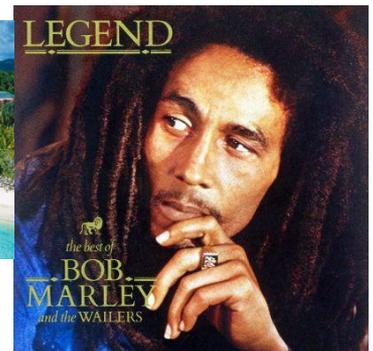
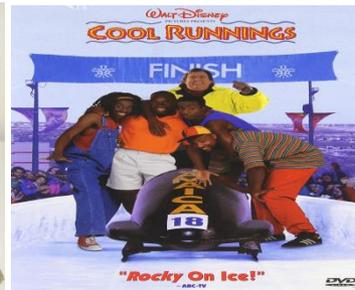




# Jamaica's Phytosanitary System

IPPC High Level Symposium Chinese Initiative 'One Road Countries'  
2018



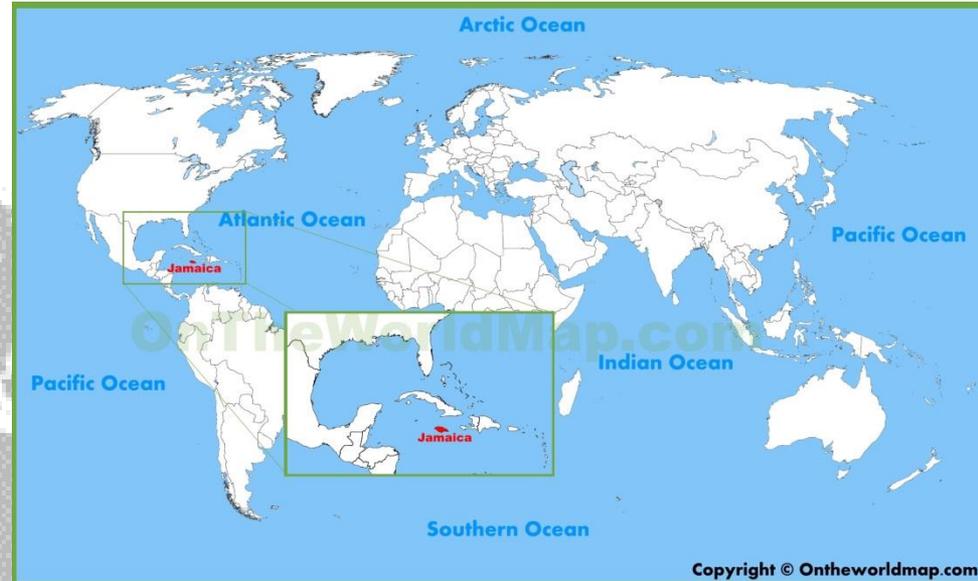
# PRESENTATION OUTLINE

- Country Profile
- Jamaica's Plant Health System
- Case Study: Frosty Pod Rot Outbreak in Jamaica
- Emerging Issues and Challenges



# Jamaica's Country Profile

## LOCATION



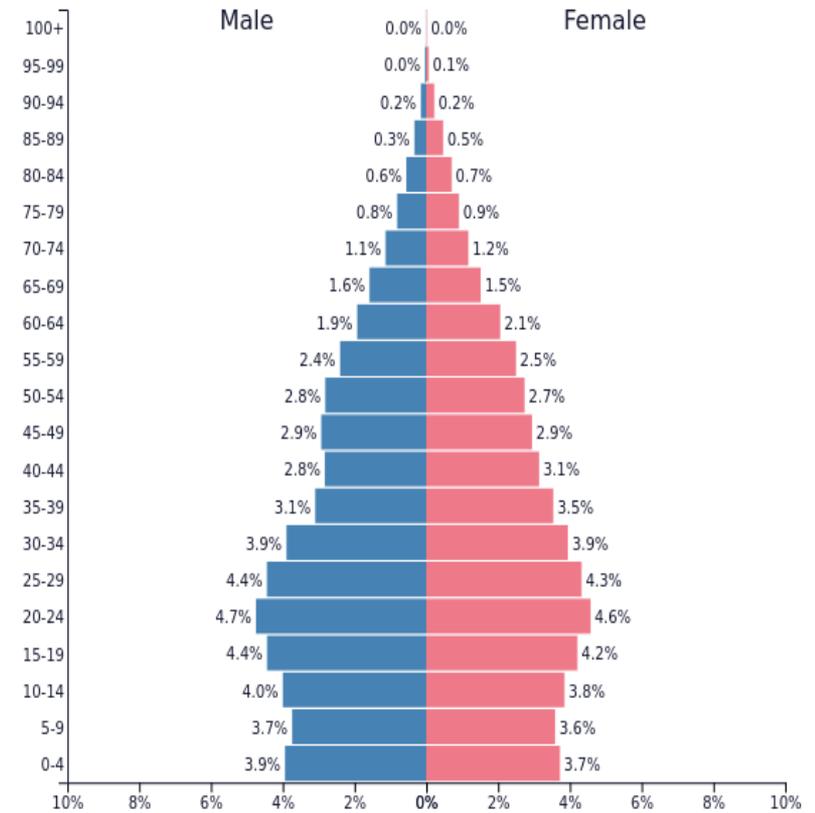
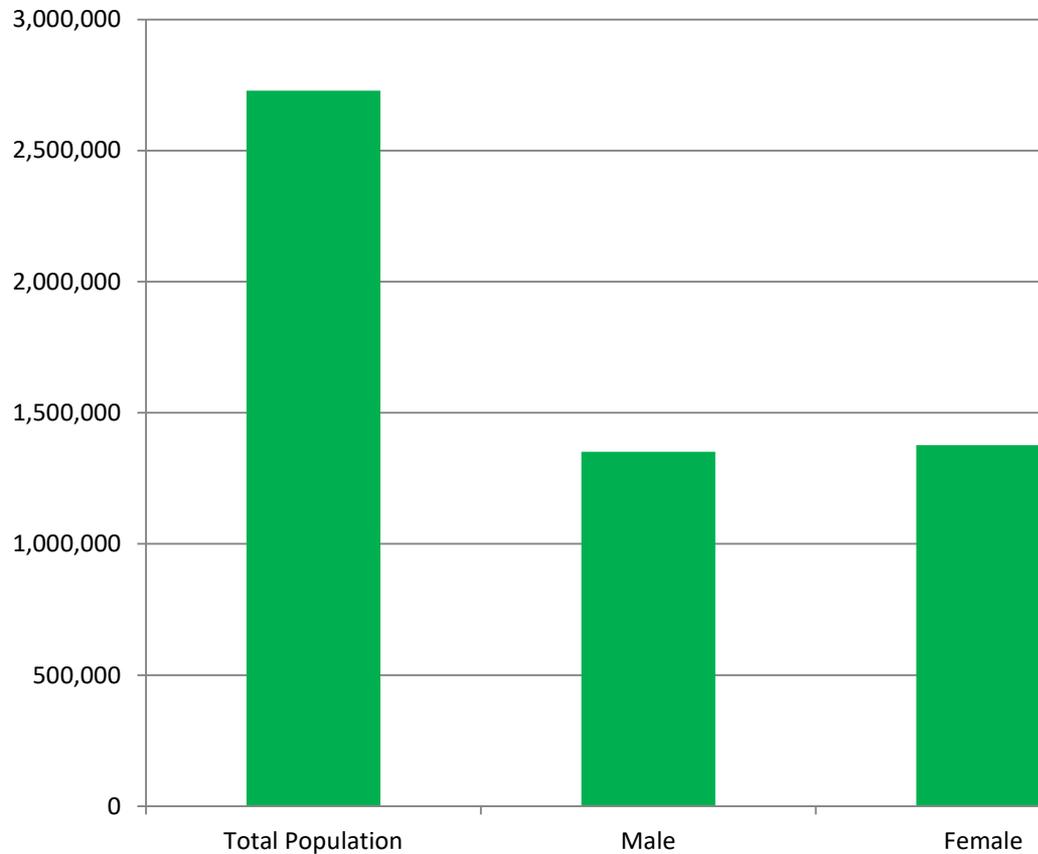
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10,991 sq. km (4,243 sq. miles)  
160 sq.km of water

# Jamaica's Population

Density- 266.8/ km<sup>2</sup>



**Jamaica - 2018**  
Population: 2,822,896

(Source: STATIN, Jamaica)

# Jamaica's Port of Entry



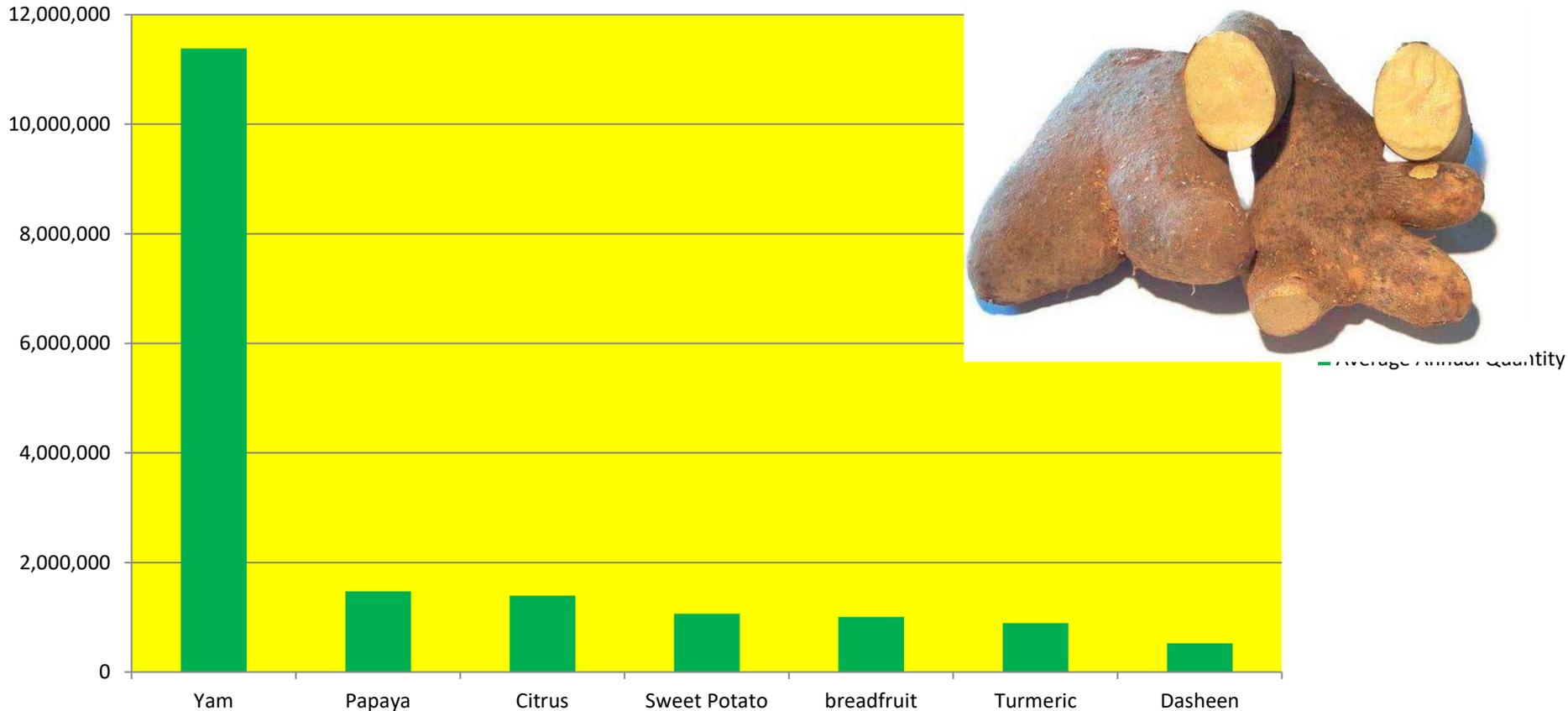
**14 Ports of Entry : 6 North & 9 South  
8 designated as Official Ports of Entry  
3 International Airports**



# Jamaica's Agriculture

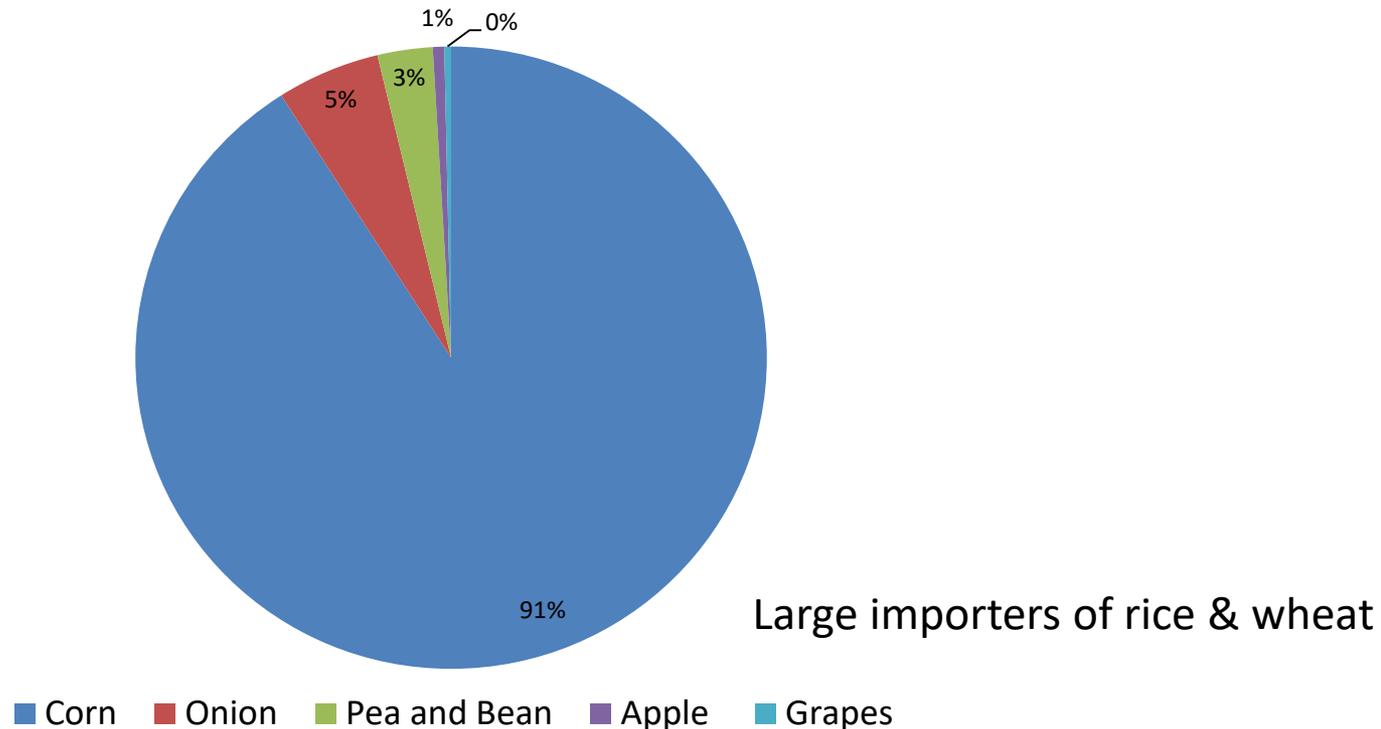
Agriculture contribute2 approximately 7% of GDP

Fresh Produce Export



# Jamaica's Agricultural Imports

## Average Annual Quantity (Kg)



# Jamaica's Phytosanitary System



Ministry of  
Industry, Commerce, Agriculture & Fisheries  
Agriculture & Fisheries Portfolio



Government of Jamaica

# Legal Framework

## Plant Quarantine Act (1993)

### Governs:

- Importation of plants
- Quarantine control
- Penalty for unauthorized landing of plants
- Power to destroy diseased plants
- Plant quarantine expenses
- Penalty for importing
- Offenses as to documents

## The Plants (Importation) Control (Amendment) Regulations, 2005

### Defines:

- Items that require import permit
- Prohibited Items
- Pest Risk Analyses (PRA)



# Plant Health System

## Plant Health Coordination

- Academia
- Forestry
- Commodity Boards
- Plant Quarantine
- Extension

NPPO, Quarantine, Certification & Inspection

Plant Quarantine  
Produce Inspection

Ministry of  
Industry,  
Commerce,  
Agriculture  
& Fisheries

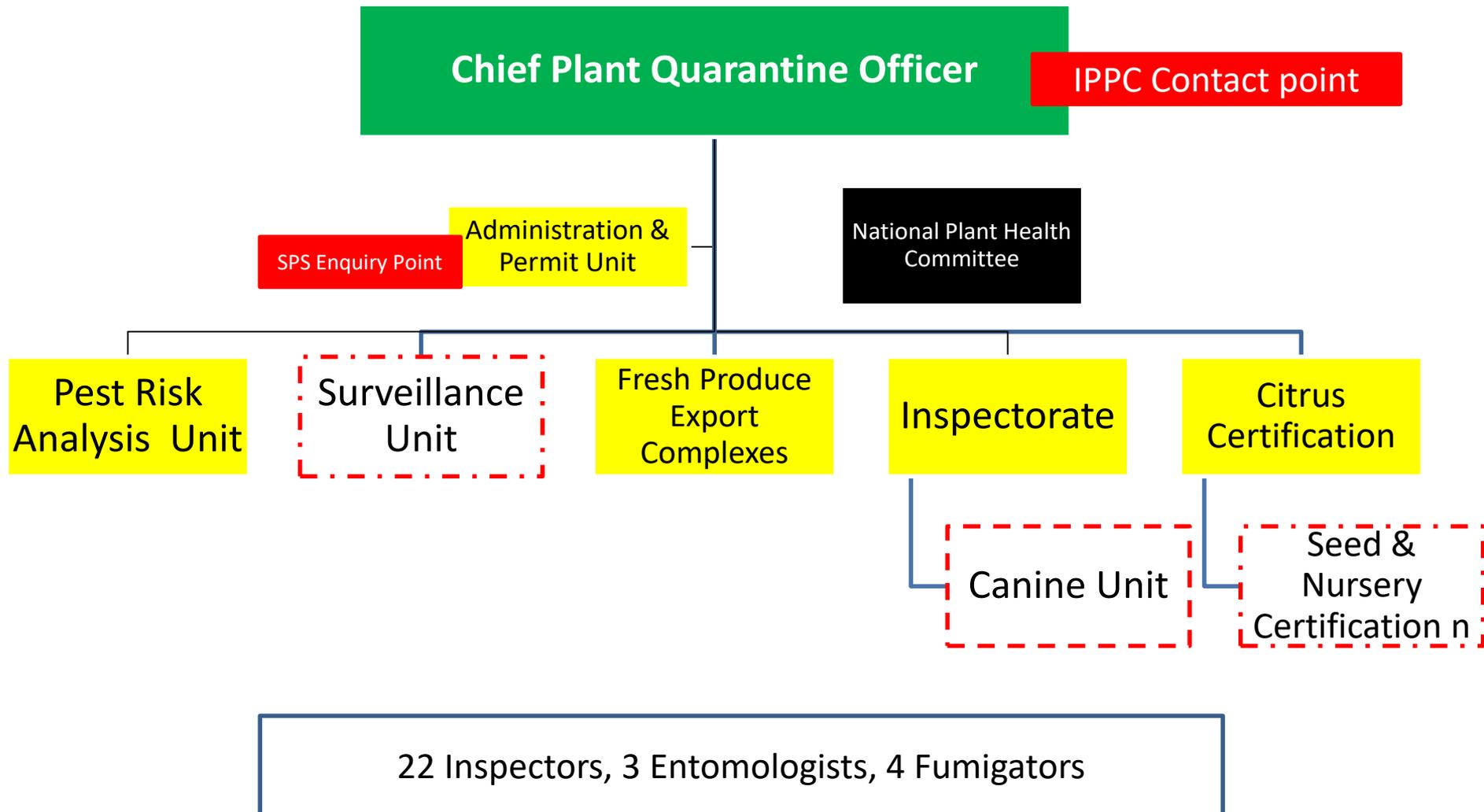
Rural  
Agricultural  
Development  
Authority

Research &  
Development  
Division

Surveillance

Research

# Structure of Jamaica's NPPO



# Plant Import Permit Process

## APPLICATION PROCESS

1. Register at [www.moatrade.gov.jm](http://www.moatrade.gov.jm)
2. Make online application at [www.moatrade.gov.jm](http://www.moatrade.gov.jm)
3. Approval process takes from zero to 48 hours for PQD
  - a. PRA is required fro new pathway or product
4. Make payment online or manually
5. Present proof of payment to PQ Head Office
6. Permit printed, signed and delivered (same time)

THE MINISTRY OF AGRICULTURE & LANDS  
Trade System

username  password  Login Release:2.3.4

welcome to . . . . .  
The Minstry of Agriculture & Lands  
Trade System

Ministry of Agriculture Home

Related Websites  
+ Jamaica Customs  
+ Jamaica Trade Point

Welcome to the Ministry of Agriculture & Lands Trade System. This is an internet based system for facilitating the importation & exportation of agricultural products. Importers & Exporters can apply online for import permits & export certification.

- Not yet registered? click [here](#)
- To update your registration click [here](#)
- To perform admin tasks click [here](#)
- To change your password click [here](#)
- Forgot your password click [here](#)

Plant Quarantine / Produce Inspection Unit  
193 Old Hope Road, Kingston 6  
Tel: (876)977-0637, (876)977-6401  
Fax: (876)977-6992  
Email: [ppq@moa.gov.jm](mailto:ppq@moa.gov.jm)

Veterinary Services Division  
193 Old Hope Road, Kingston 6  
Tel: (876)977-2489, (876) 977-2492  
Fax: (876)977-0885  
Email: [vsd@moa.gov.jm](mailto:vsd@moa.gov.jm)

Verification Secured  
MasterCard VISA  
eVISA

# Import Inspection Procedure

1. Make appointment

2. Document submission

- ✓ Customs Entry (ASYCUDA )
- ✓ Import Permit
- ✓ Phytosanitary Certificate
- ✓ Payment for inspection receipt
- ✓ Invoice
- ✓ Bill of lading

3. Inspection/  
release/quarantine/treatment/destruction



# Export Certification Procedure

## 1. Facility Certification

- a. Quarantine standards and GMPs

## 2. Phytosanitary Treatment

- a. Post-harvest treatment
- b. fumigation

## 3. Export Certification

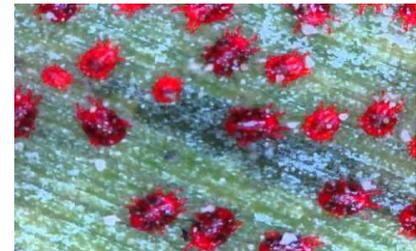
- a. Bilateral Agreements
- b. Phytosanitary Certificates



# Regulated Pest list

136

1. *Ceratitis capitata* (Mediterranean fruit fly)
2. *Fusarium oxysporum f. Sp. cubense* race 4 (Tropical Race 4)
3. *Xanthomonas axonopodis pv. Citri* (Citrus Canker)
4. *Clavibacter michiganensis subsp. Sepedonicus* (potato ring rot)
5. *Tuta absoluta* (tomato leafminer)
6. *Rhychophorus ferrugineus* (Red palm weevil)
7. Giant African Scale
8. *Moniophthora rorei* (Frosty pod rot disease)



# Frosty Pod Rot Outbreak in Jamaica

## A Case Study



# Value of Cocoa to Jamaica

- Jamaica cocoa fetches premium price
- One of only nine producers of fine flavour
- Cocoa is valued at JA \$400 million/ 3million USD
- 4000 small cocoa farmers
- 8000 acres of cocoa production



# Frosty Pod Rot Disease of Cocoa

- *Moniliophthora roreri* (frosty pod rot of cocoa)
- Host of frosty pod rot
  - *Herrania* and *Theobroma* spp
  - Commercial: ***Theobroma cacao*** (cocoa)
- List of symptoms/signs
  - Fruit: abnormal shape, discoloration, extensive mould, lesions on pods, mummification
  - Seeds Rot



# Healthy Cocoa Beans





# Frosty Pod Rot



# Frosty Pod Rot Disease of Cocoa



Presence of deformations called gibas (conspicuous bumpy swellings)



Premature ripening (A)  
+ oily spots (B)



Irregular brown or  
chocolate-colored spots



Incipient mycelium in a brown spot



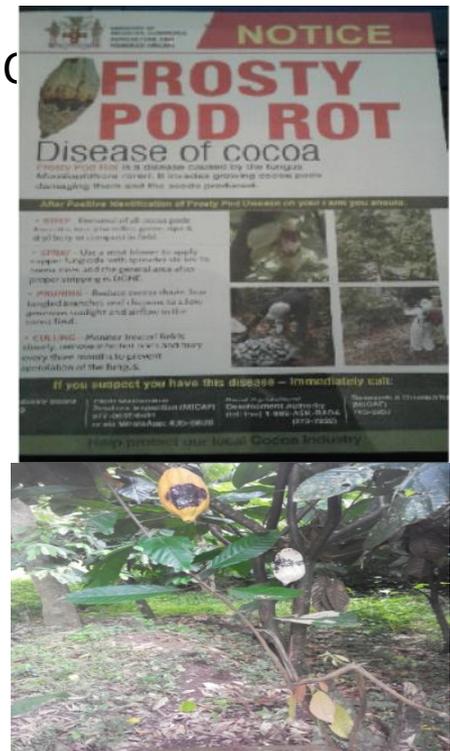
Fungal mycelia on the brown spots;  
the most contagious stage



Mummified fruit

# Outbreak of Frosty Pod Rot

- Received report on August 22, 2017 of potential sighting of FPR
- Pest Emergency Response Team (RADA, PQ, R&D, CIB, UWI, IIC) – Activated
- A detection/delimiting survey initiated in August 2016
- Disease Confirmed
  - locally and internationally on September 29, 2016
  - Report to IPPC on September 29, 2016
- Frosty Pod Rot Order (September 2016)
- Management/Action Plan developed
  - Management strategies
  - Pest alerts
  - Public Sensitization

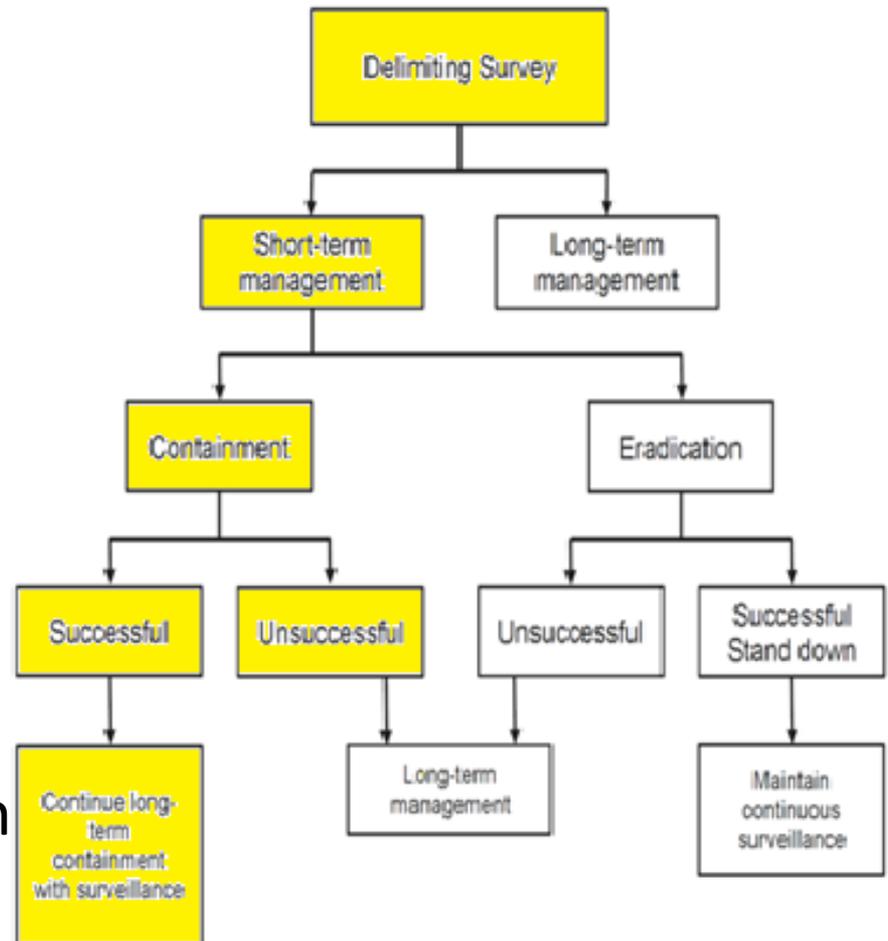


Picture of FPR in Jamaica (Photo credit: Karen Christie )

# FPR Management Plan

## Four Components:

- FPR Project Team
- Cultural Component
  - Radical Pruning
  - Stripping
- Chemical Component
- Monitoring & Evaluation



# Pruning of Cocoa Fields

Cocoa Field Before



Pruning of Trees



Cocoa Field After



Liming of the Pods



# Cultural Management Activities

Pruned & Stripped



Workers



Cutting of shade trees



# Liming of pods



# Emerging Phytosanitary Issues & Challenges

## 1. Environment

- Hurricanes, climate change

## 2. Emerging Pests

- new pests, resistant pests

## 3. Resource limitations

- financial, infrastructure, facilities

## 4. Capacity Development

- Pest surveillance, ephyto, technology, innovation, pest forecasting

## 5. Trade *and related* Issues

- Tourism, e-commerce, private standards, new phytosanitary treatments

**Thank You** 谢谢 Xièxiè

**QUESTIONS**