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# IPPC Global Workshop on Systems Approaches

Santiago, Chile  
1 – 4 December 2025

In partnership with:



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

## Control of Citrus Black Spot (CBS) in Tunisia

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**DGSVCIA**

**Ministry of Agriculture, Water Resources and Fisheries - Tunisia**



## Citrus Production in Tunisia

### Area

- About 28 000 Ha (5% of fruit trees area).
- 75% of the citrus orchards are in the Northeastern Tunisia (Cap Bon Region).

### Farmers

- 12 000 farmers (most of them are small farmers)

### Packing stations

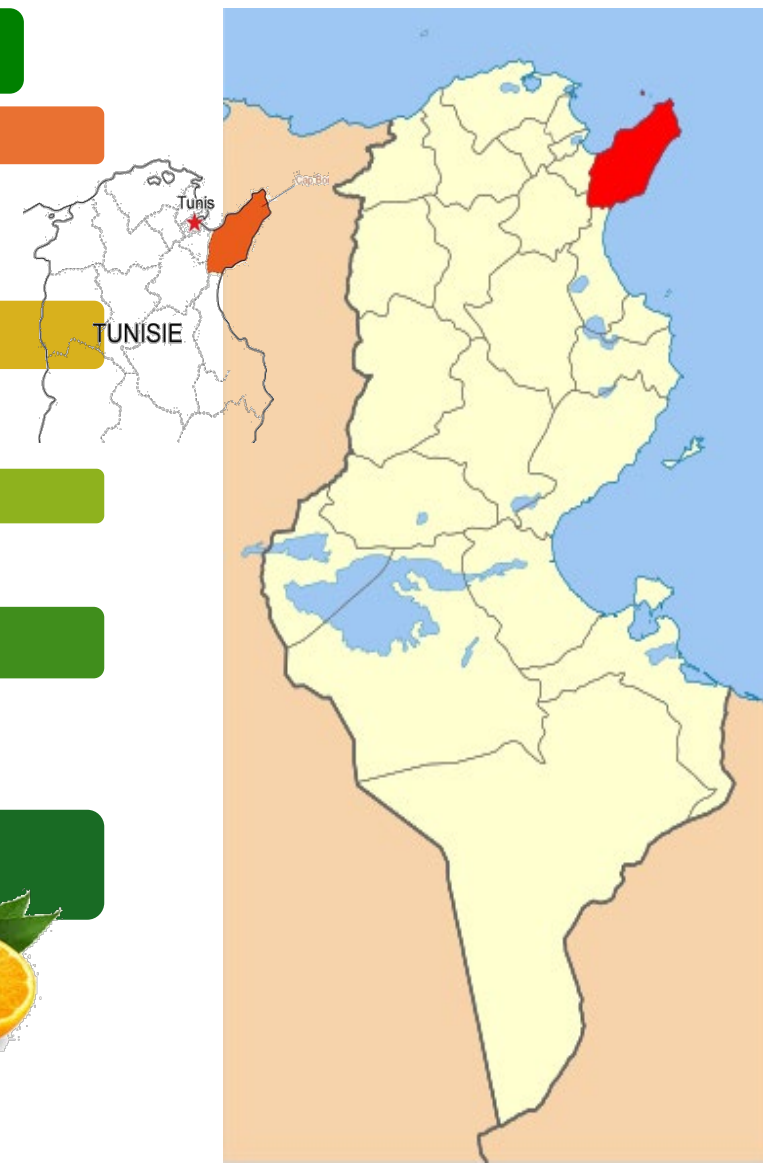
- 11 certified Packing stations

### Local market

- Supplying the local market for almost 8 months

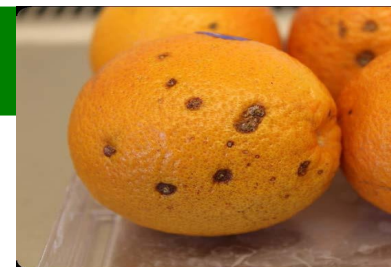
### Export

- 12 export destinations, with most of the quantities exported to the French market (Maltaise variety).





## Citrus Black Spot



- Causal agent: *Phyllosticta citricarpa* (fungus)
- Quarantine organism according to the Tunisian legislation:  
“Order of the Minister of Agriculture of May 31, 2012, establishing the list of quarantine organizations”
- EU: Listed among the **20** priority quarantine organisms:  
“COMMISSION DELEGATED REGULATION (EU) 2019/1702 of 1 August 2019 supplementing Regulation (EU) 2016/2031 of the European Parliament and of the Council by establishing the list of priority quarantine organisms”





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## Exports to the EU - 2019

- Interception of contaminated Tunisian Citrus shipments by CBS in **March 2019** by the French Phytosanitary Control Services

**Tunisia is no longer a CBS Free country**

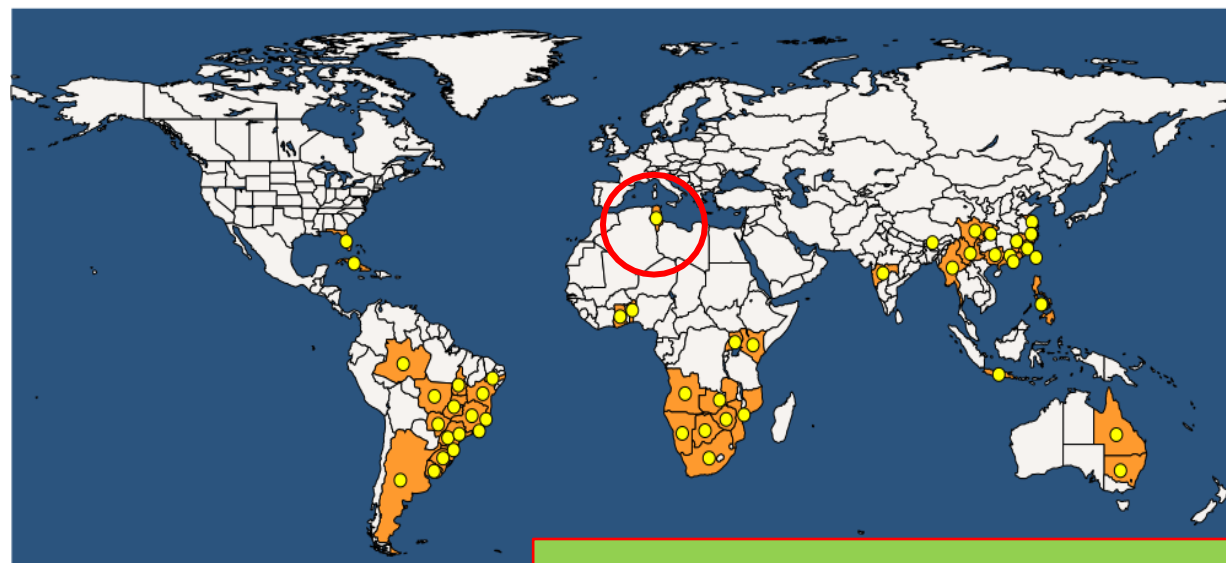


The situation of *Phyllosticta citricarpa* in Tunisia can be described as follows: Present, only in some areas (first found in 2019 in the Governorate of Nabeul), under official control.

### Sources

NPPO of Tunisia (2019-07).

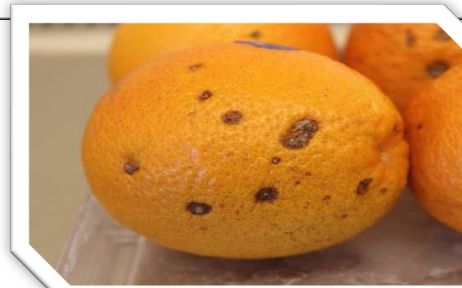
**Declaration in July 2019**



**First detection in the Mediterranean basin**

● Present ● Transient

2025-11-22  
(c) EPPO <https://gd.eppo.int>





## Measures Taken

- Meeting with the Directorate-General for Health & Food Safety (DG SANTE) - EU to diffuse the information:
  - Traceability of intercepted shipments has been identified
  - Self-suspension of citrus fruit exports (no PC issued until 2020)
  - Creation of a multidisciplinary committee to:
    1. Program short-term emergency measures,
    2. Establish a medium-term national strategy to control CBS, and monitor the implementation.



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## 1. Emergency measures

Phytosanitary  
surveys:  
demarcation  
&  
recognition of  
PFA/places/  
sites

Purchase of  
equipements  
for the  
quarantine  
laboratory for  
molecular  
detection

Chemical  
control (50%  
subsidy on  
fungicide  
treatment for  
small farmers).

Rising  
awareness :  
information  
days.



## 2. National Strategy (Contingency Plan)

1

- Legislation

2

- Phytosanitary surveys

3

- Laboratory testing – reliable detection

4

- Control (chemical treatment...)

5

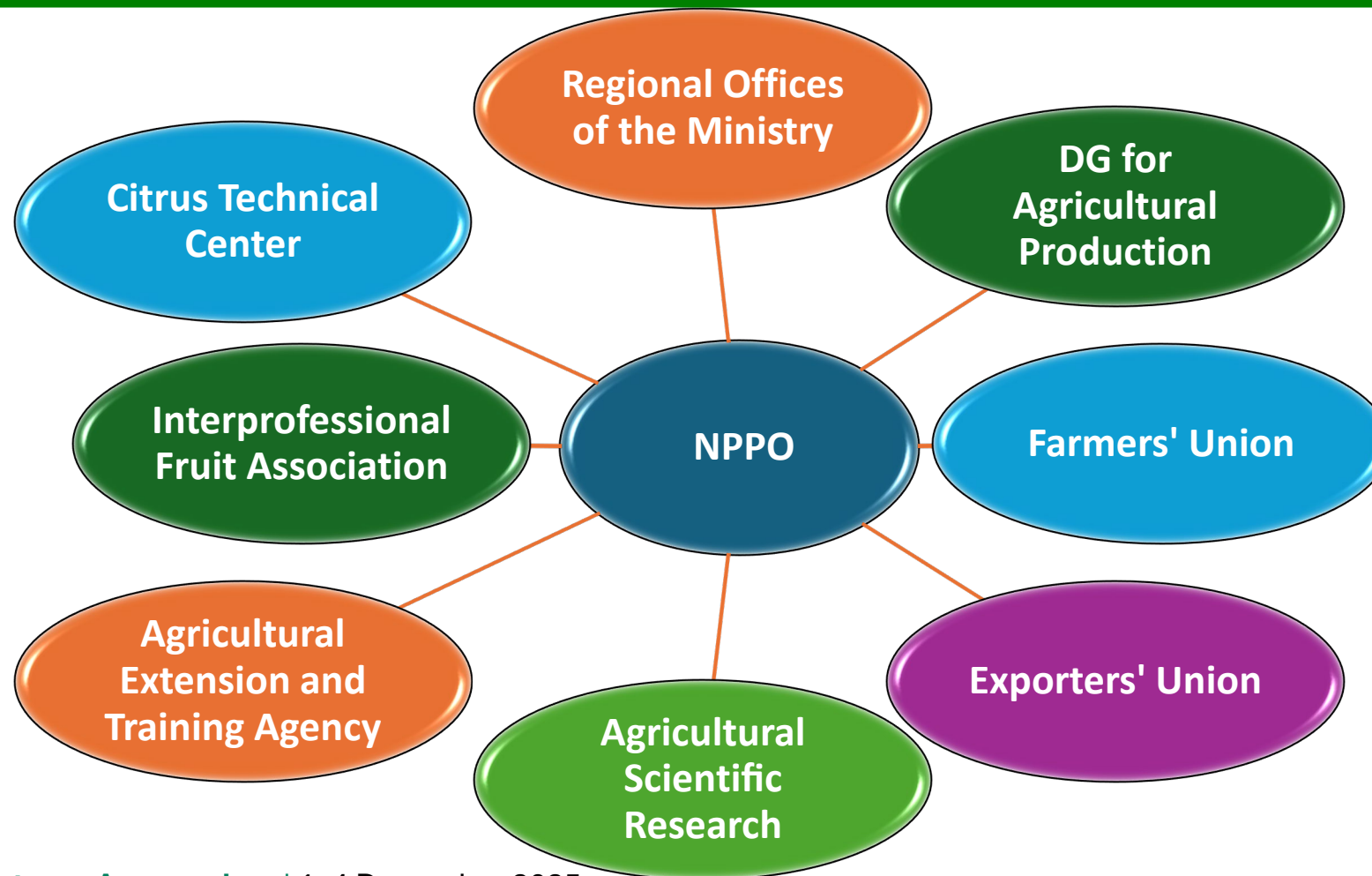
- Scientific research

6

- Extension and Training



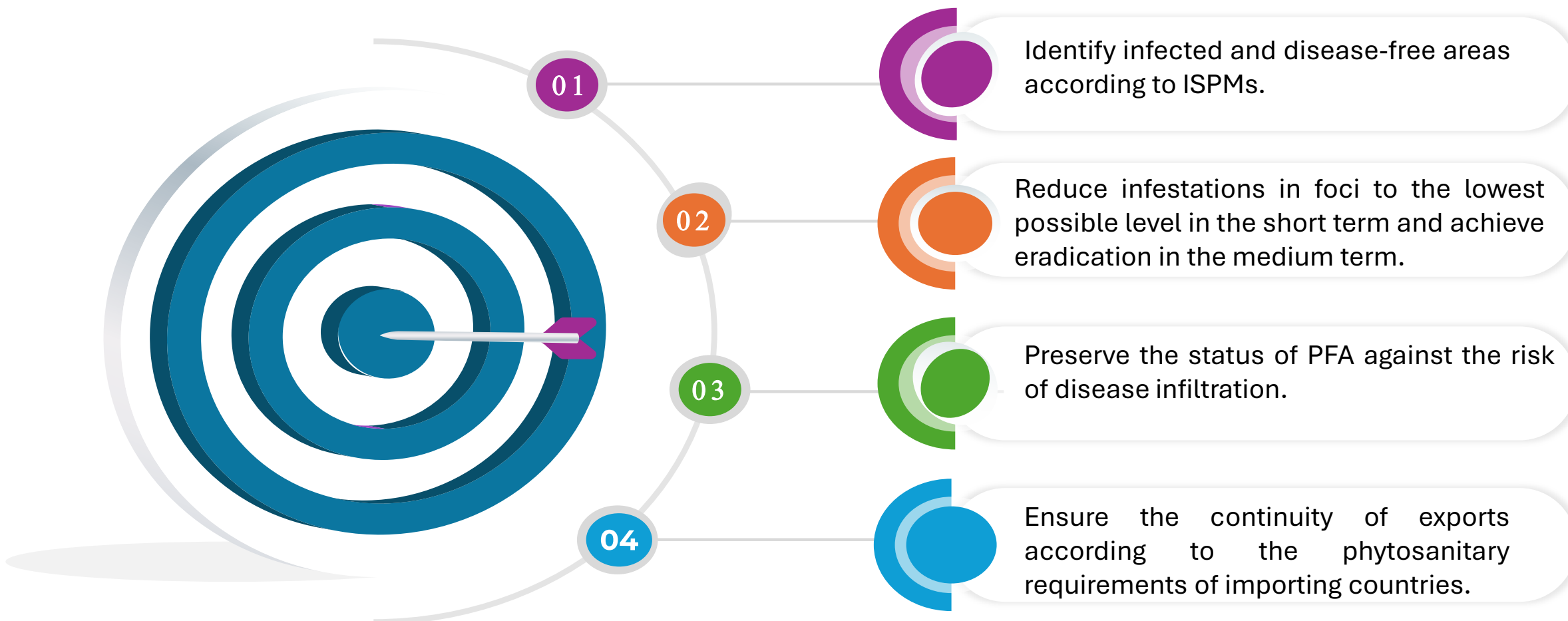
## Stakeholders







## Goals of the CP





## Measures taken for exports to the EU

Regulation (EU) 2019/2072

### 60.a

the fruits originate in a country recognised as free from *Phyllosticta citricarpa*



### 60.b

the fruits originate in an area established by the NPPO in the country of origin as being free from *Phyllosticta citricarpa*



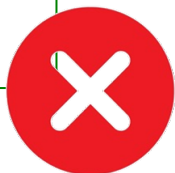
### 60.c

the fruits originate in a place of production established by the NPPO in the country of origin as being free from *Phyllosticta citricarpa* and the fruits are found free of symptoms of *Phyllosticta citricarpa*



### 60.e

in the case of fruits destined for industrial processing



### 60.d

the fruits originate in a site of production subjected to appropriate treatments and cultural measures against *Phyllosticta citricarpa* and official inspections have been carried out in the site of production during the growing season since the beginning of the last cycle of vegetation, and no symptoms of *Phyllosticta citricarpa* have been detected in the fruits, and the harvested fruits from that site of production are found free of symptoms of *Phyllosticta citricarpa* during an official inspection prior to export, of a representative sample, defined in accordance with international standards and information on traceability is included in the phytosanitary certificate,





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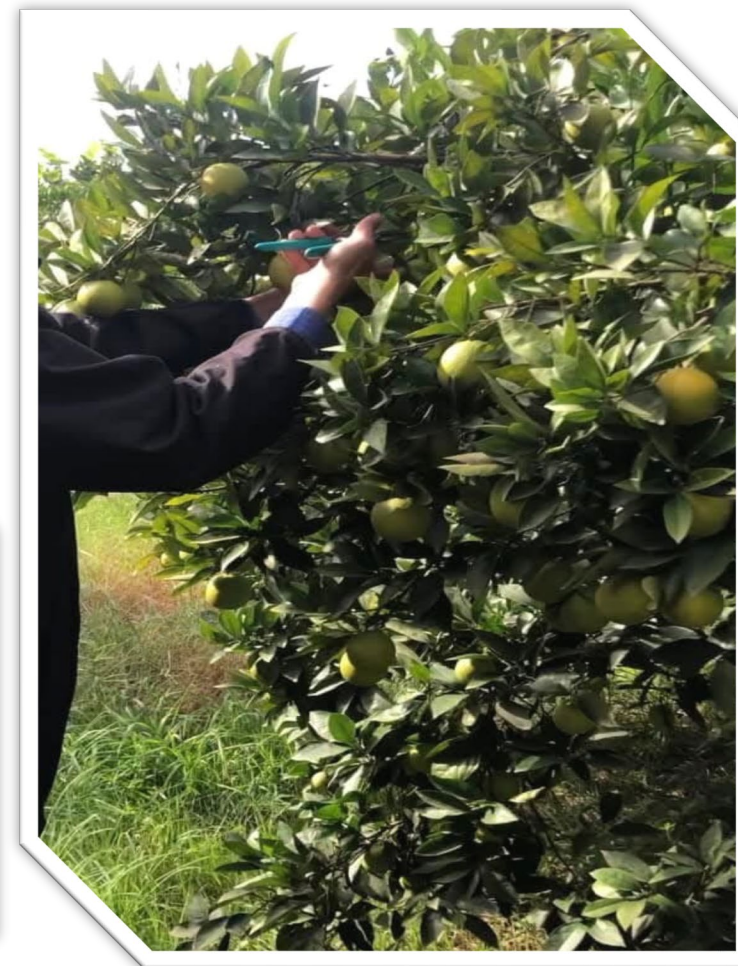
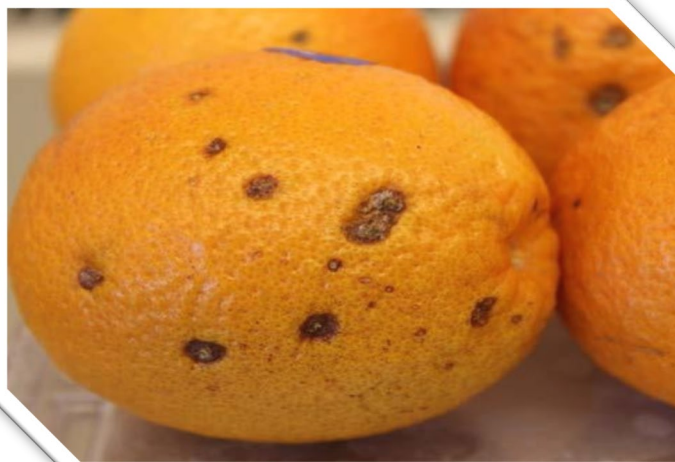
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## Legislation

- Issue an order for the obligatory control,
- Establishment of a technical committee,
- Insert a requirement for CBS freedom in the certification schemes concerning production of plant material.





## Surveys

- Development of a detailed survey guide based on ISPMs (symptoms, sampling, GPS coordinates, etc.),
- Establishment and Training of 12 survey teams
- Coverage of all production areas,
- Samples for analysis,
- Each production site is identified by a unique code.
- Monitoring yearly



hydrauliques et de la pêche  
DGSV/CIA



mis, le

Version

### Protocole de surveillance des vergers d'agrumes pour la détection du Citrus Black Spot (CBS)

#### 1. Objectif

Ce document a été élaboré pour fournir au personnel des équipes de prospections phytosanitaires de la maladie des taches noires des agrumes (CBS) les informations nécessaires pour la réalisation des inspections et afin d'avoir une méthodologie de travail unie. Ces prospections visent à détecter les foyers d'infection de l'organisme nuisible, de déterminer son étendue géographique, de contrôler sa présence dans les zones et sites de production et désigner les zones ou sites de production indemnes.



#### Fiche de prospection pour le Citrus Black Spot (CBS)

##### Informations générales

Équipe:	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input type="checkbox"/>	E <input type="checkbox"/>	F <input type="checkbox"/>	G <input type="checkbox"/>
	H <input type="checkbox"/>	I <input type="checkbox"/>	J <input type="checkbox"/>	K <input type="checkbox"/>	M <input type="checkbox"/>	N <input type="checkbox"/>	O <input type="checkbox"/>
Lieu/parcelle:							
Date:	Région:		Localité:		Observateur:		
Agriculteur au courant du CBS				Code parcelle: (Équipe/Verge):			





## Surveys

- The production site must fulfill with export requirements to obtain a phytosanitary certificate (orchard/site certificate):
  - Negative test results,
  - Applying chemical treatments,
  - Implementing cultural techniques to control the disease.

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Certificat de la situation phytosanitaire d'un site de production d'agrumes pour Citrus Black Spot (CBS)			
Informations générales			
Date:	Région:	Localité:	
Agriculteur :		Code parcelle:	Date de Prospection :
Information verger			
Essence: <input type="checkbox"/> Oranger <input type="checkbox"/> Clémentinier <input type="checkbox"/> Mandariner <input type="checkbox"/> Citronnier			

**These measures are applied to all destinations to encourage farmers to join the control program**





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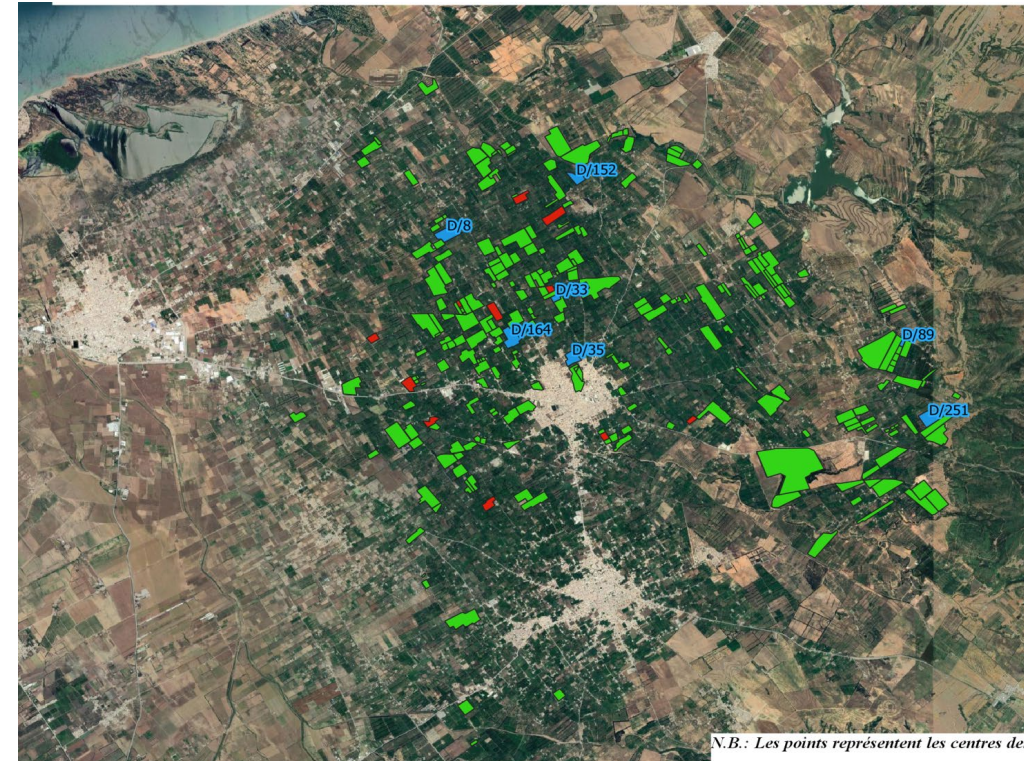
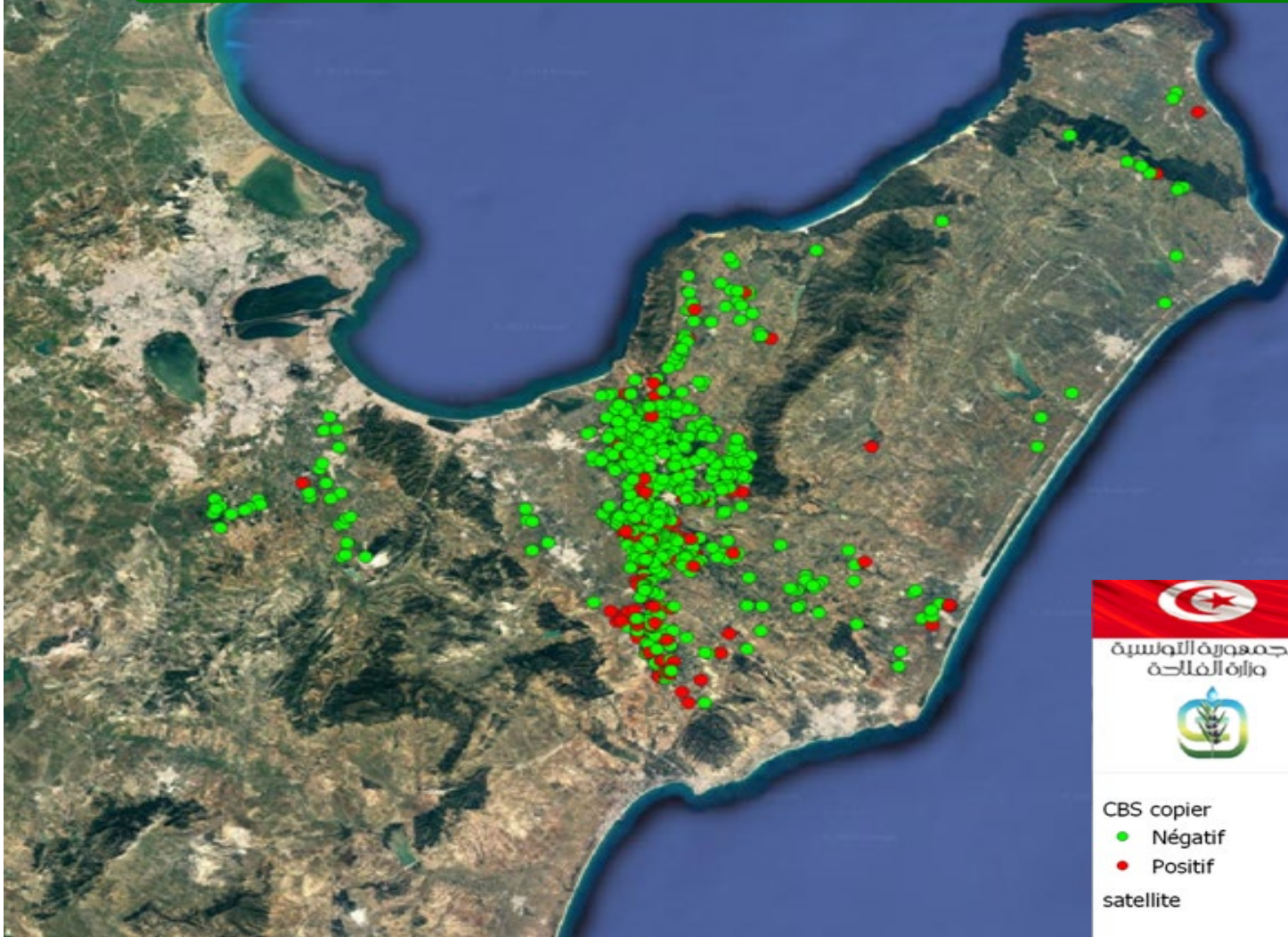


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## Distribution





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## Laboratory analysis

Visit of an expert (Head of the European Union reference laboratory) to the Quarantine Laboratory (November 2019, TAIEX capacity building program).

- Technical advice on the identification of *P. citricarpa*,
- Implementation of real-time PCR protocol to ensure reliable diagnosis.





## Pre-export inspection

- Development of a detailed phytosanitary control guide for citrus shipments intended for export (symptoms, sampling, procedures, etc.).
- Support and training for phytosanitary inspectors.
- Discussion with exporters & packing houses managers about the prior measures to export with conformity with the new EU requirements
- Training for technicians at packing stations.







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## Pre-export inspection



Rigorous control of  
all shipments

No symptoms

Presence of  
suspicious spots

Export  
Authorized  
Phytosanitary  
Certificate with  
DS

Export cancelled +  
Samples taken for  
analysis

In case of a positive result:  
Orchard Certificate with drawn





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## Production site

Plant health  
monitoring and  
sampling

Negative test  
results

Treatments and  
cultivation techniques

Phytosanitary  
Certificate Production  
Site

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Certificat de la situation phytosanitaire d'un site de production d'agrumes pour Citrus Black Spot (CBS)		
Informations générales		
Date:	Région:	Localité:
Agriculteur :	Code parcelle:	Date de Prescription :

## Packing station

Pre-export  
phytosanitary  
control

Additional statement

Issue of a P.C.

Traceability  
documents (C.P. Site)







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## Awareness

- Presentations – Roll-up banners – Flyers... during agricultural fairs
- Field days for training phytosanitary inspectors in order to recognize CBS symptoms
- Information days campaign for farmers, technicians, and packing stations on disease identification (symptoms, etc.) and prevention and control methods





## Conclusion



- Infected sites are identified.
- Mandatory Control - Appropriate Chemical treatment.
- Certificate for free sites of production.
- More reliable laboratory testing (molecular tools) in conformity with the ISPM.
- Strict inspection prior to export

### **The measures taken have achieved satisfactory results**

- **Only one interception of a CBS-contaminated shipment has been recorded between 2020 and 2025.**
- **The distribution of CBC decreased significantly between 2020 and 2025.**
- Audit to assess the official Tunisian export control system for plants and plant products to the European Union, from November 16 to 27, 2020. The information provided is satisfactory. Audit closed.





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Thank you

