## Exotic Pest Information Collection & Analysis (EPICA): Plant Health Biosurveillance for the United States





### Overview

- Defining biosurveillance
- About EPICA
- Benefits of biosurveillance

# Defining Biosurveillance

- Maintaining awareness
- Systematic monitoring
  - May involve "ground-truthing"
- Reporting relevant items
- Building on and updating existing information

## About EPICA

- Plant health biosurveillance team located in Raleigh, NC
- Cooperative agreement between US Department of Agriculture and North Carolina State University Center for Integrated Pest Management
- Provides early warning for USDA-APHIS-PPQ regarding exotic plant pest threats to U.S. agriculture and natural resources



#### Staff

- Analysts with subject matter expertise in:
  - Entomology
  - Plant pathology
  - Nematology
  - Weed science
  - Technical communication
- Project lead
  - USDA-APHIS-PPQ-CPHST scientist



#### Focus

- Plant pests not established in United States
- Pest events occurring internationally
- Open source information
- News, web pages, journals, listservs, e-mail alerts
- Only gather and report on information

# Search Techniques

- Identifying useful search terms
- Automated queries
- Non-automated journal search
- Identifying and subscribing to listservs
- Monitoring web sites

## Types of Information EPICA Reports

- New location
- New host
- Outbreak
- Interception
- New description/ identification

- Eradication
- New pest
- Research of interest
- Other

# **EPICA Does Not Report**

- Sensitive or classified information
- "Old" information
- Unconfirmed/Unreliable information
- Unidentified pests
- Routine interceptions
- Routine events in a country where pest is already known to occur



#### Process

- 1) Find information
- 2) Evaluate information
- 3) Write reports
- 4) Distribute reports to subscribers
- 5) Archive reports

# Benefits of Biosurveillance

- Aid in risk analysis
- Increase awareness of pest threats
- Promote further discussion and follow-up to pest events
- Help to update pest databases
- Target inspections
- Draw attention to potential pathways
- Pest prioritization efforts
- Increase awareness of new tools/methods

# Conclusion

- Plant health biosurveillance is the systematic monitoring of pest information in order to increase and maintain awareness of potential pest threats
- EPICA aids in U.S. plant health efforts by conducting biosurveillance
- Biosurveillance can benefit many plant health functions
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