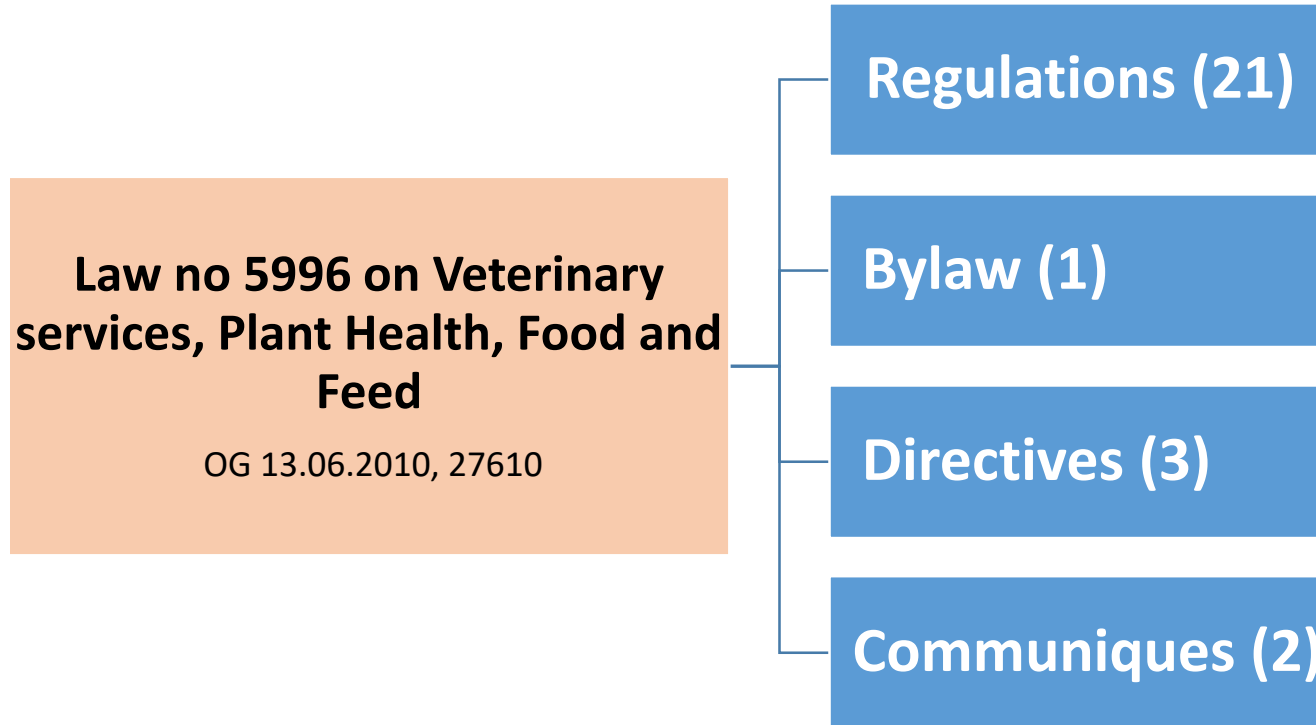
Performing the laboratory analyses for;

- Import,
- Export,
- Certification of plant propagation material,
- Pest Risk Assessment
- Validation of detection methods,

By totally 400 experts



Plant Health Legislations



- All regulation utmost harmonized with EU

Some Planth Health And Quarantine Regulations

- Regulation on Plant Quarantine,
- Regulation on Plant Quarantine Fumigation,
- Regulation on Plant Quarantine Inspectors,
- Regulation on the Heat Treatment and Marketing of Wooden Packaging Materials,
- Regulation on Registration of Plant Protection Products,
- Regulation on Plant Protection Tools and Machines,
- Regulation on Control of Plant Protection Products,
- Regulation on Wholesale and Retail Sale of Plant Protection Products,
- Regulation on Plant Passport System and Registration of Operators
- Regulation on Advise, Application and Registration of Plant Protection Products
- Regulation on the Official Controls of Import of Plant-Derived Food and Feed,
- Implementation Regulation on the expert Returned Products and Issuence of Health Certificates fort the Impot of Plant-Derived Food and Feed,
- Others..

Plant Quarantine Regulation is the main regulation on importation and exportation for Turkey.

(Dated 03 December 2011, 28131 OG)

Annex –1 Harmful Organisms That Are Subject To Quarantine And That Hinder Importation

A- Harmful Organisms Not Known To Occur In Turkey, That Are Subject To Quarantine And That Hinder Importation

B- Harmful Organisms That Have Limited Existence In Turkey, That Are Subject To Quarantine And That Hinder Importation

Annex - 2 Harmful Organisms That Are Subject To Quarantine And That Hinder Importation In Case They Are Found On Some Plants Or Plant Products

A-harmful Organisms Not Known To Occur In Turkey And That Are Subject To Quarantine

B- Harmful Organisms That Have Limited Existence In Turkey, That Are Subject To Quarantine

Annex -3 Plants, Plant Products And Growing Medium, Introduction Of Which Are Banned Excluding Plants With Soil And Growing Medium Turf Specified In The —Special Requirements|| Section In Annex-4;

Annex -4 Special Requirements For Importation Of Plants And Plant Products

Mission Of Turkish Plant Health Regime

Plant health is considered as a;

- Basic component of national food security
- Major component of a sustainable agriculture
- Key component of competitive agricultural trade
- Vital component of environmental protection

Main Objectives Of Turkish Phytosanitary Measure Regime

- Prevention to entry of any harmful organism into country by any type of international trade and product
- Prevention of establishment of entered pest
- Prevention of spread of harmful organisms inside the country
- Prevention of any other countries from harmful organisms by controlling of all plant & plant products subjected to export

Main Objectives Of Turkish Plant Health Regime

- Implementation of National Plant Health Program
- Plant quarantine and plant passport activities
- Control and registration of plant protection products and equipment's.
- Phytosanitary controls regarding export and import
- Actions taken for minimizing of site affect of plant protection activities to the environment and human health
- Publication of many training documents to the growers and extension stuff about plant health and quarantine.

Plant Health Implementation Programme

- Main programme on pest and disease control
- It is revised annually after national programme meetings

Pest management is carried out according to the **Technical Instructions for Plant Protection (373 pest) and principles of Integrated Pest Management (IPM)** in Turkey

Special IPM technical directives for total 22 main products, including **wheat, maize, cotton, potato, chickpea, lentil, vegetables** subject to protected cultivation, **apple, citrus fruits, peach, cherry, sour cherry, apricot, olive, hazelnut, pistachio, vineyard, pomegranate, pear, quince** and rice.



Surveillance of Pest and Data Collection

General Surveillance

A Pest Reporting System is in force in Turkey

- Fulfillment of international requirements
- To follow up quarantine organisms inside the country
- First records of the pests (Pest Risk Analysis)
- Defining the control measures according to the PRA
- Prevents outbreaks and provides early control

Source of Pest Information



Specific Surveys

- Annually determined survey programs
- Trainings are provided by research institutes
- Survey Instructions Manual (38 quarantine pest)
- Surveys on 16 known and 14 unknown pests (2019)



Maturitas Evoluzione			
Descrizione programma	Esclusi	Non esclusi	Esclusi esclusi
1.1			
1.2			
1.3			
1.4			
1.5			
1.6			
1.7			
1.8			
1.9			
1.10			
1.11			
1.12			
1.13			
1.14			
1.15			
1.16			
1.17			
1.18			
1.19			
1.20			
1.21			
1.22			
1.23			
1.24			
1.25			
1.26			
1.27			
1.28			
1.29			
1.30			
1.31			
1.32			
1.33			
1.34			
1.35			
1.36			
1.37			
1.38			
1.39			
1.40			
1.41			
1.42			
1.43			
1.44			
1.45			
1.46			
1.47			
1.48			
1.49			
1.50			
1.51			
1.52			
1.53			
1.54			
1.55			
1.56			
1.57			
1.58			
1.59			
1.60			
1.61			
1.62			
1.63			
1.64			
1.65			
1.66			
1.67			
1.68			
1.69			
1.70			
1.71			
1.72			
1.73			
1.74			
1.75			
1.76			
1.77			
1.78			
1.79			
1.80			
1.81			
1.82			
1.83			
1.84			
1.85			
1.86			
1.87			
1.88			
1.89			
1.90			
1.91			
1.92			
1.93			
1.94			
1.95			
1.96			
1.97			
1.98			
1.99			
1.100			
1.101			
1.102			
1.103			
1.104			
1.105			
1.106			
1.107			
1.108			
1.109			
1.110			
1.111			
1.112			
1.113			
1.114			
1.115			
1.116			
1.117			
1.118			
1.119			
1.120			
1.121			
1.122			
1.123			
1.124			
1.125			

Pests Covered in Annual Survey Programme **present limited in Turkey**

	Plants	Pests	Survey area
1	Potato	<i>C. Michiganensis subps. Sepedonicus</i>	Selected provinces
2		<i>Globodera rostochiensis, G. Pallida</i>	Selected provinces
3		<i>Meloidogyne chitwoodi</i>	Selected provinces
4		<i>Phthorimaea operculella</i>	Selected provinces
5		<i>Ralstonia solanacearum</i>	Selected provinces
6		<i>Synchytrium endobioticum</i>	Selected provinces
7	Onion	<i>Sclerotium cepivorum</i>	Selected provinces
8	Rice	<i>Aphelenchoides besseyi</i>	Selected provinces
9	Watermelon	<i>Acidovorax avenae subsp. Citrulli</i>	Selected provinces
10	Tomato	<i>Lasioptera sp.</i>	Selected provinces
11		<i>Tomato Spotted Wild Virus (TSWV)</i>	Selected provinces
12	Polifag	<i>Anoplophora chinensis</i>	All provinces
13	Maize	<i>Diabrotica virgifera</i>	Selected provinces
14	Chestnut	<i>Dryocosmus kuriphilus</i>	All provinces
15	Stone Fruits	<i>Plum Pox Potyvirus (PPV)</i>	Selected provinces
16	Carrot	<i>Candidatus Liberibacter solanacearum</i>	Selected provinces

Pests Covered in Annual Survey Programme **Not Present in Turkey**

	Plants	Pests	Survey area
1	Wineyards	<i>Candidatus phytoplasma vitis (Bois Noir)</i>	All provinces
2		<i>Candidatus phytoplasma vitis (Flavescence Doree Phytoplasma)</i>	
3	Citrus	<i>Citrus Greening Bacterium</i>	Citrus growing places
4		<i>Citrus Yellow Vein Clearing Virus</i>	
5	Olive-Wineyards	<i>Xylella fastidiosa</i>	All provinces
6	Kiwi	<i>Pseudomonas syringae actinidae</i>	All provinces
7	Potato	<i>Epitrix similaris</i>	All provinces
8	Ornamental pl. and Forest pl.	<i>Phytophthora ramorum</i>	All provinces
9	Pomegranate	<i>Xanthomonas axonopodis punicae</i>	All provinces
10	Fruit trees	<i>Monilia fructicola</i>	All provinces
11	Walnut	<i>Erschoviella musculana</i>	All provinces
12	Cucumber	<i>Dacus ciliatus</i>	All provinces
13	Pine	<i>Bursaphelenchus xylophilus</i>	Selected provinces
14		<i>Giberella circinata</i>	

Pest Reporting System

Pest Reprt Form of Turkey

Karantinaya Tabi Olmayan Zararlı Organizma Bildirim Formu (2)

Kapsam: Bu form ülke içerisinde bitki ve bitkisel ürünlerde tespit edilen karantinaya tabi olmayan ve ülkemizde ilk defa tespit edilen zararlı organizmaların Gıda, Tarım ve Hayvancılık Bakanlığına bildirilmesinde kullanılmak üzere hazırlanmıştır. Bildirim e-mail olarak bitkisagligi@tarim.gov.tr adresine iletilmeli ve yazılı olarak da Gıda ve Kontrol Genel Müdürlüğü'ne resmi olarak yapılmalıdır.

I. Bildirimde Bulunan Kişiye Ait Bilgiler	
Adı Soyadı	
Görev Yaptığı Yer	
Görevi-Uzmanlık alanı	
İletişim Bilgileri	

II. Bildirime Ait Genel Bilgiler	
Bildirim Tarihi	
Organizmanın Bilimsel Adı	
Bildirim Nedeni	<input type="checkbox"/> Organizmanın ülkede ilk kez tespit edilmesi <input type="checkbox"/> Ülkede mevcut olan organizmanın herhangi bir yerde varlığının belirlenmesi <input type="checkbox"/> Ülkede mevcut olan organizmanın konukçu bitkide ilk kez tespit edilmesi

III. Bildirimin Lokasyonu ve Tarihlerine Ait Bilgiler				
Sıra No	Tespit Edildiği İl-İlçe-Köy	Tespit Edilme Tarihleri (Gün/Ay/Yıl)	Ada/Parsel No (Mümkünse)	GPS Koordinatları (Mümkünse)
1				

*Bu tablodaki satırlar artırılabilir

IV. Bildirimi Yapılan Zararlı Organizma ve Konukçuya Ait Bilgiler				
Organizmanın Biyolojik Dönemi				
Organizmanın Tespit Edildiği Konukçu Bitki/Bitkiler ve Fenolojisi	1-	2-	3-	4-
Teshis Metodu				
Konukçu Bitki/Bitkilerdeki Belirtileri ve Zararın Şiddeti				
Organizmanın Olası Bulaşma Yolları ve Kaynağı				
Organizmanın Diğer Konukçuları (Bilimsel Adları)	1-	2-	3-	4-
Organizmanın Diğer Konukçu Bitkideki Belirtileri ve Zararın Şiddeti				

*Bu tablo, tespit edilen her yer için çoğaltılarak doldurulabilir

V. Mücadele Önerileri

V. Elektronik Fotograf ve İlave Bilgiler
(Organizmaya, belirtilere ve oluşan zarara ilişkin yeterli sayıda fotoğraf ile organizma hakkında belirtmekte yarar görülen ilave bilgi ve değerlendirmeler)

- General Directorate of Food and Control (Forms send by official letter or e-mail), bitkisagligi@tarim.gov.tr
- Scientific and field confirmation
- Risk analysis in order to determine emergency action plans and control measures
- Increased collaboration with research institutes, universities and Ministry

PESTICIDE CONTROL PROGRAM

Pre-Harvest Pesticide Control Program

- Samples are taken from field, greenhouse and orchard before harvesting of products due to check the residue level of pesticide.
- Samples which found as high MRL are not allowed for harvest or destructed immediately.
- Our goal is to decrease pesticide residue as much as possible and not let the contaminate product to rich market

Post-harvest pesticide Control:

- All risky products are objected to national residue control program while they are in market.

Opportunities And Challenges In Phytosanitary Measures

Opportunities;

- ✓ Turkey has the system and organisational capacity to act rapidly in emerging problems on plant health
- ✓ For future vision on plant health, Turkey focuses on biologic-biotechnical control, early warning systems and promotion of IPM
- ✓ International plant health organisations (IPPC, EPPO and IOBC) are main source of information.

Challenges;

- Climatic changes allows to spread, settle and rises of harmful organisms,
- Policy makers, farmers and NGO's should be aware and ready to rising risks on food security.
- Due to the significant increase in trade among countries around the world as well as people travelling to a wide range of touristic destinations, turns out to be a challenge for maintaining the phytosanitary status.

TURKEY

Our priorities are better reciprocal relationship and cooperation between the West and the East; as well as improvement of the dialogue and alliance among civilizations.

Thank You For Your Attention

Turkish experience proves that integration with the world is possible by harmonizing the existing values and traditions with the modern world.

Turkey



Murat ŞAHİN
Head of Plant Health and Quarantine
Murat.sahin@tarimorman.gov.tr

