IFAS DISEASE ALERT FOR FLORIDA PANHANDLE
ASIAN CITRUS PSYLLID

Asian citrus psyllid *Diaphorina citri* Kuwayama, vector of the causal agent of Huanglongbing (HLB) or citrus greening

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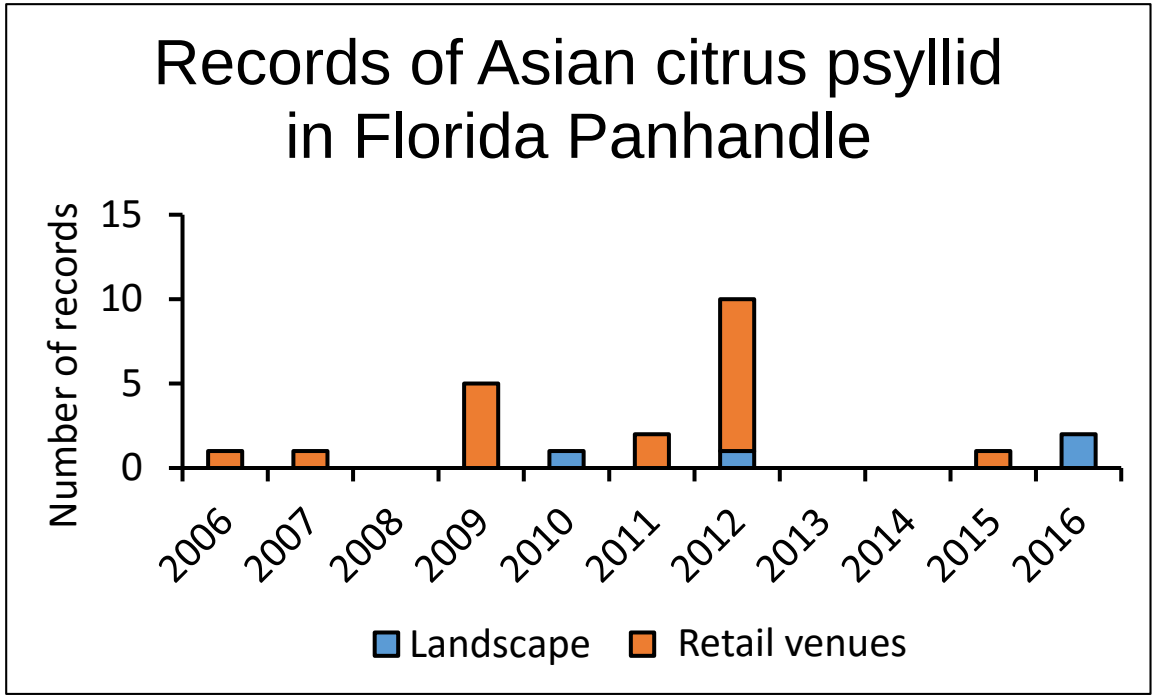
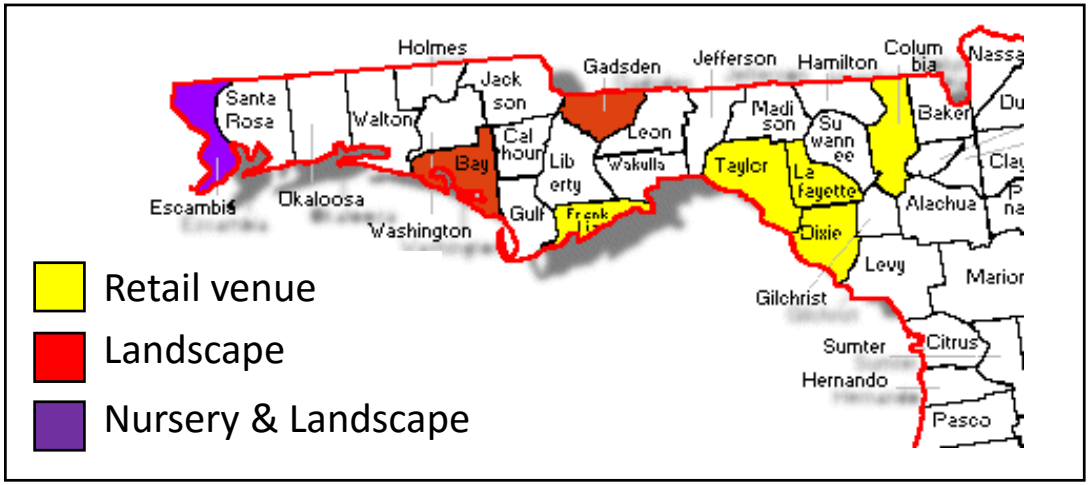
The Asian citrus psyllid

- The Asian citrus psyllid (ACP) is the most serious pest of citrus worldwide, because it is the vector of the phloem limited bacteria *Candidatus* Liberibacter asiaticus, the pathogen responsible for Huanglongbing (HLB), or citrus greening.
- HLB symptoms include chlorotic leaves; twig dieback; fruit drop; misshapen and small fruits; lower internal fruit quality; and eventual tree death 3 to 5 years after infection.
- ACP develop on all commonly grown citrus cultivars and related orange jasmine.
- The ACP was first found in Florida June 1998, although is now established in every county in south and central Florida.
- More information on Asian citrus psyllid: http://edis.ifas.ufl.edu/in160

Asian citrus psyllid in Florida panhandle

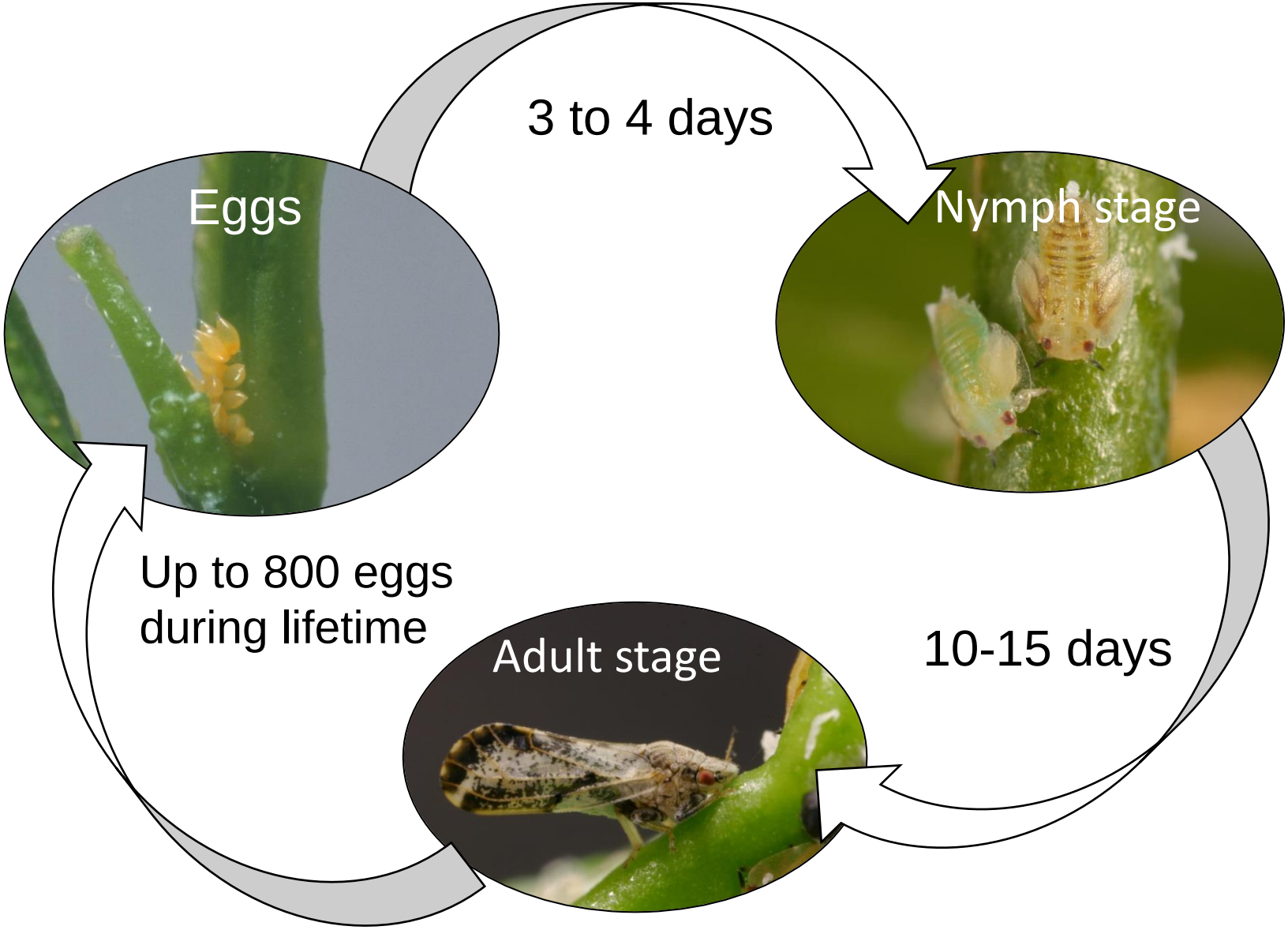
Asian citrus psyllid is not yet established in the Florida Panhandle, but is regularly found in retail venues and landscape.





Counties where Asian citrus psyllids have been found in the Florida Panhandle.

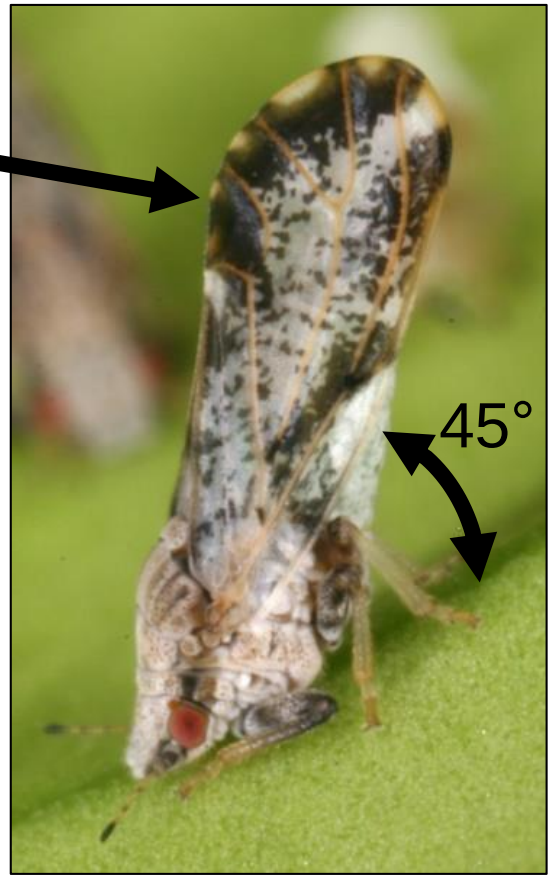
Asian citrus psyllid life cycle



Asian citrus psyllid adult identification

- Adults jump when approached
- They sit in a vertical position with abdomen up in the air

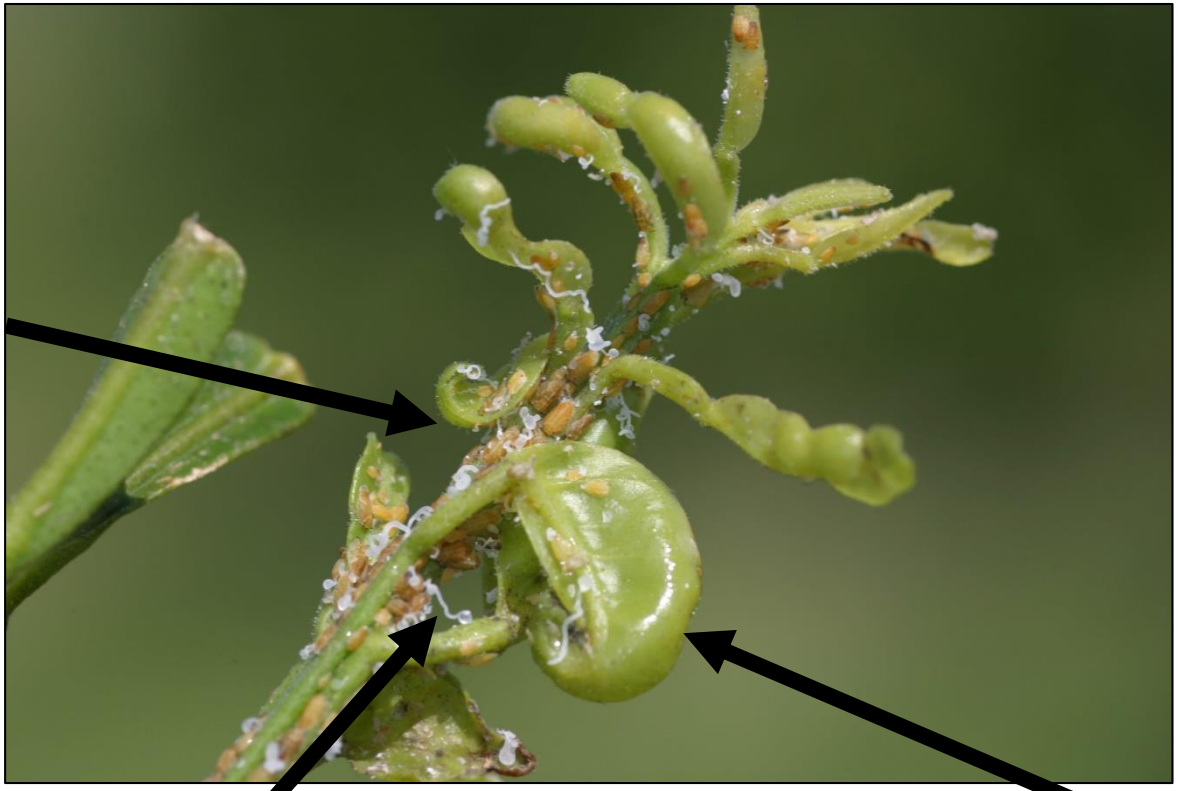
Black coloration at the end of the wings



1/10 to 1/6 inches

Asian citrus psyllid nymph identification

- Nymphs are always found on new emerging leaves.
- Can be confused with scale insects, but scale insects do not move and do not produce white honeydew.



Asian citrus psyllid sampling

Flush examination. In addition to nymphs that are only found on new emerging leaves, adults are often present on flush, either because they just emerged, are laying eggs, or are looking for a mate. Flush examination is the fastest and easiest way to assess for the presence of Asian citrus psyllid.

Tapping: Tap a randomly selected branch three times with a stick (PVC pipe). Psyllid adults are counted as they fell on a white board placed below tapped branch. Ten tap samples should be made at ten locations per block
http://edis.ifas.ufl.edu/in1116

Yellow **sticky traps** can also be used to monitor flying Asian citrus psyllid adults. One trap is recommended per 20 trees.

Prevention

- Sample every week during spring and summer for Asian citrus psyllid, especially when young flush are abundant on citrus.
- Only buy citrus from registered nurseries. Always check citrus for psyllids and psyllid damage prior to purchase.
- When possible, grow windbreaks or hedgerows on citrus grove borders, as this can reduce densities of the pest on grove borders.

Windbreaks may help protect citrus groves from Asian citrus psyllid infestation. More information on windbreak in citrus groves can be found at: http://www.crec.ifas.ufl.edu/extension/windbreaks/

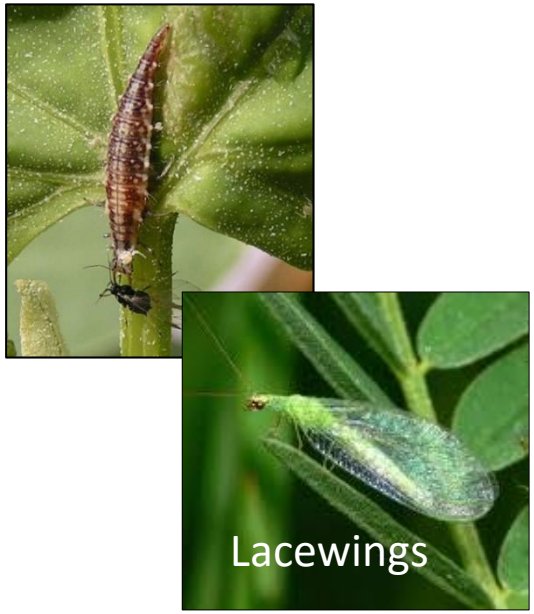
Asian citrus psyllid natural enemies

The wasp *Tamarixia radiata* is a biological control agent for Asian citrus psyllid. To obtain and release *T. radiata*, contact Robin Stuart at robin.stuart@freshfromflorida.com
Other Asian citrus predators include ladybugs, hoverflies, lacewings and spiders. These predators are more generalist than *T. radiata* and therefore can survive without the presence of the Asian citrus psyllid by feeding on other prey.

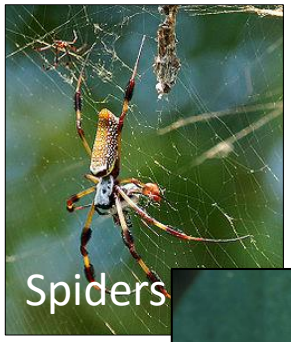
Adult female *Tamarixia radiata*

Asian citrus psyllid nymphs killed by *Tamarixia radiata*

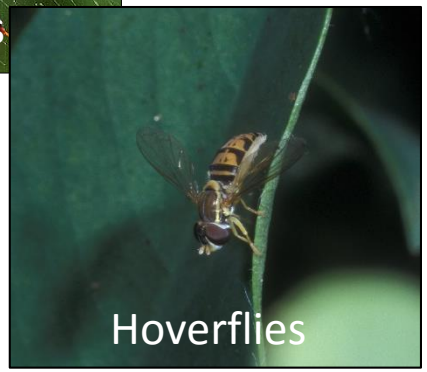
Ladybugs



Lacewings



Spiders



Hoverflies

Asian citrus psyllid treatments

- Insecticide applications are an important tool currently available for management of Asian citrus psyllids.

- Soil-applied insecticides (mainly neonecotinoides) offer longer lasting systemic protection.
  - The main advantage is that they disrupt psyllid feeding, and therefore significantly reduce citrus greening pathogen transmission.
  - They are preventive in nature and require approximately 10-14 days following application for proper uptake by treated plants before they are optimally protected.

- Foliar-applied insecticides are typically not systemic
  - They are shorter–lived than soil-applied insecticides, but offer immediate protection.

- More information on insecticides registered against Asian citrus psyllid can be found at: http://edis.ifas.ufl.edu/in686

BEWARE! Most of the insecticides used against Asian citrus psyllid are toxic to honeybees and other pollinators. **DO NOT** apply insecticide during blooming period, and always check the label for specific restriction on use.

Citrus quarantines in Florida

For detailed information about Quarantines refer to the following links:

Citrus Quarantines in Florida

Florida is currently under statewide quarantine as directed by CFR 301.75 Subpart Citrus Canker and by federal order from the United States Department of Agriculture (USDA) for citrus canker, sweet orange scab, Huanglongbing and the Asian citrus psyllid. In addition, portions of Collier, Hendry and Polk counties in Florida are under quarantine for citrus black spot disease.

Citrus National Quarantine Map

Learn more about Huanglongbing

USDA

Citrus Greening

Huanglongbing (HLB)/Citrus Greening Disease Information

Citrus Health Response Program (CHRP)

UF/IFAS Citrus Extension

Citrus Greening (Huanglongbing)

Testing sites in Florida

Division of Plant Industry, FDACS
1911 SW 34th Street, Gainesville, FL 32608
(352) 395-4768
xiaoan.sun@freshfromflorida.com
http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry

UF IFAS North Florida Research and Education Center
155 Research Road, Quincy, FL 32351
850-875-7154
paret@ufl.edu or fbiriarte@ufl.edu
http://nfrec.ifas.ufl.edu/
http://programs.ifas.ufl.edu/u-scout/Lab_Profile.html

Plant Diagnostic Center
Department of Plant Pathology, University of Florida
Building 1291, 2570 Hull Road Gainesville, FL 32611-0830
352-392-1795
clharmon@ufl.edu
http://plantpath.ifas.ufl.edu/extension/plant-diagnostic-center/

UF/IFAS Southwest Florida Research and Education Center
2686 State Road 29 N., Immokalee, Florida 34142
(239) 658-3408
obatuman@ufl.edu
http://swfrec.ifas.ufl.edu/programs/plant-path/