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Emerging pests

2023 IPPC Regional Workshops

Outline

- Background: Emerging pests – Pest Outbreak Alert and Response Systems (POARS)
- Overview of activities on fall armyworm (FAW) (*Spodoptera frugiperda*):
 - Global Action Plan
 - Prevention, preparedness and response guidelines
- Overview of activities on Fusarium Tropical Race 4 (TR4):
 - IC Team
 - Prevention, preparedness and response guidelines
 - Workshop Series on TR4
- Emergency Preparedness: a guide for developing contingency plans for outbreaks of quarantine pests

Background: At CPM 14 (2019), the issues related to "emerging pests" were merged with the activities to address the IPPC Strategic Framework (2020-2030) development agenda item (DAI) on "**Strengthening Pest Outbreak Alert and Response Systems.**"

Two pests of primary concern for the IPPC Community have been the subject of global efforts, and activities have been incorporated into the IPPC Secretariat's work plan:

- 1 FAO/IPPC Technical Working Group on Quarantine and Phytosanitary Measures for Global action on fall armyworm (*Spodoptera frugiperda*) control
- 2 Implementation and Capacity Development Committee (IC) Team on *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 (TR4)

- **Slide 2 – POARS - emerging pests**

The desired outcome for this DAI is to build a global pest outbreak alert and response system (POARS) with mechanisms to evaluate and communicate emerging pest risks.

Under this DAI, a global pest alert system with mechanisms to evaluate and communicate emerging pest risks will be developed, providing regular information to NPPOs on changes in pest status around the world.

NPPOs will use this to quickly adapt their phytosanitary systems to reduce the risk of pest introductions and spread. In the case of outbreaks, strengthened pest outbreak response systems and tools will help countries take much more timely action, especially against new incursions and/or outbreaks.

The IPPC Secretariat has been coordinating strong emerging pest response programmes for fall armyworm (*Spodoptera frugiperda*) and *Fusarium* banana wilt TR4 in compliance with the strategic Framework and the DAI on POARS



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The FAW Global action plan

- Reduce Crop yield losses due to FAW by 5-10%
- Prevent further spread of FAW to new areas
- Conduct a global coordination mechanism





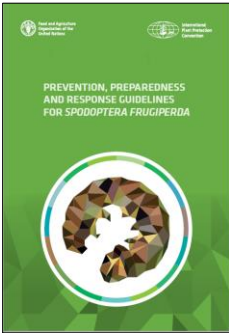
- **FAW global action plan**



The FAW **Global Action Plan was launched** to ensure a strong coordinated approach at country, regional and global levels against FAW, and aims to take radical, direct and coordinated measures to strengthen prevention and sustainable pest control capacities at a global level.

The Global Action has three key objectives:

- Reduce crop losses due to FAW by 5-10% in all demonstration countries and 10 percent in the pilot countries,
- Decrease the risk of further spread and infestation in countries with limited presence of the pest, and

- Establish a coordination mechanism at global, regional and national levels.




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Prevention, preparedness and response guidelines for *Spodoptera frugiperda* (EN, FR, AR, RU, published in 2021)

Supports NPPOs to take suitable actions against FAW through **timely detection** to prevent or slow the spread of the pest and reduce its negative impact:

- When FAW is absent – **prevention and preparedness plan**
- When FAW is officially detected and confirmed – **response plan**
- Provides a practical checklist to draft and implement prevention, preparedness and response plans for FAW



- **FAW guide**

The guidelines have been developed by **experts of the FAO-IPPC Fall Armyworm Technical Working Group** on “Quarantine and Phytosanitary Measures”. Published in 2021




The aim of these guidelines is to help NPPOs to take suitable and prompt actions against FAW through timely detection to prevent or slow the spread of the pest and reduce its negative impact.

- The guidelines give general information on the distribution and biology of the pest
- Provides technical details of actions and measures to be included in prevention, preparedness and response plan when FAW is absent from the territory, namely PRA, updating phytosanitary regulations, inspection and diagnostics, and surveillance, as well as

communication and information sharing with stakeholders.

- Provides technical details of actions and measures that are to be included in response plan to contain or limit the spread of the pest once FAW is officially detected and confirmed, namely, delimiting surveys, Phytosanitary measures and measures to suppress and reduce pest population, and communication and information sharing with stakeholders.

IC Team on Fusarium TR4 activities for 2021 – 2023:

- Revision of the contributed resources on TR4 – 12 contributed resources posted on IPP → 
- Series of virtual training workshops on surveillance, diagnostic, inspection, and simulation exercises on TR4 delivered → 
- Prevention, preparedness and response guidelines developed and published → 



- **IC team on TR4**

The IC created an IC Team on TR4 in 2021 and approved [Terms of Reference \(ToRs\)](#) to select global experts according to technical and practical expertise in the subject matter and areas as surveillance, contingency planning and simulation exercises. As a result, ten (10) qualified experts worldwide composed the Team.

- **Contributed resources:** A call for technical resources on TR4, resulted in 12 contributed resources being posted on the IPP, including technical situational reports, guidelines, and training materials
- **Series of webinars:** The three-part virtual workshop series, *Fusarium TR4 diagnostic, surveillance, inspection and simulation exercises*, was attended by participants from nearly

125 countries. The presentations and recordings are available on the IPP


- **Prevention, preparedness, and response guidelines:** In March 2023, the IPPC Secretariat, with the support of the IC Team on TR4, published the *Prevention, preparedness, and response guidelines for Fusarium TR4*, which were peer-reviewed by around forty-nine experts. The English version is available on the IPP, and the FAO Office for Mesoamerica is considering providing the Spanish translation.

IC Team on Fusarium TR4 – post CPM-17 (2023) activities


- Reinforce the IC Team on Fusarium TR4 membership to support the delivery of following activities in Africa:
 - Surveillance course
 - Diagnostic course
 - Tabletop exercise
 - Simulation exercise



- These activities to be delivered under the project FAO support to COMESA trade facilitation programme (GCP/INT/387/COM)
- The materials to be made available globally

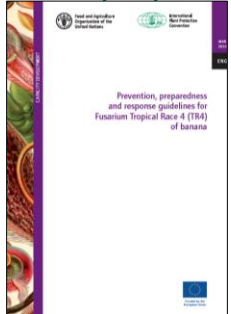


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Prevention, preparedness and response guidelines for Fusarium Tropical Race 4 (TR4) of banana (EN, published in 2023)



Developed based on the FAW guidelines.

- Distribution and biology of the pest
- When TR4 is absent – prevention and preparedness plan
- When TR4 is officially detected and confirmed – first response
- Gathers materials, tools and actions that NPPOs may undertake to prevent introduction of TR4

❖ French translation is under development



TR4 Guidelines:

- Developed based on the Prevention, preparedness and response guidelines for FAW, and focuses on prevention, preparedness and response measures and actions for the safe international trade to prevent spread Fusarium TR4.
- Provides pest specific information on biology and pest distribution.
- The guidelines provide pest specific biological and scientific information to inform the measures that need to be considered and implemented to develop a prevention and preparedness plan when the pest is still absent, comprising elements for pest risk analysis, phytosanitary regulations, prevention (for nurseries/large scale commercial plantations/ subsistence and small holder banana cultivation), sampling and diagnostics, surveillance, simulation exercises, contingency plan preparation, and communication and information sharing with stakeholders.

- The guidelines also provide information to inform measures that need to be included in the response plan, once the pest is detected and officially confirmed, including surveillance for delimiting and monitoring, zoning (destruction, clean/dirty areas), purposes and phytosanitary measures to contain an outbreak, safe destruction TR4 infected plants, communication and sharing information.



**Workshop Series on Fusarium TR4 freely available on the IPP
(in English with interpretation in French and Spanish)**

IPPC WORKSHOP SERIES

Fusarium TR4 Diagnostic,
Surveillance, Inspection and
Simulation Exercises

- Q&A document
- Record
- Presentations



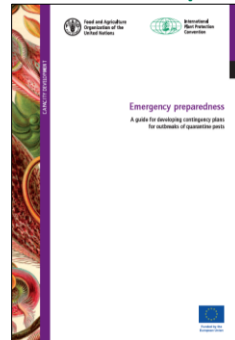
Session One – Diagnostic (24 March 2022)

Session Two - Surveillance and early warning
(19 April 2022)

Session Three - Inspection and simulation exercises
(10 May 2022)

- **Session One - Diagnostic** - Communicate and disseminate information on the critical aspects to consider when conducting a lab diagnosis, recognition of suspect plants in the field
- **Session Two - Surveillance and early warning** - Explanation of the overall surveillance process, information to consider to perform detection and delimitation surveys, and remote sensing applied for plant health
- **Session Three - Inspection and simulation exercises**, Pathways and commodities of significant concern, simulation exercises as an approach to be prepared for Fusarium TR4 outbreaks

Emergency Preparedness: A guide for developing contingency plans for outbreaks of quarantine pests (EN, published in 2023)



- Outlines the main components of generic and pest-specific contingency plans
- Provides guidance on how NPPOs can effectively organize and allocate resources to eradicate or contain pest outbreaks
- Discusses criteria for establishing and maintaining pest freedom, pest reporting and includes several country case studies

❖ Spanish translation is under development



- Provides generic and pest-specific contingency plans are defined, and the main components of these plans are outlined.
- For each of these components, guidance is provided on how NPPOs, in collaboration with relevant stakeholders, can effectively organize and allocate their resources to ensure that pests are eradicated quickly or are effectively contained.
- The guide also discusses the criteria to establish and maintain pest freedom, the reporting of outbreaks and recovery, and includes eight case studies around the world that illustrate various aspects of contingency planning for outbreaks of quarantine pests.



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Thank you

IPPC Secretariat

Food and Agriculture Organization
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ippc@fao.org | www.ippc.int

