



## Exotic Pest Information Collection and Analysis (EPICA): Safeguarding Through Biosurveillance and Early Warning

### Introduction

The mission of the United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) Plant Protection and Quarantine (PPQ) is to safeguard U.S. agriculture and natural resources from the risks associated with the entry, establishment, or spread of exotic pests. For a proactive and effective safeguarding approach, PPQ needs early warning regarding plant pests that are not yet established in the United States.

To address this need, Exotic Pest Information Collection and Analysis (EPICA) conducts plant pest biosurveillance by continuously collecting, analyzing, distributing, and archiving relevant open-source information for USDA-APHIS-PPQ programs. EPICA monitors mostly English-language sources worldwide for relevant pest information.

EPICA offers:

- Dedicated, full-time staff
- Subject matter expertise
- Foreign language capability
- Close collaborations with USDA-APHIS-PPQ programs

### Information Collection & Analysis

EPICA's process for collecting and analyzing information includes the following steps:

- **Collect information from various sources**, including scientific journals, web sites, news services, and listservs
- **Filter information** for potentially relevant pest news
- **Evaluate filtered information** regarding relevance to PPQ, timeliness, and source reliability
- **Complement pest news with background research**
- **Summarize information** in a PPQ-relevant context
- **Distribute information weekly**
- **Archive information** in the Global Pest and Disease Database (GPDD)

EPICA searches more than 90 scientific journals and uses nearly 250 queries to search the internet for relevant pest news.

### EPICA Notifications

EPICA distributes relevant pest news articles to USDA-APHIS-PPQ programs through weekly e-mail notifications. EPICA notifications are timely, PPQ-focused, short, clear, and formatted for readability.

Warning: The following information has not been confirmed with the appropriate national plant protection organizations. It is provided solely for the purposes of early warning and should be used with caution. Please do not distribute this information indiscriminately.

We value your feedback! Please reply to this message with any comments or suggestions (journal, mail).

**Thursday, May 21, 2009 Notification**

**First report of the root-knot nematode *Meloidogyne enterocoli* (Tylenchida: Meloidogyinidae) in Vietnam**

Source: Plant Disease  
Source Publication Date: 6/1/09  
Category: New Location

*Phytum guineae* (spiral) plants exhibiting leaf-browning, defoliation, stunting, root galls, and death were observed in Vietnam. Molecular analysis indicated that the causal agent was *Meloidogyne enterocoli* (*Tylenchus* *Meloidogyinidae*), also called *Meloidogyne*. This represents the first report of *M. enterocoli* in Vietnam.

In addition to guava, *M. enterocoli* infects a wide range of hosts, including *Capitulum annuum* (beet), *Coffea* spp. (coffee), *Acrotylus fuscus* (butterfly), *Solanum lycopersicum* (tomato), and *Solanum melongena* (eggplant). It has been reported from China, Africa, Switzerland, South and Central America, the Caribbean, and the United States. It is only known to occur in Florida and is listed as a vegetable in the PEST ID database (www.pestid.org).

References:

1. Isahon, H., N. T. H. Thu, D. V. Ban, and K. Ichino. 2008. First report of root-knot nematode *Meloidogyne enterocoli* on guava in Vietnam. *Plant Disease* 92(5):575. Last accessed May 21, 2009. from <http://doi.org/10.1094/PDIS-03-08-0575C>.
2. EPIC. 2008. *Meloidogyne enterocoli*: a root-knot nematode. European and Mediterranean Plant Protection Organization (EPPO). Last accessed May 21, 2009. from [http://www.eppo.org/QUARANT/OTR/08/new\\_L1/meloidogyne\\_meloidogyne\\_enterocoli.html](http://www.eppo.org/QUARANT/OTR/08/new_L1/meloidogyne_meloidogyne_enterocoli.html).

**First report of Huanglongbing (citrus greening), caused by 'Candidatus Liberibacter asiaticus', in the Dominican Republic and Belize**

Source: Plant Disease: Caribbean Hot News  
Source Publication Date: 6/15/09  
Category: New Location

In August of 2008, *Citrus aurantiifolia* (lemon) trees exhibiting symptoms of Huanglongbing (citrus greening) were observed in the Dominican Republic. The presence of *Candidatus Liberibacter asiaticus*, the causal agent of Huanglongbing, was confirmed by molecular analysis. This represents the first report of *C. l. asiaticus* in the Dominican Republic; in addition, a survey conducted

EPICA notification

### EPICA Archive

All EPICA news articles are accessible through the Global Pest and Disease Database (GPDD). The GPDD ([www.gpdd.info](http://www.gpdd.info)) contains information on over 2,000 pests of U.S. quarantine concern. EPICA articles are searchable by date, category, pest, and keyword.

EPICA archive search page in GPDD



The EPICA project is a cooperative effort of the Center for Integrated Pest Management at North Carolina State University and the United States Department of Agriculture's Center for Plant Health Science and Technology.



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