

# Asian Longhorned Beetle

*(Anoplophora glabripennis)*



**FLORIDA FIRST DETECTOR**



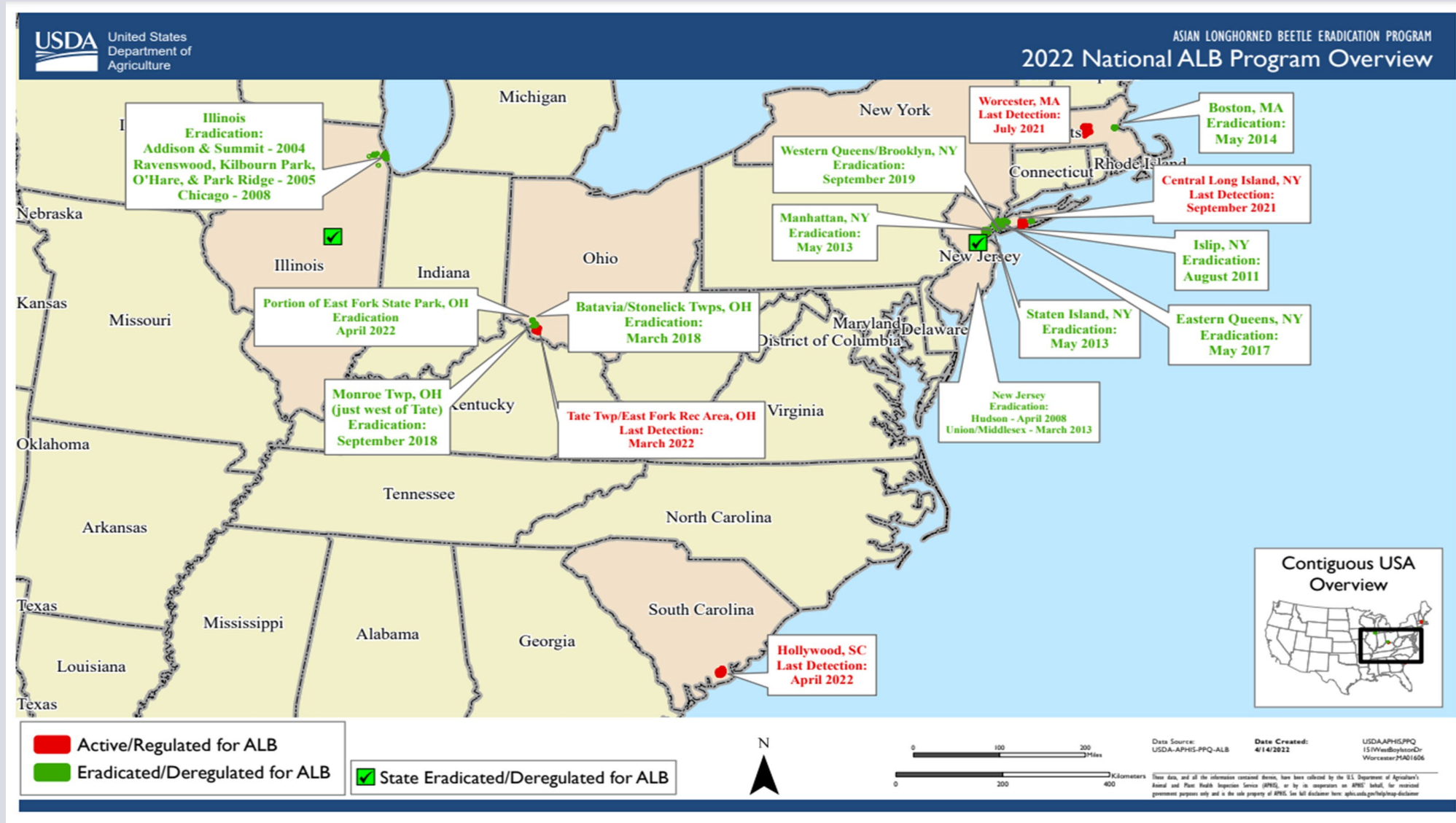
# Asian Longhorned Beetle (ALB)

- Other names: Basicosta white-spotted longicorn beetle, starry sky beetle
- Native to China & Korea
- Problem for urban, suburban and forest trees



Asian Longhorned  
Beetle

# Detection & Eradication in US



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# Host plants

- Preferred hosts
  - Maple, Elm, Buckeye, Willow, Poplar
- Potential hosts
  - Birch, Sycamore
- Occasional hosts:
  - Green Ash, Mountain Ash, Mimosa, Katsura Tree



Sugar Maple (*A. saccharum*)  
leaves

# External signs

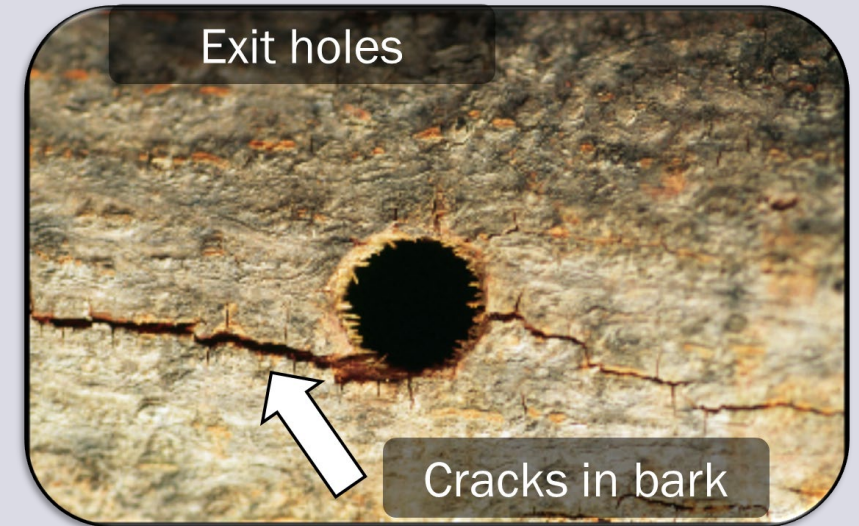


Photo credit: Left - Dean Morewood, Health Canada, Bugwood.org, #1193003; Top row – Joe Boggs, Bugwood.org, #5476353 and #5476351; Bottom row – Kenneth R. Law, USDA APHIS PPQ, Bugwood.org, #5392784 and Melody Keena, USDA Forest Service, Bugwood.org, #5431708

# Internal signs

Feeding galleries and tunnels



Pupal Chambers



# Symptoms

- Sap flowing from wounds
- Callus tissue around wounds
- Yellowing and drooping of leaves
- Branch dieback
- Tree death

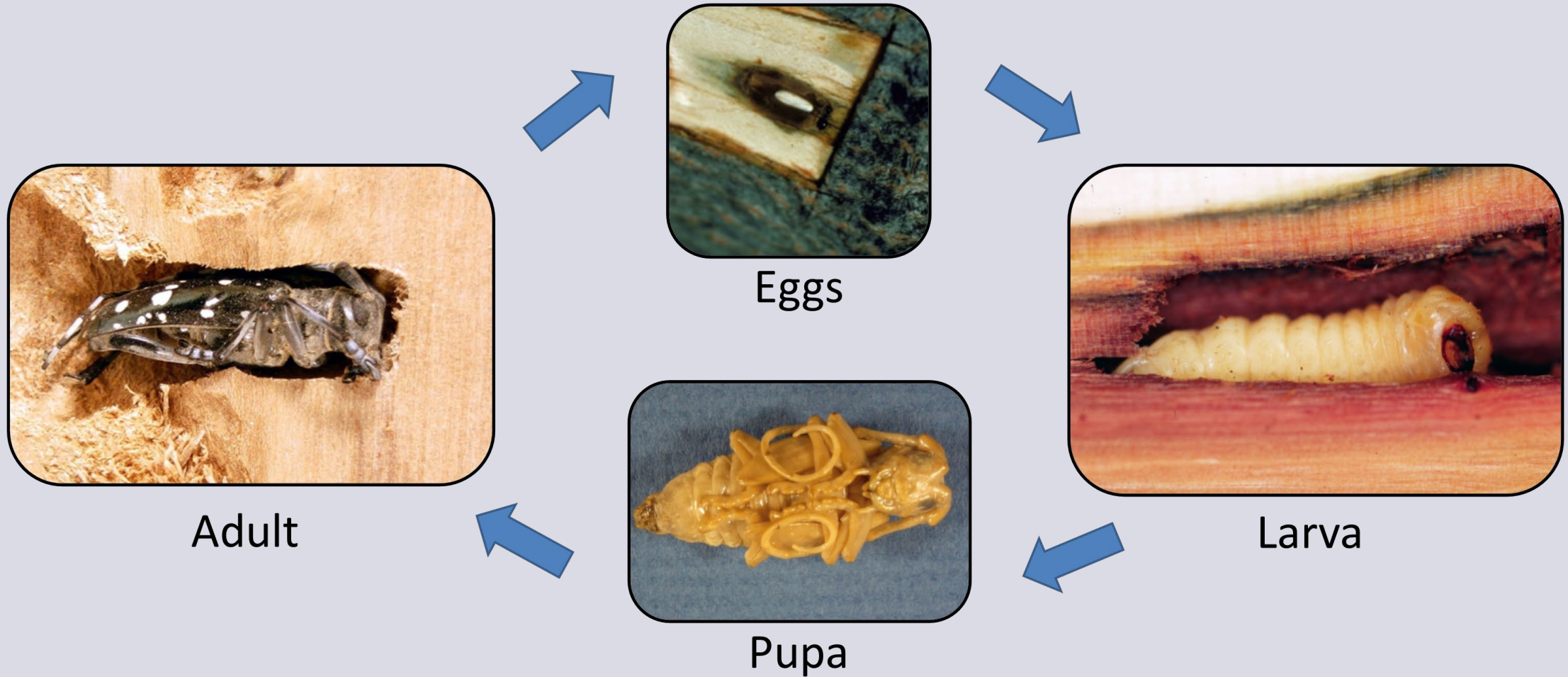


Row of dead trees



Tree showing die-back

# Life cycle





# Identification

Adult male



Adult female



Photo credit: (Top)- Kenneth R. Law, USDA APHIS PPQ, Bugwood.org, #UGA4798041, (Bottom right to left) - Michael Bohne, Bugwood.org, #UGA1262001 & #UGA1262002

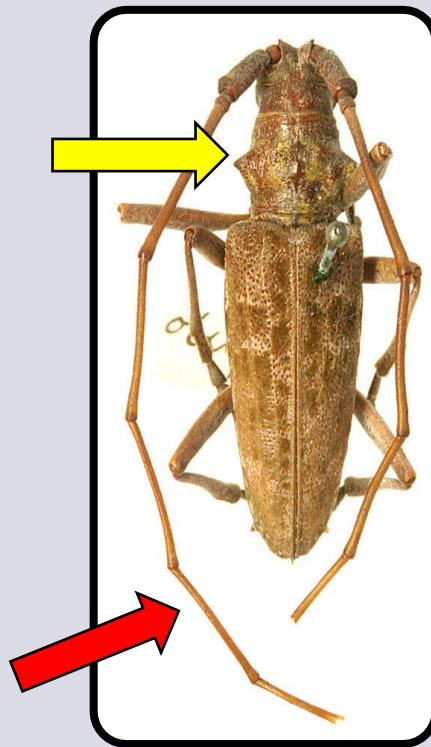
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# Look-alike species

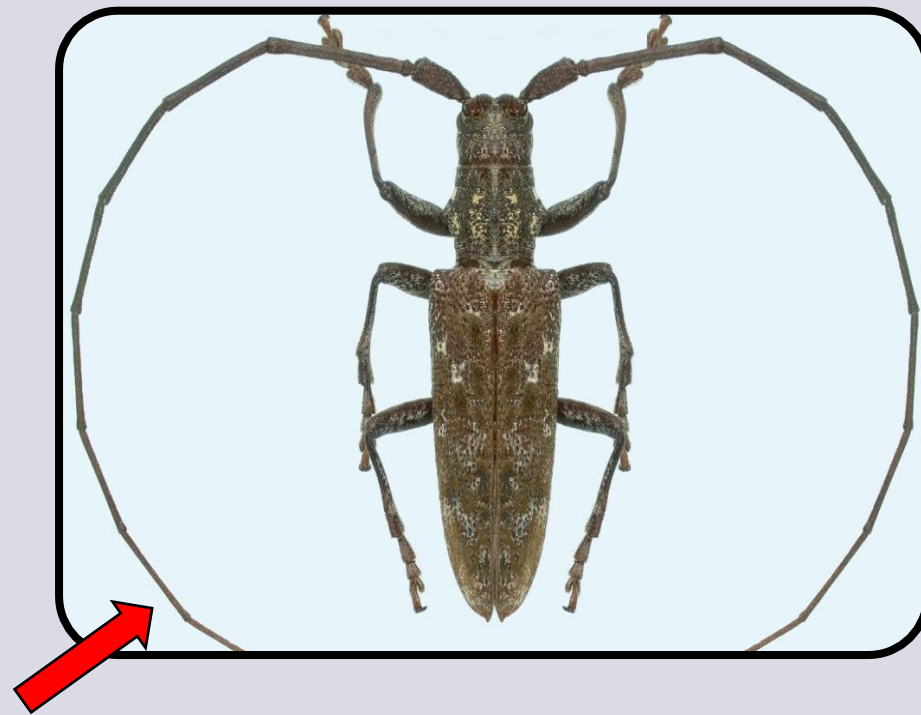


Asian longhorned beetle  
*Anoplophora glabripennis*

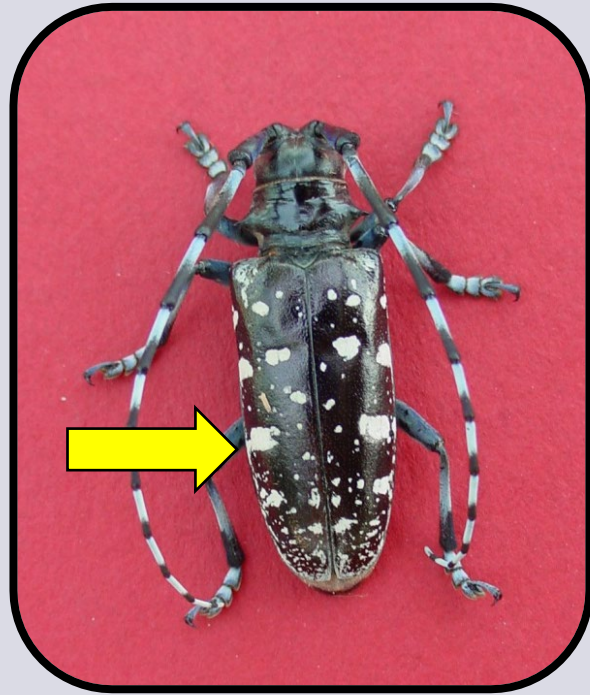
Southern pine sawyer  
*Monochamus titillator*



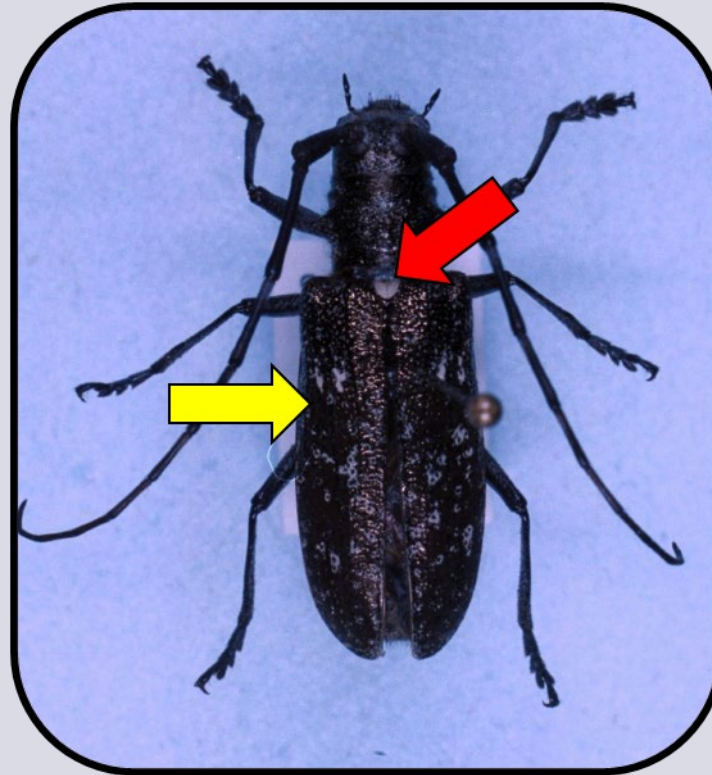
Pine sawyer beetle  
*Monochamus carolinensis*



# Look-alike species



Asian longhorned beetle  
*Anoplophora glabripennis*



Whitespotted sawyer  
*Monochamus scutellatus*



Cottonwood borer  
*Plectrodera scalator*

Photo credit: (Left to right) - Michael Bohne, Bugwood.org #UGA1262002; E. Bradford Walker, Vermont Department of Forests, Parks and Recreation, Bugwood.org, #UGA4836002; Jim Baker, North Carolina State University, Bugwood.org, #1549692

# Look-alike species



Asian longhorned beetle  
*Anoplophora glabripennis*



Long-jawed longhorn beetle  
*Trachyderes mandibularis*

Photo credit: (Left to right) - Michael Bohne, Bugwood.org #UGA1262002; Eugenio Nearn, University of Florida

# Look-alike species



Asian longhorned beetle  
*Anoplophora glabripennis*

If suspected **REPORT!**



Citrus longhorned beetle  
*Anoplophora chinensis*

# Monitoring

Call FDACS-DPI at 1-888-397-1517  
or visit <http://asianlonghornedbeetle.com/report-your-findings>



Photo credit: Thomas B. Denholm, New Jersey Department of Agriculture, Bugwood.org, #UGA1253035; APHIS photographer Daniel J. Parry; Andrew Koeser, International Society of Arboriculture, Bugwood.org, #5375276

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# Control Measures

- Prevention
  - Don't move around invasive species on accident
  - Keep your trees healthy!



Photo credit: Dontmovefirewood.org

# Control Measures

- Prevention
  - Quarantine infected areas
- Cultural
  - Removal of infested trees
- Chemical
  - Imidacloprid on host trees in quarantined areas
  - Treating wooden packing material from infested areas





# Reporting to UF/IFAS Faculty in Florida

- Local county extension office

<https://sfyl.ifas.ufl.edu/find-your-local-office/>

- Insect ID Lab - Dr. Lyle Buss

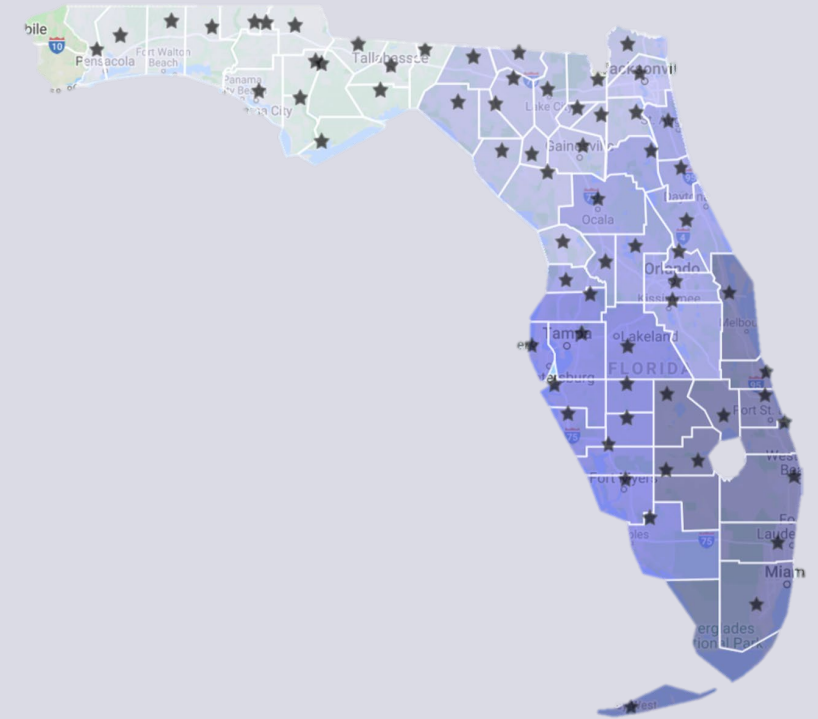
<http://entnemdept.ufl.edu/insectid/>

- Nematode Diagnostic Lab - Dr. Billy Crow

<http://nematology.ifas.ufl.edu/assaylab/index.html>

- Plant Diagnostic Center - Dr. Carrie Harmon

<https://plantpath.ifas.ufl.edu/extension/plant-diagnostic-center/>



# Reporting to FDACS-DPI in Florida

Florida Department of Agriculture and Consumer Services (FDACS)  
- Division of Plant Industry (DPI)

- FDACS, DPI Responsibility
  - Announcing detection or establishment of new invasive species.
  - Reporting is a legal obligation under Florida Statute 581.091.
- Submission Form
  - <http://forms.freshfromflorida.com/08400.pdf>
  - <https://www.fdacs.gov/Agriculture-Industry/Pests-and-Diseases/How-to-Submit-a-Sample-for-Identification>

# FDACS, DPI Contact

- Dr. Leroy Whilby, Bureau Chief-Entomology, Nematology and Plant Pathology
  - 352-395-4661
  - [Leroy.whilby@freshfromflorida.com](mailto:Leroy.whilby@freshfromflorida.com)
- Dr. Paul Skelley, Assistant Chief-Entomology, Nematology and Plant Pathology
  - 352-395-4678
  - [Paul.skelley@freshfromflorida.com](mailto:Paul.skelley@freshfromflorida.com)
- Division of Plant Industry Hotline
  - 1-888-397-1517
  - [DPIHelpline@FDACS.gov](mailto:DPIHelpline@FDACS.gov)

# Reporting using DDIS in Florida

## Digital Diagnostic and Identification System (DDIS)

- Digital Diagnostic Collaboration
  - Extension agents
  - Laboratories
  - Clinics
  - Specialists
- <https://ddis.ifas.ufl.edu/>

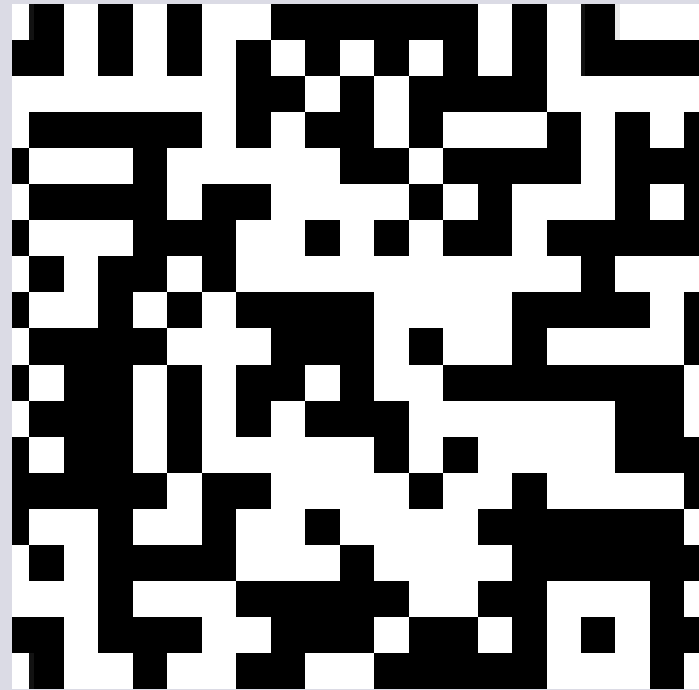


The screenshot displays the DDIS website interface. At the top, the UF IFAS Extension logo is on the left, and the DDIS logo is on the right. Below the logos is a navigation menu with links for Home, Media Library, Diagnostic Labs, Equipment, Training, and Contact Us. A login section includes links for 'Become a User' and 'Forgot Your Password', along with input fields for 'user name' and 'password', and a 'Sign In' button. The main content area features a photograph of a yellow and black striped caterpillar on a green leaf. To the right of the image, the following information is displayed:

- Sample Type:** Insect (Plant)
- Common Name:** Snowbush spanworm
- Scientific Name:** *Melanchroia chephise*
- Family:** Geometridae
- Sample Submitter:** Joe Sowards
- Sample ID:** 15-2335

# Find More Information At:

<https://entnemdept.ufl.edu/ffd/>



# Lab Team

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## **Collaborating Agencies**

- U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS)
- Cooperative Agricultural Pest Survey Program (CAPS)
- Florida Department of Agriculture and Consumer Services (FDACS)
- National Plant Diagnostic Network (NPDN)
- Sentinel Plant Network (SPN)
- University of Florida Institute of Food and Agricultural Sciences (UF-IFAS)
- Protect U.S.

# Educational Disclaimer and Citation

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- Citation:
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