

The Backyard Orchard – Citrus– Module 4.1 – Citrus Arthropods: ACP & Citrus Root Weevil



LSU AgCenter Backyard Orchard
Certificate Course

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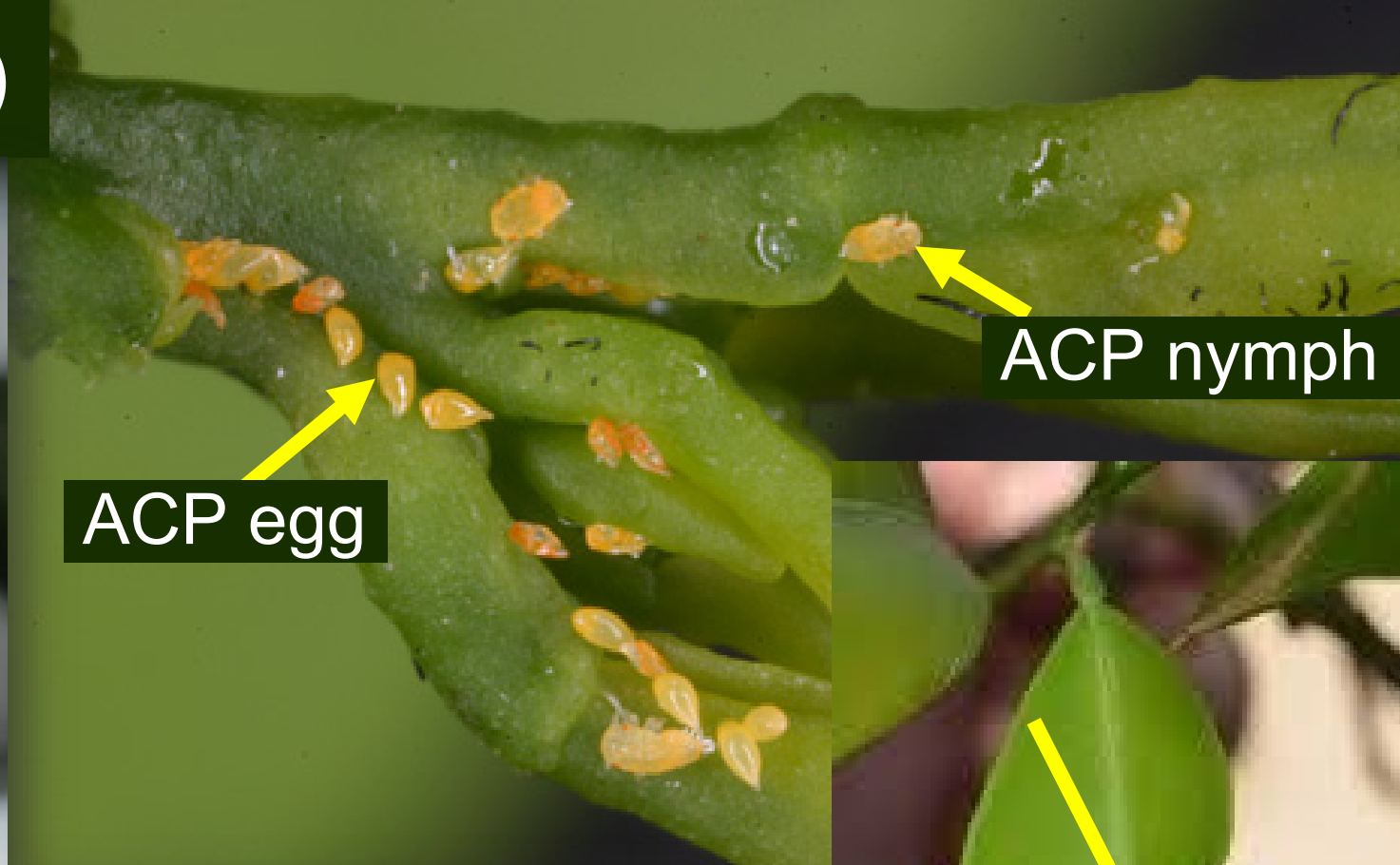
Asian citrus psyllid

- *Diaphorina citri*
- It vectors a bacterial disease called citrus greening.
- Adults are very small and measure 3-4 mm in length.
- Female psyllid lays bright orange eggs in the whorls of newest growth.
- Eggs hatch and yellow immature psyllid feed on new growth and suck cell sap.
- Immature psyllids go through five nymphal instars.
- Nymphs produce white waxy tubules from posterior ends to direct honey dew away from their bodies.

Asian citrus psyllid

- Adult psyllids have piercing and sucking mouth parts.
- Adults feed on citrus leaves at a 45 degree angle position.
- Their feeding causes twisting damage to the leaves known as leaf notching.
- Black sooty mold may appear on leaves growing on honeydew produced by nymphs and adults.
- Under favorable conditions, Asian citrus psyllid may complete up to 30 generations.
- Ants protect Asian citrus psyllid nymphs.
- Systemic insecticide containing imidacloprid labeled for citrus trees can be used as soil drench.
- Foliar application of horticulture oils and insecticidal soaps may provide ACP control.

Asian citrus psyllid (ACP)



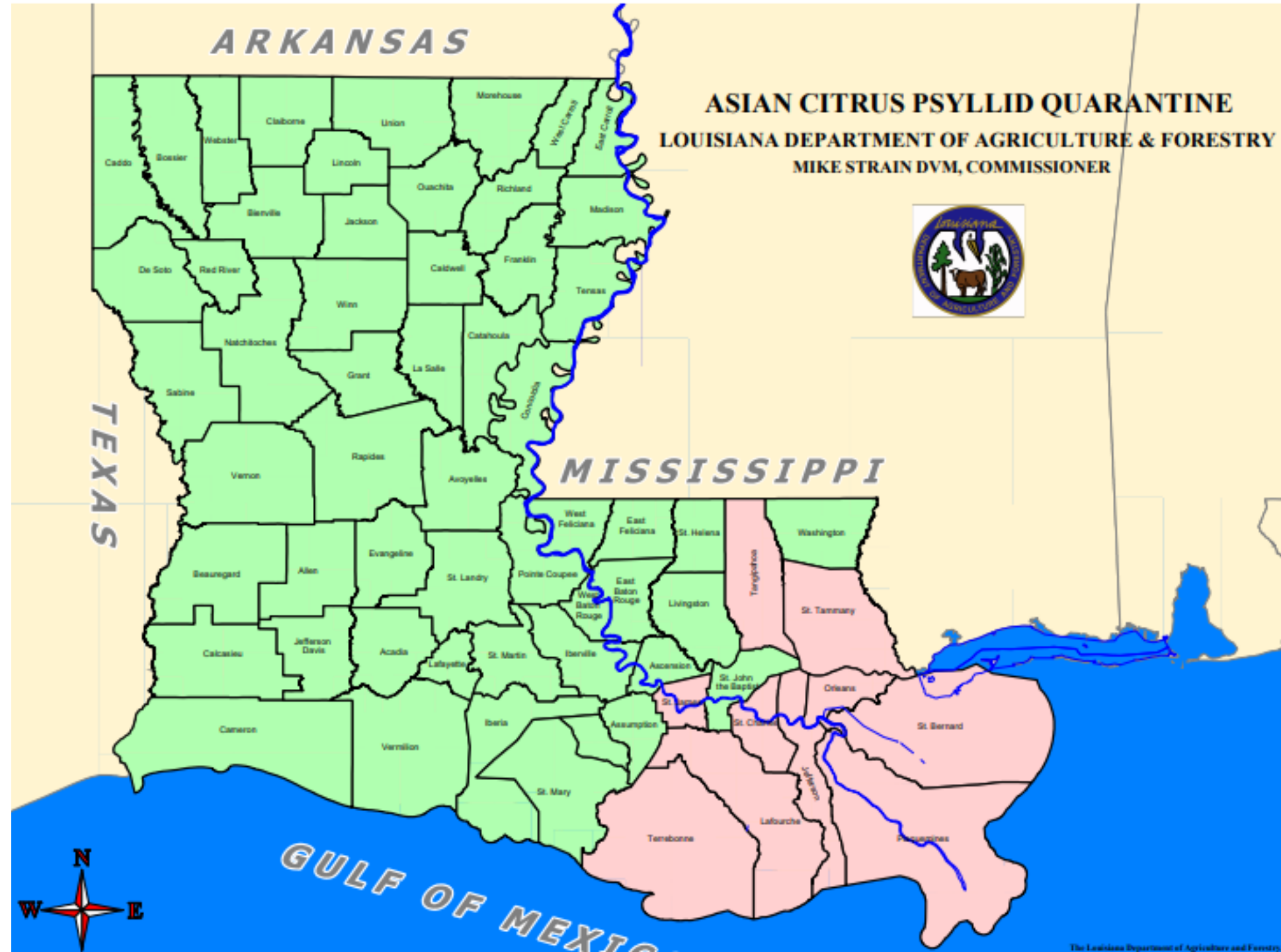
Leaf notching
caused by ACP
Credit: M. O'Neill,
ucanr.edu

Asian citrus psyllid nymphs



Credit: David Hall, USDA Agricultural Research Service, Bugwood.org

Asian citrus psyllid distribution



Diaprepes root weevil

- *Diaprepes abbreviates*
- Also known as sugarcane rootstock borer, citrus root weevil or West Indian weevil.
- Adult beetles feed on leaves and notch leaves in a semicircular fashion.
- The feeding from adult beetle does not do any harm to mature trees.
- The feeding from weevil larvae on the roots can kill the tree.
- Root injury caused by weevil larvae of citrus root weevil provides infection sites for foot/root rot caused by *Phytophthora* sp.
- Female weevils lay eggs between two leaves and glue them together with a gelatinous material.

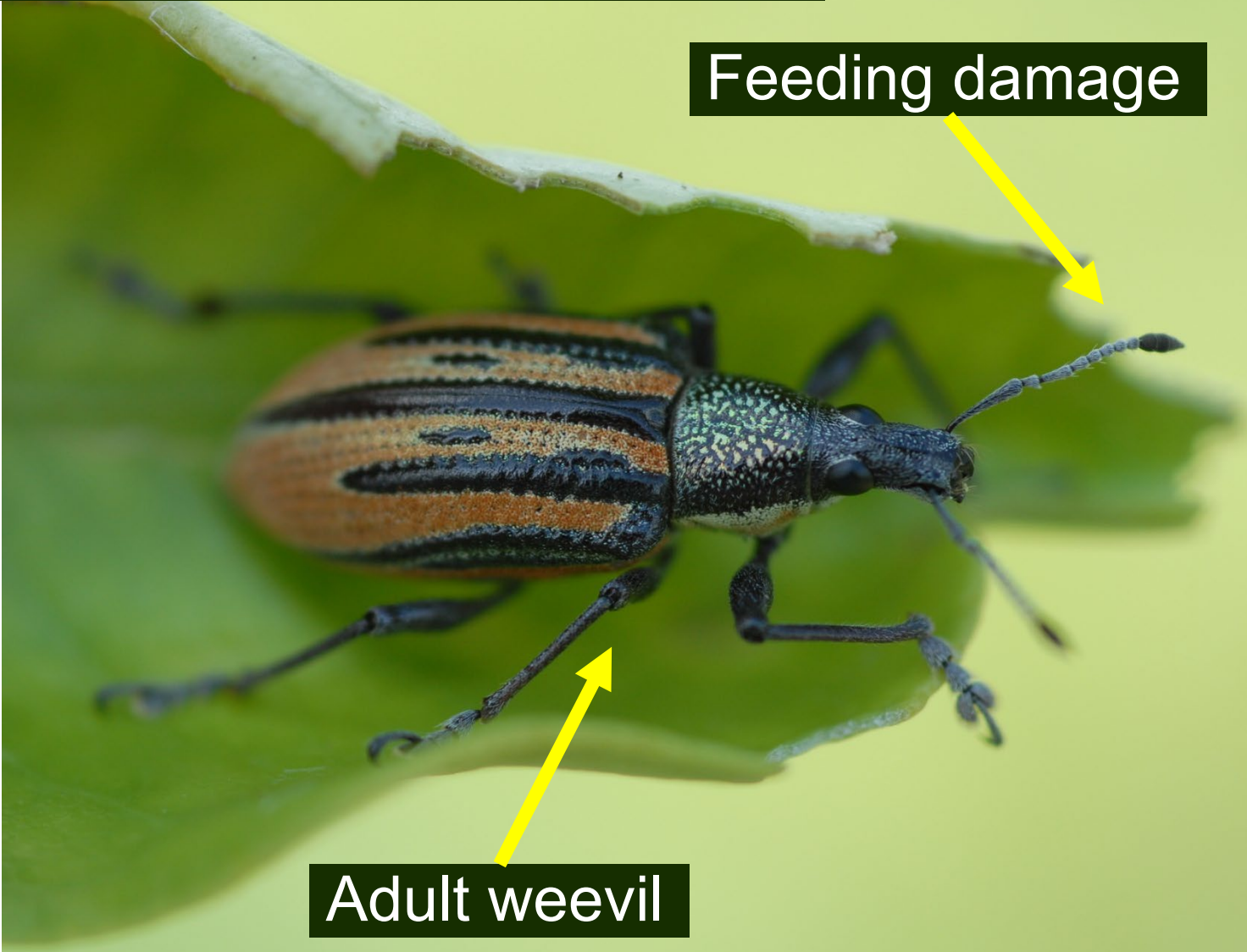
Diaprepes root weevil

- Newly emerged larvae do not feed on the leaves but drop to the soil where they burrow and feed on the roots.
- Larvae are grub shaped and creamy white in color.
- As larvae molt and grow, they become aggressive feeders.
- Larvae can damage the entire root system of mature trees.
- Mature larvae pupate in the soil for two to four weeks before the adults emerge.
- Control adults with pyrethroids or carbamates.
- Control larvae with imidacloprid (not during bloom)
- There are two species of nematodes, *Heterorhabditis indica* and *Steinernema riobravis*, that will attack and kill diaprepes root weevil.

Diaprepes root weevil

Feeding damage

Adult weevil



Weevil larvae





Please post all your questions and results to the message board that was emailed to you.

