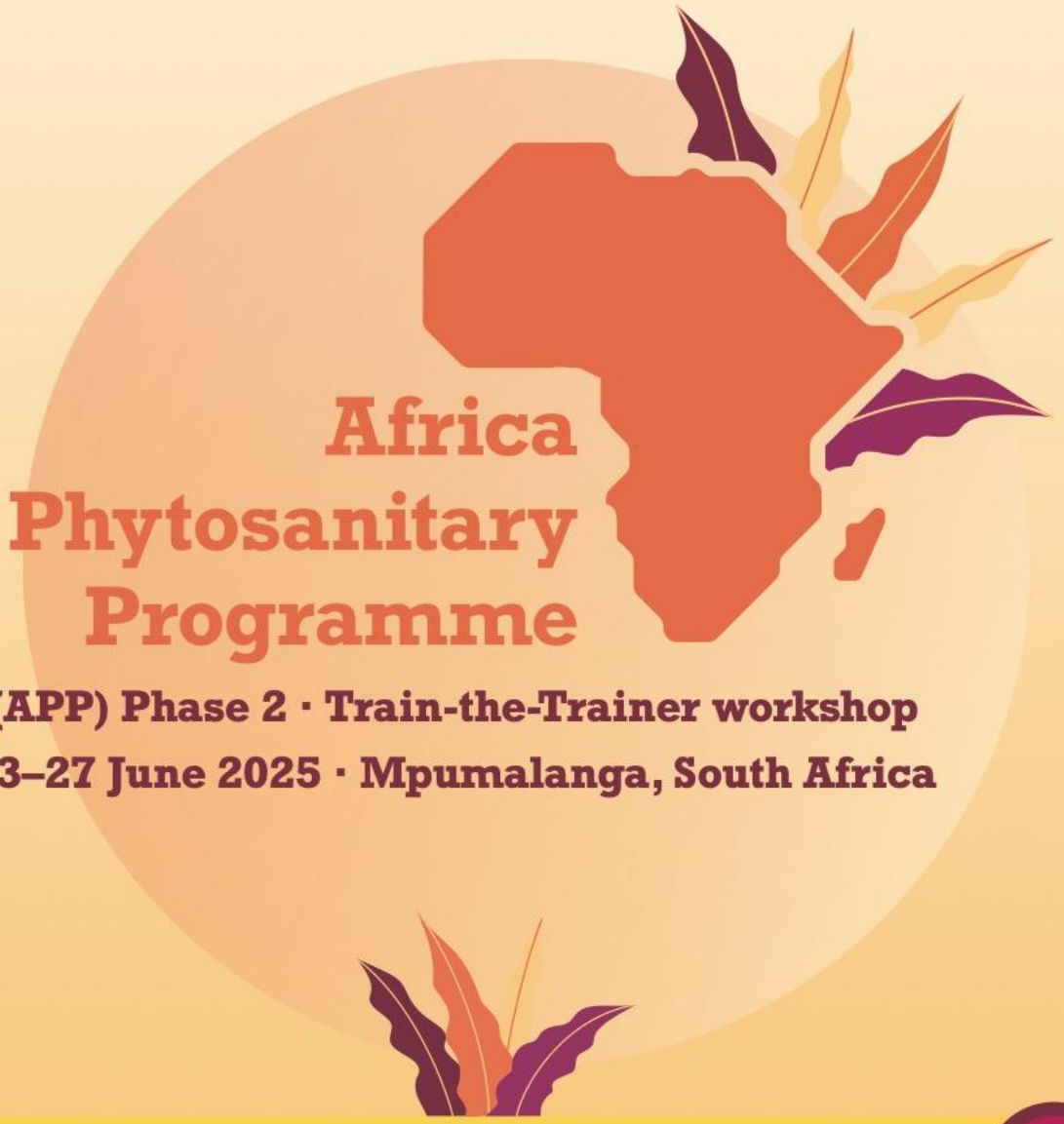


Pest Outbreak Alert and Response System (POARS)

Activities of the Steering Group

Strengthening Pest Outbreak Alert and Response Systems (POARS)

- 1 of the 8 development agenda items (DAIs) of the IPPC Strategic Framework 2020–2030
- Work initiated in 2020 with the Commission on Phytosanitary Measures (CPM) establishing a CPM Focus Group on POARS (FG POARS) which produced recommendations
- CPM-16 (2022) established the POARS Steering Group with a two-year mandate
- The POARS SG started the work in March 2024, consisting of 11 experts from around the world

Tasks of POARS Steering Group

1. Technical capability
   - Emerging pest criteria
   - POARS procedure
   - Alert system, prevention, preparedness and response components

2. Governance
   - To compare functions and activities with other IPPC bodies
   - Pros-and-cons analysis of the POARS governance structure options

3. Collaboration and resource mobilisation strategies

4. Financial capability

How do we identify emerging pests of global concern?

Criterion	Description	Condition to pass
Step 1: Initiation		
Recent geographical spread	Recent pest outbreaks[9] are reported in more than one area, showing a *significant* expansion of the pest's range.	A pest must meet both criteria to be eligible to proceed to Step 2.
Current distribution	The pest has a limited distribution in its endangered area.[10]	
Step 2: Current impact		
Economic impact	The pest is causing substantial economic impact according to what is described in ISPM 11 (*Pest risk analysis for quarantine pests*) and supplement 2[11] of ISPM 5 (*Glossary of phytosanitary terms*).	A pest must meet at least one criterion to be eligible to proceed to Step 3.
Environmental impact	The pest is causing substantial environmental impact according to what is described in ISPM 11 and supplement 2 of ISPM 5.	
Step 3: Risk evidence		
Likelihood of introduction into new areas	The pest has a high likelihood of introduction in new areas based on assessment in line with ISPM 11.	A pest should meet all conditions and be classified as an emerging pest of IPPC concern.
Scale of impacts in new areas	The pest is likely to cause substantial impacts based on assessment in line with ISPM 11.	
Risk management	The pest risk is likely to be difficult to manage effectively in new areas.	

Which is the outcome of the implementation of the criteria?

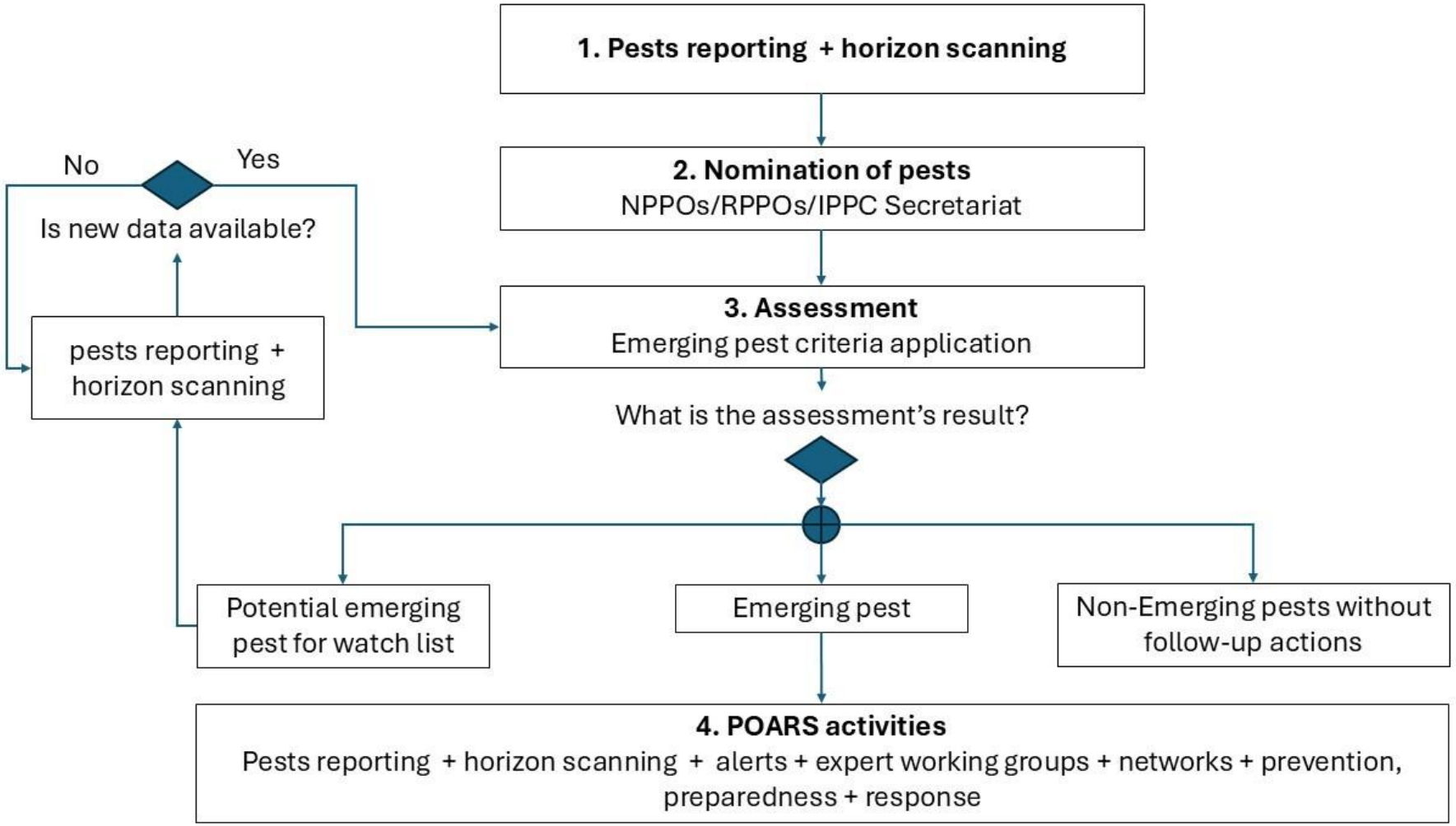
Pests are categorized as follows:

- *Emerging pest (of a global concern)*
  A pest that meets the relevant criteria of all three steps.

- *Non-emerging pest for the watch list*:
  Pests that meet the criteria of the first step but do not meet all other criteria.
  observation with reassessment if new data becomes available.

- *Non-emerging pest with no follow-up actions*
  A pest that does not meet any of the criteria in Step 1 for distribution and spread.

Process for identifying emerging pests



Outbreak Response

Qualified as an emerging pest of global concern?

Then tools will be developed for:

- *Prevention*: guidance on phytosanitary measures
- *Preparedness* : strengthening the overall capacity and capability e.g. provision of contingency plans, diagnostic protocols, training activities and simulations
- *Response*: establishment of networks and pest-specific expert groups to provide advice

Examples of such outbreak response actions:

Spodoptera frugiperda

Fusarium oxysporum f. sp. *cubense* Tropical Race 4

Governance

- 4 options were analysed for pros and cons by the Steering group
- CPM -19 in March 2025 approved a Steering Group as the long-term governance body of the POARS
- ToRs are prepared by the current SG to be approved by the Bureau

Pilot phase of POARS

- Application of the criteria
  Resulted in further refinement and the creation of a guidance document

- IPPC call for nomination of potential emerging pests
  31st January 2025 to 3rd March 2025

- Evaluation of the potential emerging pests

- Implementation of the response system for the emerging pests of a global concern

Nominated pests

#	Submitter	Pest
1.	COSAVE	Pepper chat fruit viroid
2.	COSAVE	*Rhizonia theobromae*
3.	COSAVE	*Bactrocera dorsalis*
4.	COSAVE	*Orobanche cumana*
5.	COSAVE	*Rhynchophorus ferrugineus*
6.	COSAVE	'*Candidatus* Liberibacter solanacearum'
7.	IPPC Secretariat	*Xylella fastidiosa*
8.	IPPC Secretariat	*Cryphonectria parasitica*
9.	IPPC Secretariat	*Thaumetopoea processionea*
10.	IPPC Secretariat	Sri Lanka cassava mosaic virus
11.	IPPC Secretariat	*Clavibacter nebraskensis*
12.	Netherlands	*Synchytrium endobioticum* (new pathotypes)
13.	Netherlands	*Bactericera cockerelli*

#	Submitter	Pest
14.	Nigeria	Cassava brown streak viruses
15.	Nigeria	*Anomis leona*
16.	South Africa	Citrus greening disease
17.	South Africa	*Xylella fastidiosa*
18.	South Africa	*Fusarium oxysporum* f. sp. *cubense* TR4
19.	South Africa	*Zeugodacus cucurbitae*
20.	South Africa	*Drosophila suzukii*
21.	South Africa	*Halyomorpha halys*
22.	South Africa	*Euwallacea fornicatus*
23.	South Africa	Banana bunchy top virus
24.	South Africa	*Lycorma delicatula*
25.	South Africa	Maize lethal necrosis
26.	South Africa	*Eriococcus ironsidei*

First alert was sent on March 3rd 2025

First confirmed report of *Clavibacter nebraskensis* outside North America

Date of issue: 03/03/2025

Trigger alert event:

NRO: Pest report: *Clavibacter nebraskensis* (Goss's wilt of maize) has been detected in four provinces in South Africa

Distribution*:

Africa: South Africa.
North America: Canada, Mexico, United States of America (EPPO Global Database).

© Oxelaght, E., Robertson, A.E., Jackson-Ziems, T.A., Allaché, H., Li, X., & Harveson, R.M., 2022. Licensed under CC 4.0.
Clavibacter nebraskensis causing Goss's wilt of maize, 2024

Major economic host:

Maize (Eichenlaub, R., & Gartemann, 2011; Lang *et al.*, 2017).

Current impact:

Severe infections have been documented to cause yield losses of up to 50% in susceptible maize varieties, especially under favorable environmental conditions such as high humidity and warm temperatures (Jackson-Ziems *et al.*, 2014). Between 2012 and 2015, estimated total yield losses due to Goss's Wilt in the U.S. and Canada exceeded 1.27 million tonnes, making it one of the most destructive maize diseases in the northern U.S. and Ontario (Wise *et al.*, 2019).

Environmental conditions favoring spread:

The pathogen thrives in warm temperatures and high humidity, which are common in maize-growing regions (Wise *et al.*, 2019).

Possible pathways of spread for *Clavibacter nebraskensis*:

The pathogen spreads through both natural and human-mediated pathways. Naturally, the pathogen can spread via wind-driven rain, contaminated soil, and infected crop residues, which serve as reservoirs for future infections. Human activities, such as the movement of contaminated agricultural equipment and the trade of infected plant material, facilitate long-distance spread. Seeds spreading is possible. However, the spreading rates of seeds are considered low (Flores-Lopez *et al.*, 2024). The risk of these pathways needs to be carefully determined.

***Disclaimer:**

IPPC Pest Alerts are news items obtained from public sources. They do not serve as official communication from the IPPC or FAO. The "IPPC Pest Alerts" is an early warning tool for potential emerging plant pests. In some cases, information within alerts is not confirmed with the corresponding National Plant Protection Organization. They are provided solely as an early warning to IPPC Contracting Parties and should be used with this disclaimer in mind.

If you have any questions or comments for us about this alert, please e-mail us at IPPC@fao.org

Communication

Welcome to POARS

About POARS | IPPC Pest Alerts | Emerging Pests

The Pest Outbreak Alert and Response Systems (POARS) aim to enhance global phytosanitary capacity by improving early detection, strengthening response strategies, and fostering international collaboration to minimize the impact of emerging pests on agriculture, trade, and ecosystems.

The POARS initiative is entering a critical phase in 2025, as this year marks the pilot implementation of the system. This pilot phase will test the alert system, emerging pest identification framework, and targeted activities.

@FAO/KEPHIS

[Pest Outbreak Alert and Response System (POARS) - International Plant Protection Convention]

After the pilot phase of POARS

Aim:

- provide a global alert system to the IPPC community based on the agreed criteria
- focus on new emerging pests that pose a global thread
- establish global experts' networks for emerging pest responses
- a global emergency response mechanism
- quickly mobilizing tools and support to aid a countries or region's response to emerging pests

Africa Phytosanitary Programme

Train-the-Trainer workshop

Thank you

IPPC Secretariat
Food and Agriculture Organization
of the United Nations (FAO)
ippc@fao.org | www.ippc.int