



# **Africa Phytosanitary Programme**

**(APP) Phase 2 · Train-the-Trainer workshop  
23–27 June 2025 · Mpumalanga, South Africa**

## **Introduction to plant pest surveillance and monitoring**

**Ms. Julie Mokwele (Pr.Sci.Nat.)  
Directorate: Plant Health  
Early Warning Systems Division  
Department of Agriculture of South Africa  
E-mail: [JulieM@dalrrd.gov.za](mailto:JulieM@dalrrd.gov.za)**

# NPPOZA

## PLANT HEALTH

- Develop phytosanitary policy, norms and standards
- Manage import and export protocols
- Conduct pests risk analysis
- **Manage early warning system for phytosanitary pests**

## INSPECTION SERVICES

- **Render risk management and pest surveillance and monitoring**
- inspection/auditing services at official ports of entry
- Render national plant risk management **inspection/auditing and diagnostic services**

## FOOD IMPORT AND EXPORT STANDARDS

- Render promotion and awareness on:  
**Phytosanitary issues**  
Sanitary and genetic resources
- Issue import permits for both animal and plant products
- Coordinate WTO notifications

# Pest monitoring and surveillance and implementation of APP

## STRATEGIC PLAN

- Exotic fruit fly,
- Citrus greening
- BBTV

## ENFORCEMENT

- NPPOZA carries out active and regular pest monitoring and surveillance
- NPPOZA inspectors carry out inspections of imported goods and phytosanitary certificates
- Issue official orders

## COLLABORATION & RESEARCH

- (surveillance, diagnostic, awareness, pest management strategies and innovation/technology)
- ARC
  - Industry bodies
  - Academic institutions
  - Growers
  - etc

# Legislative and Policy Framework



International Plant Protection Convention (IPPC)



In South Africa, Plant Biosecurity is regulated in terms of the Agricultural Pests Act, Act, 1983 (Act No.36 of 1983) and its associated regulations;



Plant Health Policy of the RSA



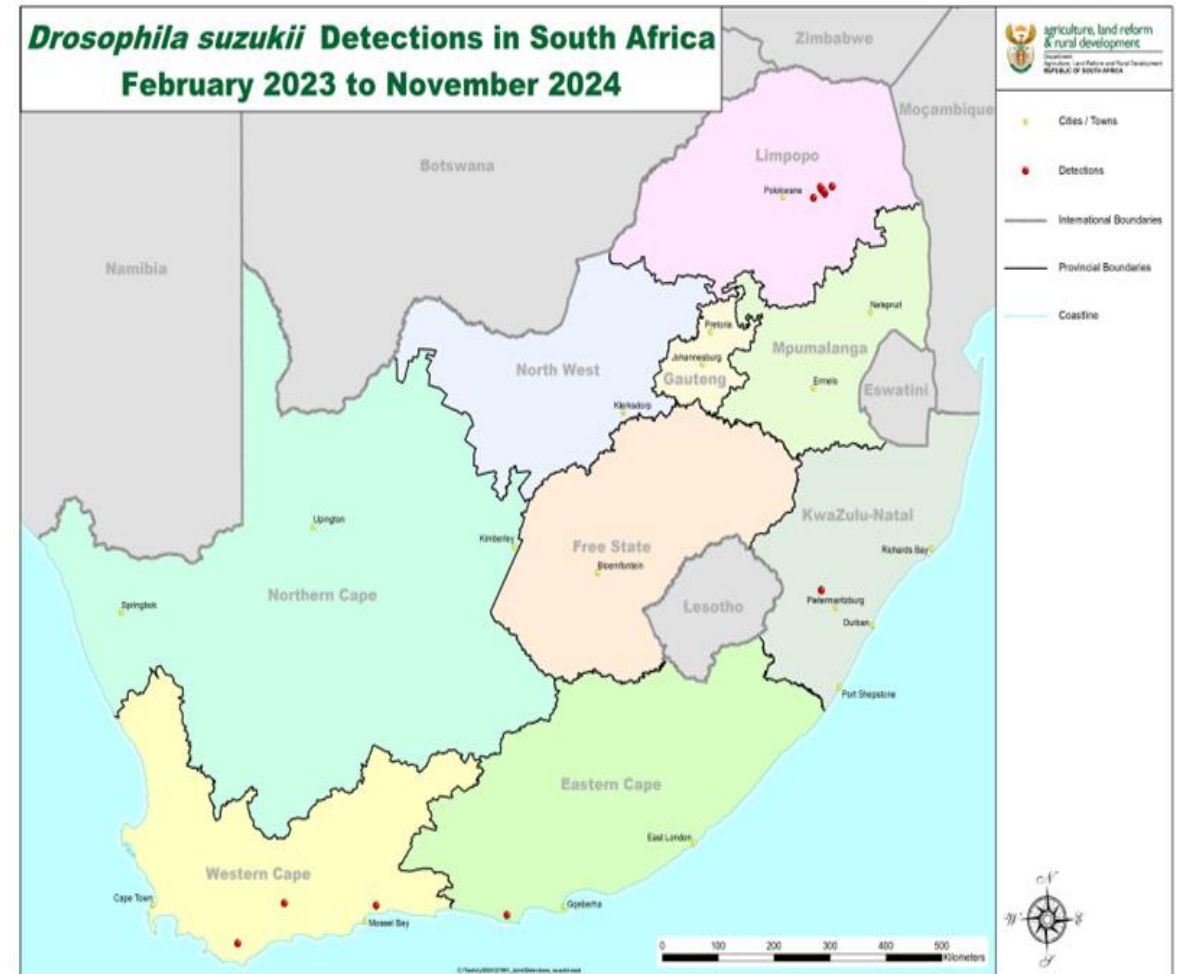
South African Emergency Plant Pest Response Plan



Specific plant pest contingency or action plans and formation of steering committee

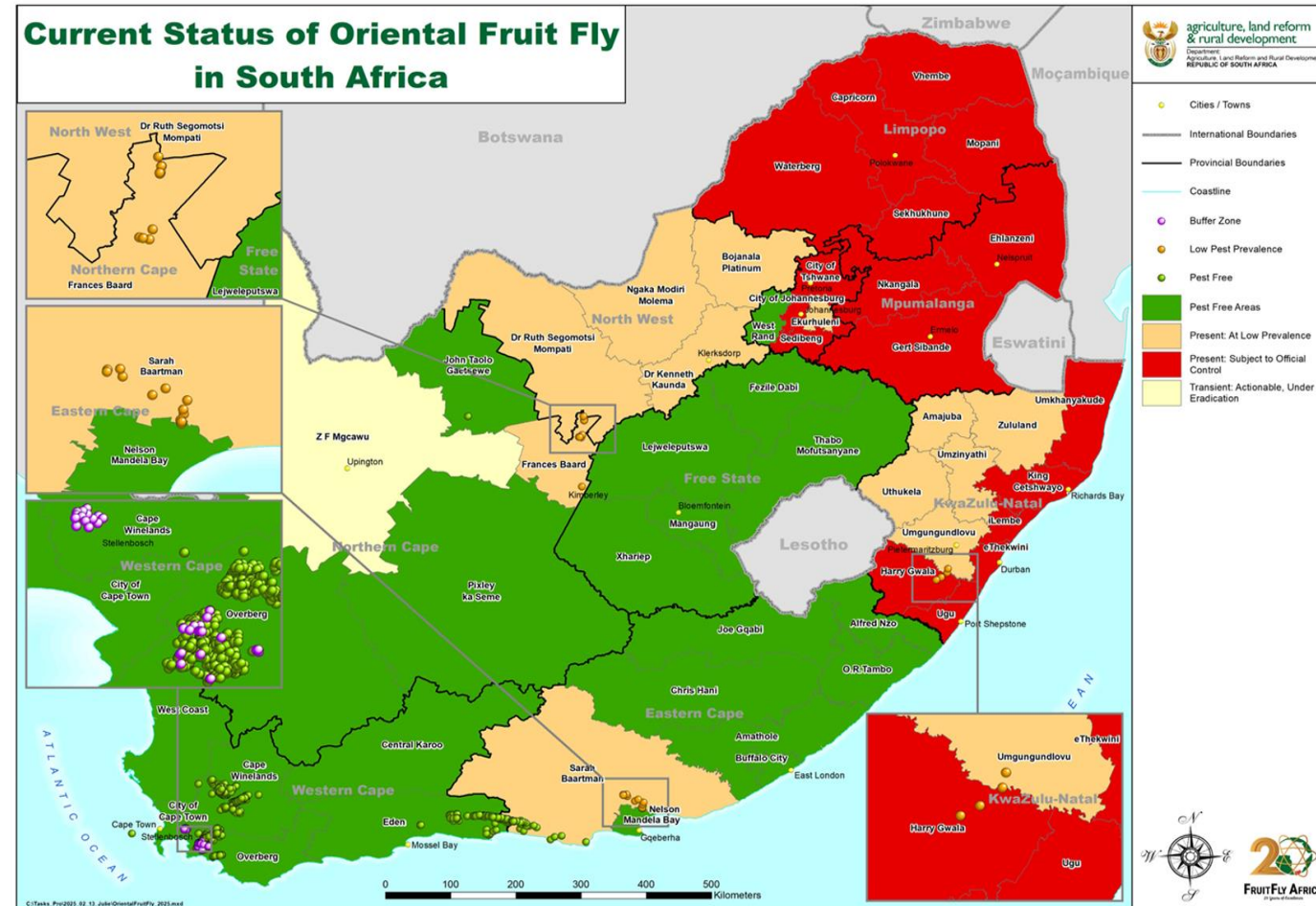
# *Drosophila suzukii* (Spotted wing drosophila)

- Detected only in blueberry farms.
- Detection confirmed **in four (4)** provinces in South Africa (Limpopo, Kwazulu-Natal, Eastern Cape and Western Cape ).
- Surveillance is ongoing & phytosanitary measures are being implemented in the affected farms.
- Detections were reported to IP Portal and trading partners
- **Collaborative work between Department , Industry bodies, ARC, Universities and etc**



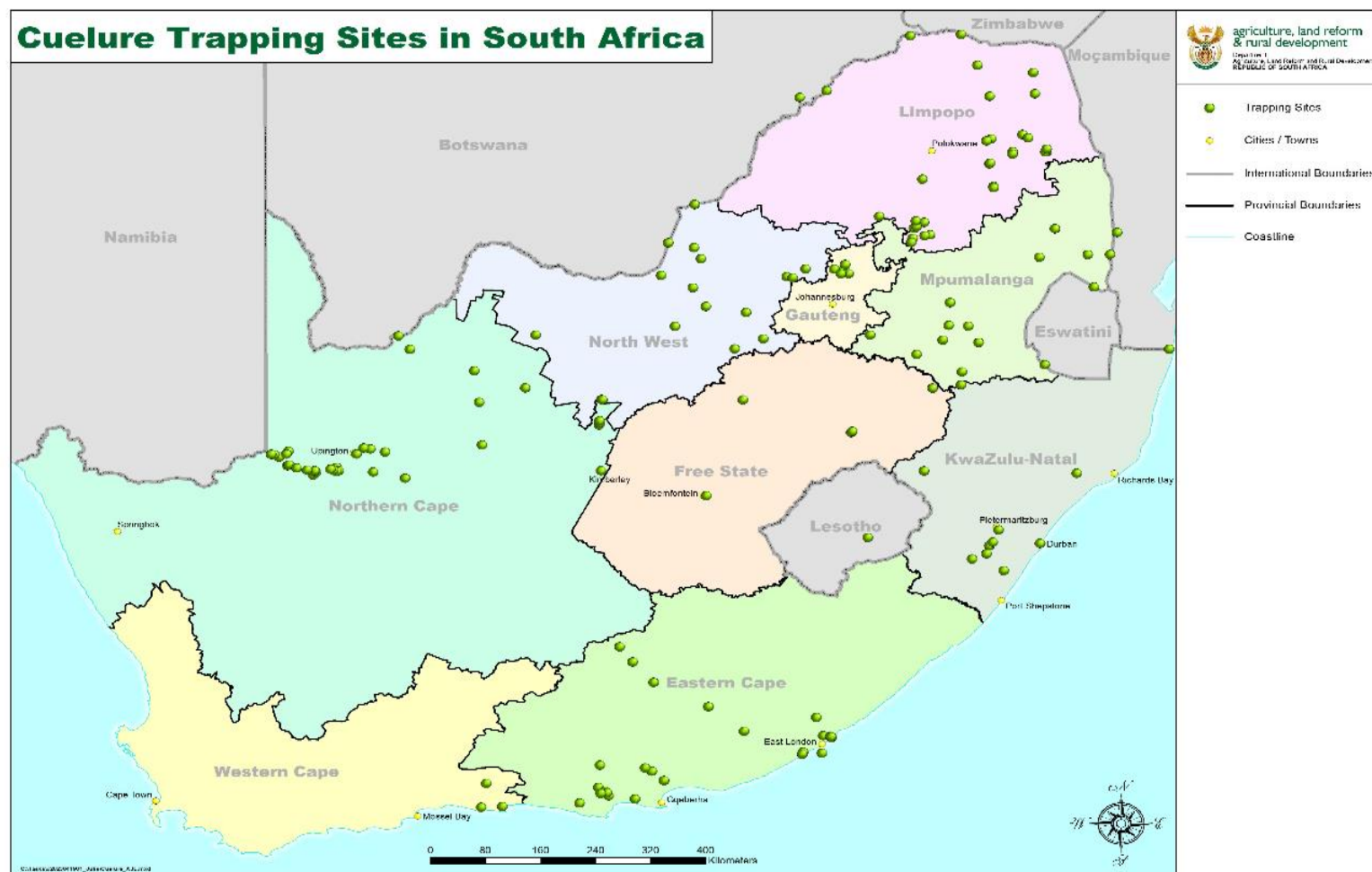
# ***Bactrocera dorsalis*, Oriental fruit fly**

- ***Bactrocera dorsalis* is a prohibited insect, APA**
- Removal permit for hosts from affected areas is required
- Monthly surveillance is ongoing
- Over **1500 active traps** serviced monthly
- Suppression methods includes MAT, BAT, orchard sanitation
- **Collaborative work between Department , Industry bodies, ARC, Universities and etc**





# *Zeugodacus cucurbitae*, Melon fly



- Absent in the country
- Monthly surveillance using pheromone traps baited with cue lure throughout the country
- Different role-players and stakeholders

# Citrus greening ( Huanglongbing)

- Regulated in terms of Control Measures R. 110 of 27 January 1984 and Control Measures relating to Asian Citrus Greening R.121 of 12 February 2021 -**Absent in the country**
- HLB surveillance for early detection by **monitoring disease and the vector on going**
- Surveillance of pathogen and psyllids, (*Diaphoria citri* and *Trioza erytrea*) monthly- Sticky traps used for the vector
- Traps are serviced monthly- over **140 active traps** by the Department al Inspection services officials,
- **Collaborative work between Department and Citrus industry**





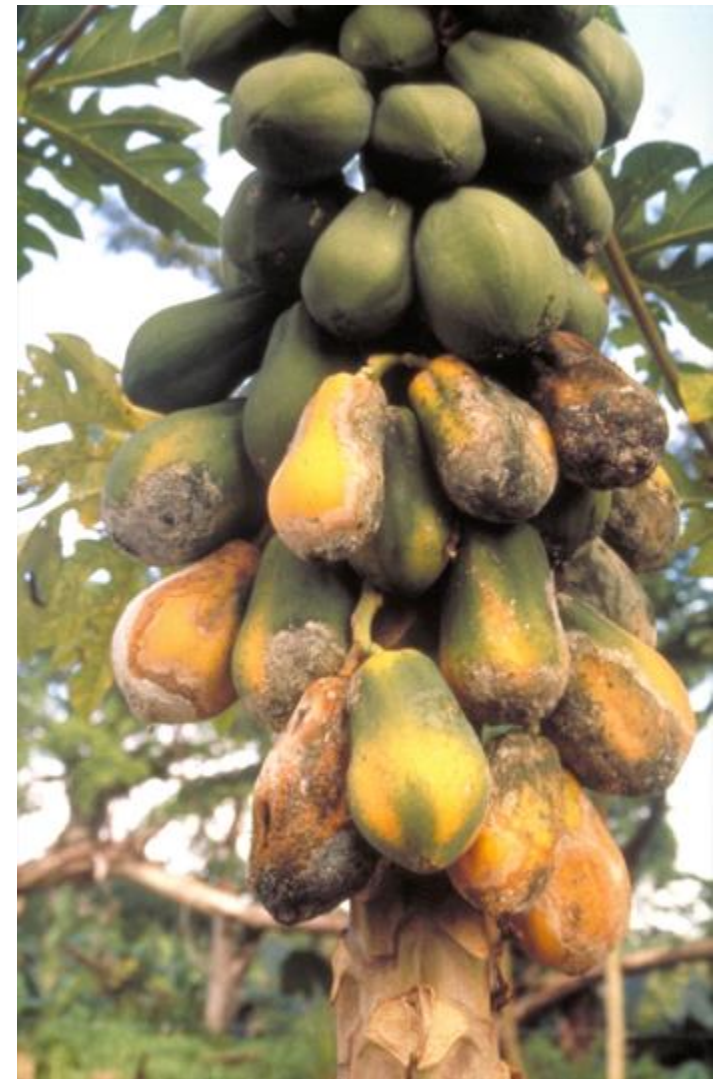
# Tropical Race4 (TR4) and Banana bunchy top virus and other banana diseases

- Surveillance on going in high-risk banana production areas
- Continuous training for capacity building ongoing
- Absent in the country
- BBTV present only in Ugu District (South Coast) of the Kwazulu-Natal Province
- Collaborative work between ARC and Department



## *Phytophthora palmivora* (Bud rot of palms)

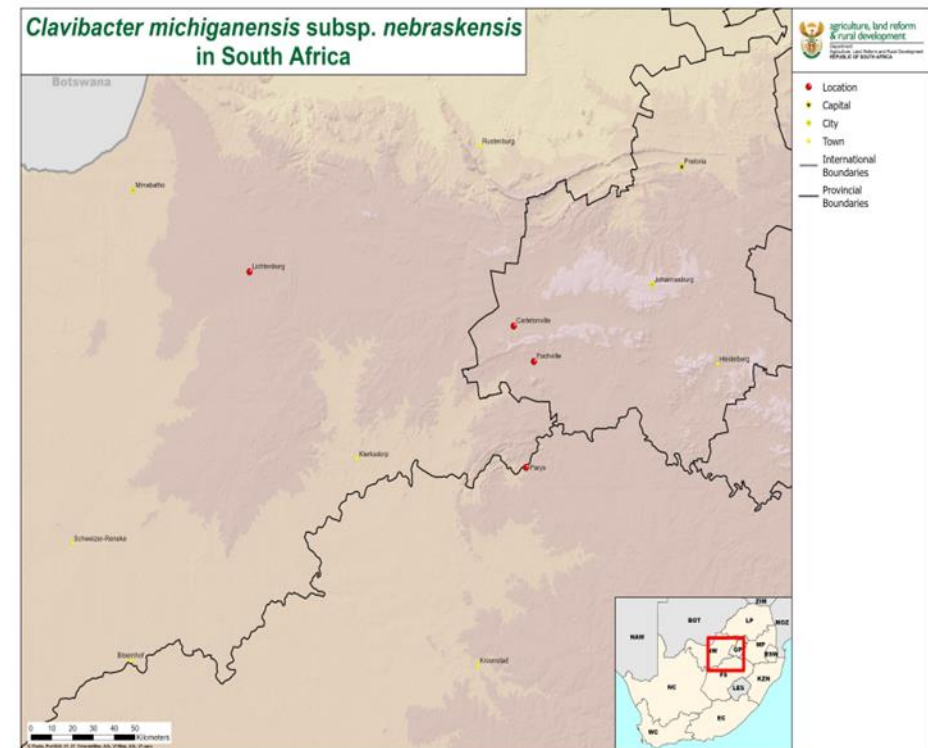
- Detected on five (5) commercial papaya orchards .
- Detection confirmed in two (2) District Municipalities of two (2) provinces in South Africa (Limpopo & Mpumalanga).
- Surveillance is ongoing & phytosanitary measures are being implemented in the affected farms.
- Detections were reported to IP Portal and trading partners
- Chemical treatment: there are registered chemicals already and the active ingredients of these will be included in the document to follow.
- Part of ARC project





# *Clavibacter michiganensis* subsp. *nebraskensis* (Goss's wilt)

- Detected only in isolated **maize production farms**.
- Detected in (4) provinces (Eastern Cape, Gauteng, Northwest, Free State).
- Delimiting Surveys Phytosanitary measures are being implemented in the affected farms (Advisory note developed).
- Detections were reported to IP Portal and trading partners
- **Resistant variety/ cultivar recommended since there is no control**
- Collaborative work between Department , ARC, grain industry, and universities

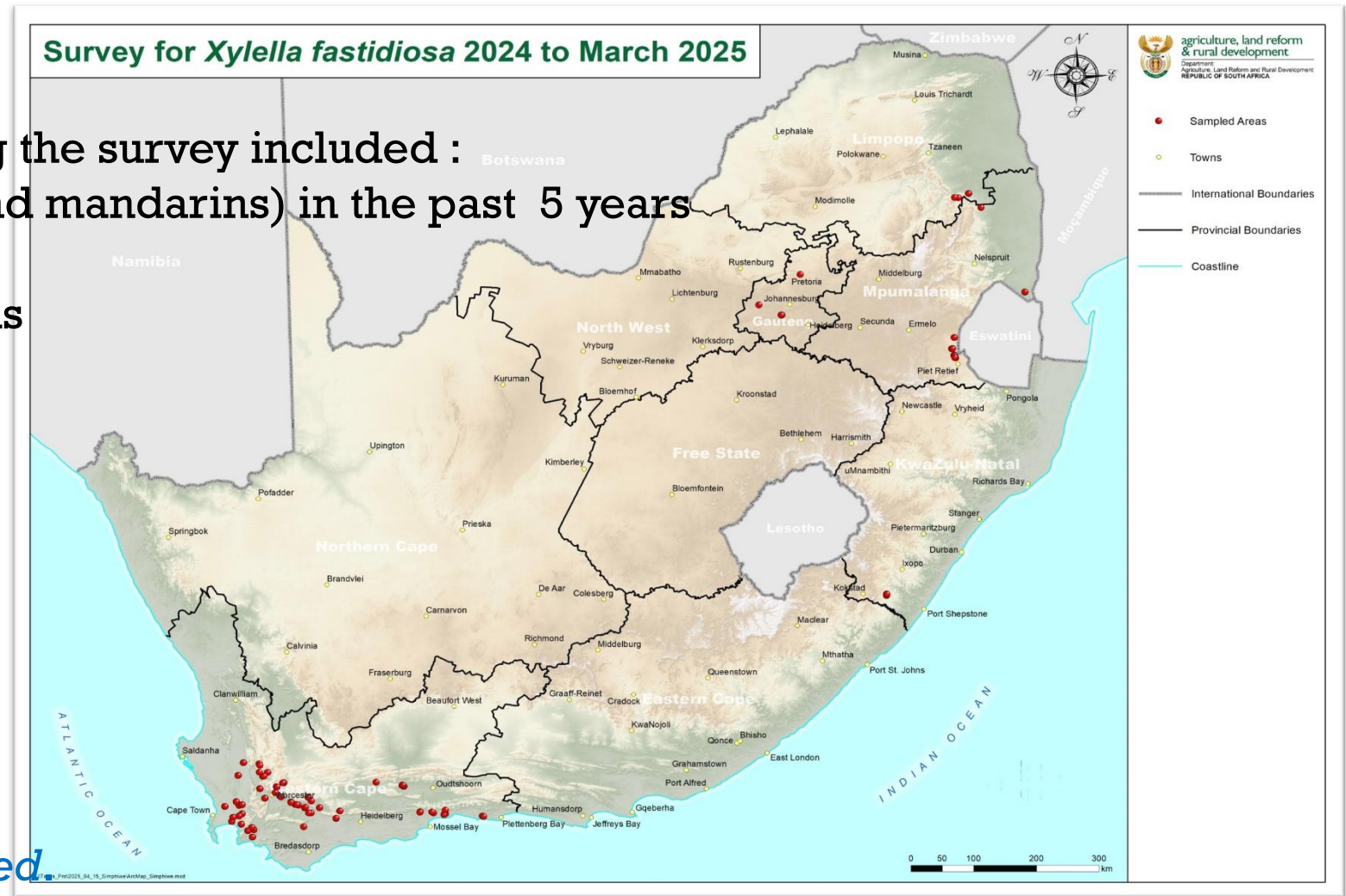


# *Xylella fastidiosa*

The primary crops sampled during the survey included :

- Citrus (e.g., oranges, lemons, and mandarins) in the past 5 years
- Blueberries
- Pecans, Macadamia and almonds
- Litchi and Mango
- Avocado
- Olives
- Coffee
- Lavender
- Rosemary
- Raspberry
- Blackberry
- Acacia

*Absent in South Africa, never detected*





# Some of the Pests detected in South Africa: 2010-2024 and dated reported to IP Portal

*Bactrocera dorsalis*- Oriental Fruit Fly (2010)

*Acalitus vaccinii* – Blueberry Bud Mite (2015)

*Raoiella indica*- Red Palm Mite (2016)

Banana Bunchy Top Virus (2015)

*Tuta absoluta*- Tomato leaf miner (2016)

*Spodoptera frugiperda*-Fall Armyworm (2016)

*Eriococcus ironsidei* - Macadamia Felted Coccid (2017)

*Euwallacea fornicatus*- Polyphagous Shot hole Borer (2017)

*Drosophila suzukii*- spotted wing drosophila (2024)

Pepper ring spot virus (2024)

*Clavibacter michiganensis* - Goss's wilt (2024)

*Phytophthora palmivora* (2024)



agriculture

Department:  
Agriculture

REPUBLIC OF SOUTH AFRICA

**"From Field to Cloud"**  
**Transforming Plant Health**  
**Monitoring Through Smart**  
**Technology**

A stylized orange map of the African continent is centered on the slide. Several leaves in shades of purple, yellow, and orange are scattered around the map, some appearing to grow from it. The background features a warm orange gradient with a large, light green circular shape on the right and rolling hills in shades of brown and orange at the bottom.

# Africa Phytosanitary Programme Africa Train-the-Trainer Workshop Phytosanitary Programme

**Thank you**

Train-the-Trainer workshop

