

# The International Plant Protection Convention

## Emerging Issues in Plant Health

**2017 IPPC Regional Workshop**  
**Date, City, Country**



# Outline

- **Background**
- **2016 Questionnaire: Emerging issues in plant health**
- **Emerging issues identified**
- **Future work**



## Background

- Since 2015 the IPPC has participated in the FAO foresight group to identify emerging issues and their impacts.
- This work is primarily done under the IRSS project, which scans for emerging issues in relation to implementation of the Convention and ISPMs.
- Work will continue under the IRSS to identify and analyze plant health emerging issues and develop resources to assist contracting party preparedness to respond to issues.

# Background

What is an emerging issue?

- In this context, an emerging issue are those that are new, unexpected or can cause change in the status quo in plant health.
- The word issue describes the circumstance as a risk or challenge that may have a negative impact on plant health.
- Conversely, an opportunity is something that occurs that could have a positive impact on plant health.

# 2016 Questionnaire: Emerging issues in plant health

- In 2016 contracting parties and RPPOs completed a questionnaire asking them to identify the five most important emerging issues related to plant health, with short explanations for each.
- Initial outcomes were discussed at the 2016 workshops.
- Analysis of the outcomes were undertaken by the IRSS.
- The findings\* of the questionnaire provide a summary of regional and global emerging issues.

\*Global emerging issues report is available on the IPP.

[https://www.ippc.int/static/media/files/irss/2017/04/03/DRAFT\\_Global\\_Emerging\\_Issues\\_report.pdf](https://www.ippc.int/static/media/files/irss/2017/04/03/DRAFT_Global_Emerging_Issues_report.pdf)



## Emerging issues identified

The plant health emerging issues identified fall under eight different categories:

- Environment
- Plant pests (diseases)
- Plant pests (other)
- Collaboration
- Policy
- Resource limitations
- Phytosanitary capacity
- Trade issues



# Emerging issues identified

**Prioritization of global plant health emerging issues includes:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	144	22.6%
Emerging pests (general)	95	14.9%
Environment	88	13.8%
Plant pests: diseases	85	13.3%
Plant pests: other	79	12.4%
Resource limitations	58	9.1%
Trade issues	35	5.5%
Collaboration	34	5.3%
Policy	20	3.1%

# Emerging issues identified

The five most common global plant health emerging issues include:

- Emerging pests (general) - introduction of new pests
- Environment - climate change
- Phytosanitary capacity - pest surveillance
- Phytosanitary capacity - inspection and pest reporting
- Environment - overuse of chemicals for pest risk management



# Emerging issues identified

**Prioritization of plant health emerging issues for Africa includes:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	21	17.4%
Environment	18	14.9%
Emerging pests (general)	17	14.1%
Plant pests: other	16	13.2%
Resource limitations	16	13.2%
Plant pests: diseases	15	12.4%
Collaboration	8	6.6%
Trade issues	5	4.1%
Policy	5	4.1%

# Emerging issues identified - Africa

- Phytosanitary capacity needs of Africa
  - use of new agricultural practices
  - inspection
  - pest reporting
  - diagnostics
  - ability to raise national phytosanitary awareness
- Climate change
- Overuse of chemicals for pest risk management.
- Introduction of new pests.
- Plant diseases
  - Maize lethal necrosis disease
  - bunch root diseases
  - *Fusarium oxysporum* f. sp. *cubense* Race 4 (Panama disease)
- Other plant pests include
  - fruit flies
  - *Tuta absoluta* (tomato leafminer).
- General lack of resources.
- Trade issues are centered on market access
- Some collaboration issues among national stakeholders (legislation, regulatory frameworks and policies)
- Policies associated with sea containers

# Emerging issues identified

**Prioritization of plant health emerging issues for Asia include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	29	29%
Emerging pests (general)	17	17%
Plant pests: other	15	15%
Environment	11	11%
Plant pests: diseases	9	9%
Resource limitations	7	7%
Trade issues	6	6%
Collaboration	4	4%
Policy	2	2%

# Emerging issues identified

- Phytosanitary capacity needs
  - pest surveillance
  - Inspection
  - pest reporting
  - diagnostics
  - phytosanitary treatments.
- Introduction of new pests.
- Plant disease - *Xylella fastidiosa* (Pierce's disease)
- Other plant
  - *Nilaparvata lugens* (brown planthopper)
  - Golden snail
  - *Trogoderma granarium* (Khapra beetle)
- Overuse of chemicals for pest risk management
- Climate change.
  - Resource limitations
  - access to facilities
  - sufficient infrastructure
  - financial resources.
- Trade issues are centered on market access.
- Some collaboration issues among national stakeholders (legislative and regulatory frameworks)
- Policies associated with sea containers

# Emerging issues identified

**Prioritization of plant health emerging issues for the Caribbean include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	17	27.9%
Resource limitations	11	18.1%
Emerging pests (general)	8	13.1%
Plant pests: diseases	6	9.8%
Policy	5	8.2%
Environment	5	8.2%
Plant pests: other	3	4.9%
Trade issues	3	4.9%
Collaboration	3	4.9%



## Emerging issues identified

- Phytosanitary capacity needs
  - inspection
  - pest reporting
  - pest surveillance
- Resource limitations
  - appropriately trained staff and the ability to retain them
  - sufficient infrastructure
- Introduction of new pests
- Plant diseases
  - *Candidatus Liberibacter* spp. (Citrus greening)
  - Lethal yellowing of palm/coconut
- Policy issues associated (national legislative and regulatory frameworks)
- Climate change
- Some regional collaboration issues



# Emerging issues identified

**Prioritization of plant health emerging issues for Europe include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	8	25%
Resource limitations	5	15.6%
Emerging pests (general)	3	9.4%
Environment	3	9.4%
Policy	3	9.4%
Plant pests: other	3	9.4%
Collaboration	3	9.4%
Trade issues	2	6.2%
Plant pests: diseases	2	6.2%

## Emerging issues identified

- Phytosanitary capacity
  - Surveillance
  - Inspection
  - pest reporting
  - pest risk analysis
- Resource limitations
  - appropriately trained staff and the ability to retain them
  - sufficient infrastructure
- Introduction of new pests
- Overuse of chemicals for pest risk management
- Climate change.
- Some collaboration issues among national stakeholders (legislative and regulatory frameworks)

# Emerging issues identified

**Prioritization of plant health emerging issues for Latin America include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	29	26.7%
Emerging pests (general)	16	14.7%
Plant pests: diseases	15	13.8%
Plant pests: other	14	12.8%
Environment	8	7.3%
Trade issues	8	7.3%
Collaboration	8	7.3%
Resource limitations	7	6.4%
Policy	4	3.7%

# Emerging issues identified

- Phytosanitary capacity needs
  - pest surveillance
  - use of phytosanitary treatments
  - Inspection
  - pest reporting
  - diagnostics
- Introduction of new pests.
- Plant diseases
  - *Candidatus Liberibacter* spp. (Citrus greening)
  - *Fusarium oxysporum* f. sp. *ubense* Race 4 (Panama disease)
  - *Xylella fastidiosa* (Pierce's disease)
- Other plant pests
  - fruit flies
  - *Lobesia botrana* (European grapevine moth)
  - *Trogoderma granarium* (Khapra beetle)
- Climate change
- Overuse of chemicals for pest risk management
- Trade issues are centered on market access.
- Some collaboration issues among national stakeholders (legislative and regulatory frameworks associated policies)
- Resource limitations
  - appropriately trained staff and the ability to retain them
  - sufficient financial resources

# Emerging issues identified

**Prioritization of plant health emerging issues for the Near East include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Plant pests: diseases	9	20%
Emerging pests (general)	9	20%
Phytosanitary capacity	8	17.8%
Plant pests: other	8	17.8%
Environment	6	13.3%
Resource limitations	2	4.4%
Trade issues	2	4.4%
Collaboration	1	2.3%
Policy	0	0%



## Emerging issues identified

- Introduction of new pests
- Increasing pest resistance to pesticides
- Emergence of new pest biotypes
- Plant disease - *Xylella fastidiosa* (Pierce's disease)
- Other plant pests - fruit flies
- Phytosanitary capacity needs
  - pest surveillance
  - ability to raise national phytosanitary awareness
- Climate change
- Overuse of chemicals for pest risk management



# Emerging issues identified

**Prioritization of plant health emerging issues for North America include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Phytosanitary capacity	7	28%
Plant pests: other	5	20%
Emerging pests (general)	4	16%
Trade issues	3	12%
Environment	2	8%
Plant pests: diseases	2	8%
Collaboration	2	8%
Resource limitations	0	0%
Policy	0	0%

## Emerging issues identified

- Phytosanitary capacity need - the use of new agricultural practices
- Introduction of new pests
- Plant diseases
  - *Fusarium oxysporum* f. sp. *cubense* Race 4 (Panama disease)
  - *Xanthomonas campestris* pv. *citri*, *X. axonopodis* (Citrus canker)
- Other plant pests
  - *Epiphyas postvittana* (light brown apple moth)
  - *Grapholita molesta* (Oriental fruit moth)
  - *Lobesia botrana* (European grapevine moth)
  - *Lymantria dispar* (Gypsy moth)
  - *Xyleborus glabratus* (ambrosia beetle)
- Trade issues are centered on market access.
- Climate change
- Some collaboration issues among national stakeholders (legislative and regulatory frameworks and working regionally)

# Emerging issues identified

**Prioritization of plant health emerging issues for the South West Pacific include:**

Emerging Issues	Response rate (count)	Response rate (percent)
Plant pests: diseases	18	24.7%
Phyosanitary capacity	14	19.2%
Emerging pests (general)	14	19.2%
Environment	7	9.6%
Plant pests: other	7	9.6%
Resource limitations	6	8.2%
Trade issues	5	6.8%
Collaboration	2	2.7%
Policy	0	0%

## Emerging issues identified

- Plant diseases
  - *Colletotrichum gloeosporioides* (Anthracnose fungus)
  - *Cercospora coffeicola* (Brown eye leaf spot)
  - *Phytophthora palmivora* (Fruit rot)
  - *Xanthomonas campestris* pv. *Citri* and *X. axonopodis* (Citrus canker)
- Other plant pest - *Oryctes rhinoceros* (Coconut Rhinoceros Beetle).
- Phytosanitary capacity needs
  - pest surveillance
  - use of phytosanitary treatments
  - ability to raise national phytosanitary awareness
- Introduction of new pests and the emergence of new pest biotypes
- Climate change
- Poor soil conditions through natural causes or mismanagement
- Resource limitations
  - sufficient infrastructure
  - financial resources
- Trade issues include market access and illegal plant trade
- Some collaboration issues among national stakeholders (legislative and regulatory frameworks and working regionally)

# Emerging issues identified

**Prioritization of plant health emerging issues for RPPOs include:**

<b>Phytosanitary capacity</b>	<b>11</b>	<b>24.4%</b>
<b>Plant diseases</b>	<b>9</b>	<b>20.0%</b>
<b>Plant pests</b>	<b>8</b>	<b>17.8%</b>
<b>Emerging pests (general)</b>	<b>7</b>	<b>15.6%</b>
<b>Resource limitations</b>	<b>4</b>	<b>8.9%</b>
<b>Collaboration</b>	<b>3</b>	<b>6.7%</b>
<b>Trade issues</b>	<b>1</b>	<b>2.2%</b>
<b>Environment</b>	<b>1</b>	<b>2.2%</b>
<b>Policy</b>	<b>1</b>	<b>2.2%</b>



## Emerging issues identified

- Phytosanitary capacity needs
  - Inspection
  - pest reporting
  - pest surveillance
- Plant diseases
  - *Candidatus Liberibacter* spp. (Citrus greening)
  - *Fusarium oxysporum* f. sp. *cubense* Race 4 (Panama disease)
- Other plant pests - fruit flies
- Introduction of new pests
- Resource limitations
  - appropriately trained staff and the ability to retain them
  - access to facilities and financial resources
- Importance of collaboration at the regional and international levels
- Implementation of economic partnership agreements
- Concern for weak national policies within regions
- Climate change



## Future work

The IRSS will continue to identify and analyze emerging issues, including activities:

- Regular questionnaires and meetings to identify and discuss emerging issues, focusing on themes (food security, trade facilitation, environmental protection and capacity development)
- Analyze emerging issues to help contracting parties prepare to be able to respond to issues
- Develop a strategy for contracting party preparedness



## Future work

In accordance with CPM 12 decisions, the IPPC Secretariat will:

- Develop a framework for information sharing in five areas to support contracting parties prepare and respond to emerging pests, including:
  - Intelligence
  - Analysis
  - Awareness
  - Information sharing
  - Response action

# Contacts

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