



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention



Department
for Environment
Food & Rural Affairs

Transboundary Plant Pest Management for Food Security in Near East

London, 21 – 23 September 2022

International Plant Health Conference



Highlights

**Transboundary pests threaten NENA
(Life examples)**

Economic Impact & Status

Control measures

General Recommendations

Transboundary pests threaten NENA

Transboundary plant pests and diseases (TPPDs) are migratory pests that pose a significant threat to food security, trade, and livelihoods of people in the affected countries, and generate huge losses of crops and pastures.

Important TPPDs are threatening NENA: Fall armyworm, Locusts, Fruit flies, Citrus black spot, Xylella.

Preventive measures, early action, and long-term solutions are essential for protecting crops and pastures from TPPDs.

➤ **Some examples will be presented:**

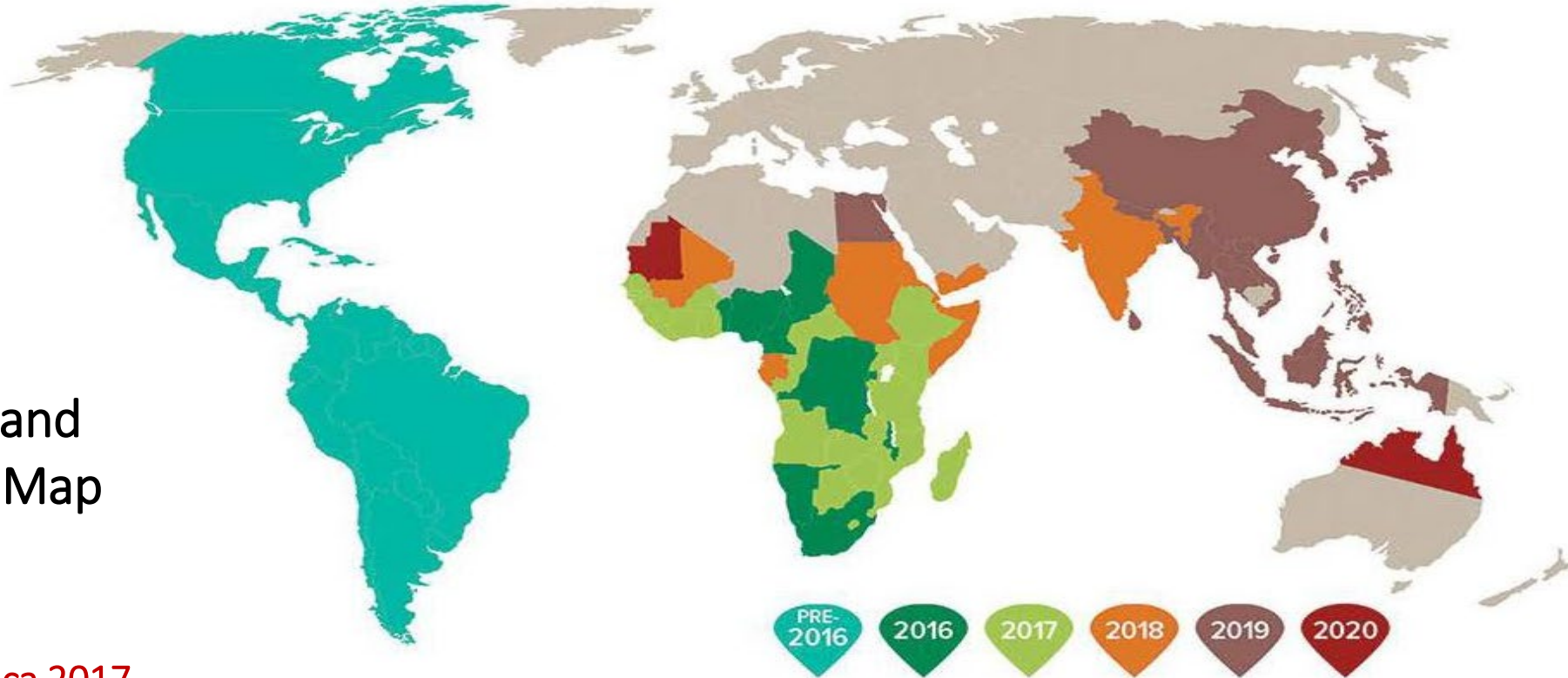




Fall armyworm

Pest status and Distribution Map

Presented in Africa 2017,
In Egypt 2019 (May)



SOURCE: ADAPTED FROM FAO

Fall armyworm

The Fall Armyworm (FAW) is a dangerous insect that causes significant economic losses to maize production in Africa.

Invaded Africa since 2017, travelled North to reach upper Egypt in 2019.

This represented a serious threat to food security, especially as it attacks many basic crops such as corn, sorghum, rice and wheat.



Phytosanitary Measures and Procedures Taken to Manage the Risk of Fall Armyworm in Egypt

In Egypt, program focused:

Communication: Technology utilization: Mobile App to provide information on the FAW (behavior, damage and the symptoms of its infection).

Coordination: national capacities in Egypt to use, monitor and manage the early warning system.

Awareness: Training for smallholder producers in upper Egypt to combat FAW and mitigate the damage.

Control: Integrated Pest Management (massive release of parasitoids)

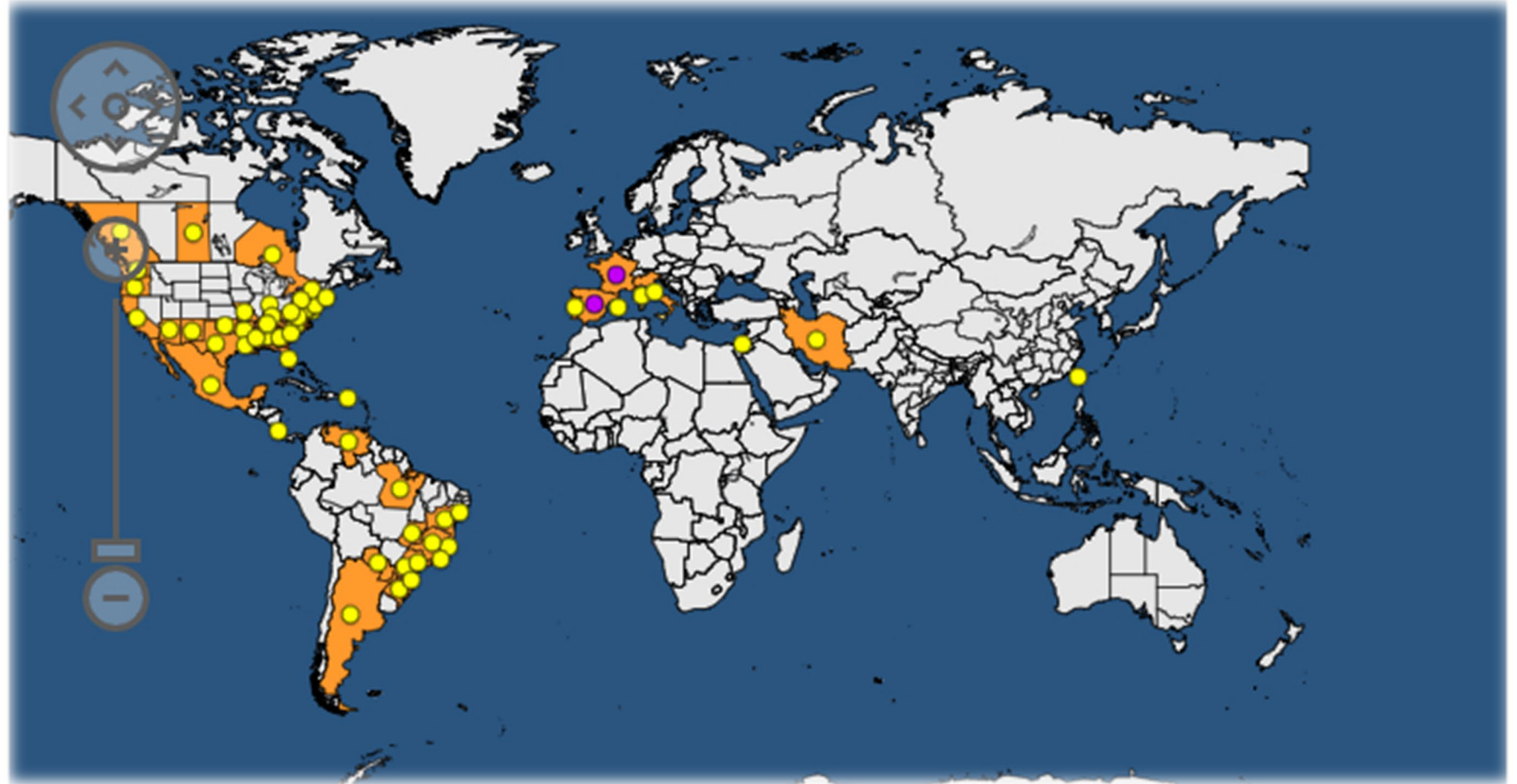
It was successful for minimizing its entry and spread (Presented in Country's case study in FAO Pub.).



Controlling measures

Xylella fastidiosa

Pest status
and
Distribution Map



Xylella fastidiosa

Completely devastating olive trees and other host plants, including 561 plant species which belong to 264 genera in 82 botanical families

Estimates that *X. fastidiosa* full spread could ultimately cost the EU over €5.5 billion Euros per year due to loss of production, with potential export losses of €700 million Euros per year

Rapid PRA for the potential risk that the pest can cause in the region was a reference for supporting following actions

Surveillance included nurseries and the main cultivated area with olives, grapevine and citrus

No officially confirmed reports in NENA region till now, except a few non-confirms from Iran, Lebanon and Palestine

Draft Rapid Pest Risk Analysis (PRA) for:

Xylella fastidiosa Wells et al;1987



Xylella fastidiosa

Controlling measures

strengthen prevention measures by increasing the awareness within phytosanitary specialists and inspectors for the risks of *X. fastidiosa* diseases, and the methods for diagnosis

implementing surveillance programs and having a contingency plan ready to apply

General surveillance for the bacteria and the xylem feeding insects, with scan survey for nurseries and the area cultivated with the main host plants

A case study from Tunisia will be included in the Guide on Contingency Plan for Outbreaks of Quarantine Pests to be published in due course by FAO

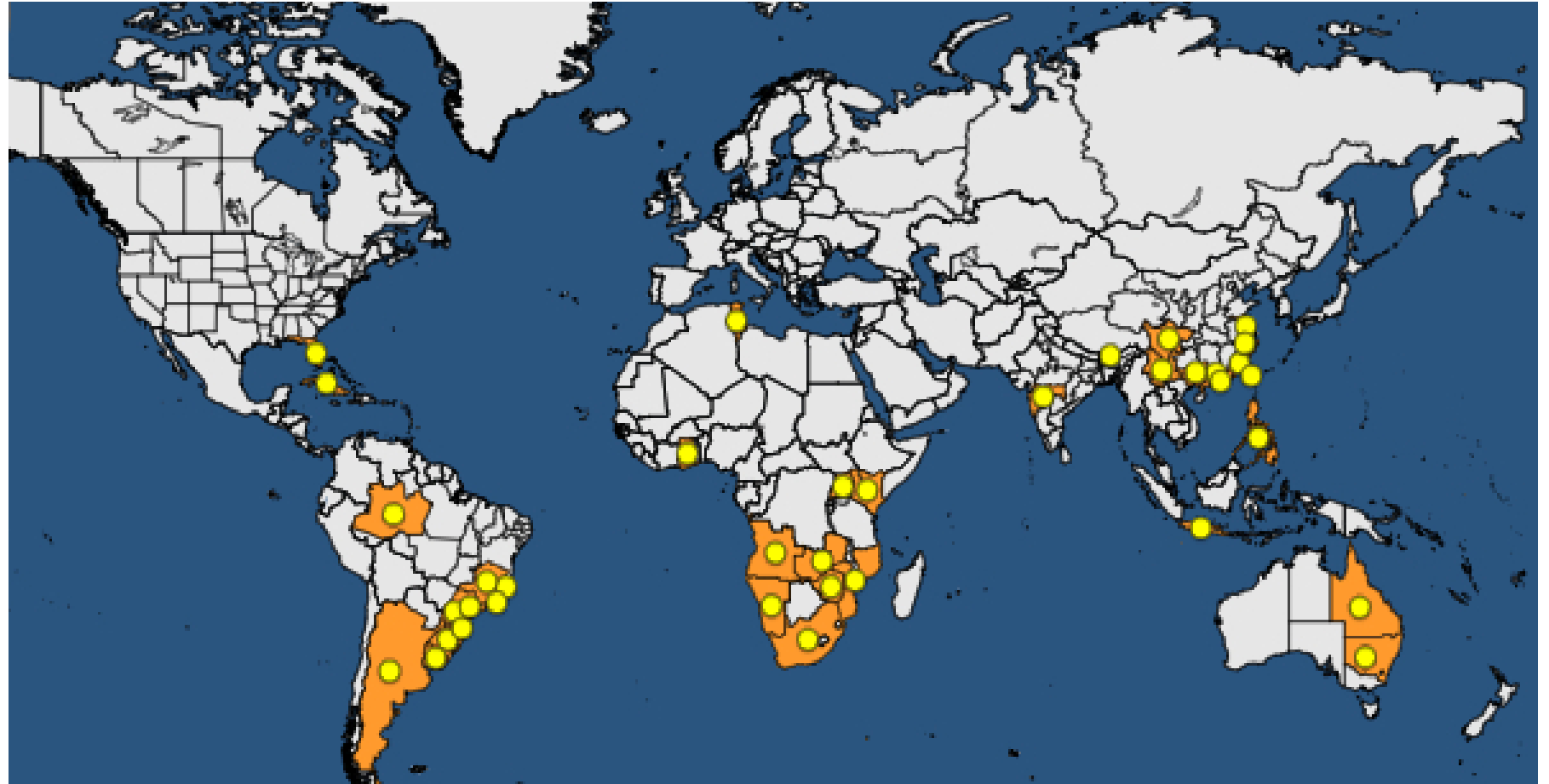
Citrus Black Spot (CBS)



Citrus black spot (CBS) caused by the fungus *Phyllosticta citricarpa* occurs in tropical and sub-tropical citrus production regions and affects all varieties of citrus.

Citrus Black Spot (CBS)

Pest status
and
Distribution Map



No reports from NENA except Tunisia

Citrus Black Spot (CBS)






Since eradication and containment are difficult, phytosanitary measures should focus on preventing the introduction of the disease into new areas.

certified *P. citricarpa* free nurseries should be used for the establishment of new orchards.

Desert Locust



Pest status and
Distribution Map
for possible invasions

-  Winter/spring breeding areas and resulting migration
-  Summer breeding areas and resulting migration
-  Recession area

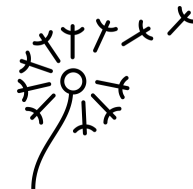
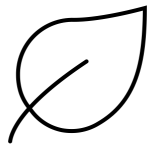
Desert Locust

Economic Impact & Pest Status

Schistocerca Gregaria is considered as the most destructive migratory pest in the world.

A single square kilometer of swarm can contain up to 80 million adults, with the capacity to consume the same amount of food in one day as 35,000 people or 20 Camels.

They can eat Crops, grass, bushes and wild plants.



Controlling measures

Monitoring swarms for early warning and alerts on the timing, scale and location of locust invasions and breeding.

Preventative control relies on established national locust units that are well equipped, have sufficiently trained staff and are funded by the government.

General Recommendations

Raising awareness to policy makers of the importance of plant health to achieve Strategic Development Goals 2, 9, 15 (Zero Hunger, Innovation, Life on Land) policy of the UN 2030 Agenda.

Minimizing the risk of spreading plant pests through trade and travel.

Triggering higher compliance with International Phytosanitary Standards.

Protecting the environment through integrated pest management.

Promoting investment in plant health innovations.

Strengthening monitoring and **early warning systems** to protect plants.





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Thank You

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