CITRUS PEST SPOTLIGHT



Figure 1. Adult Diaprepes root weevil and leaf notching caused by adult feeding damage



Figure 2. Diaprepes egg mass laid on the underside of a leaf



Figure 3 (above). Diaprepes root weevil larvae

Figure 4 (right). Feeding damage to a structural tree root caused by Diaprepes larvae



SCIENTIFIC NAME:

Diaprepes abbreviatus (L.)

(Coleoptera: Curculionidae)

IDENTIFICATION:

Diaprepes root weevil

By Michael E. Rogers

Adults (Figure 1) are 1-2 cm in length and are easily recognizable

by the bright orange/yellow color patterns on the elytra (wing covers). Eggs (Figure 2) are 1.2 mm long by 0.4 mm wide, yellow/white in color and are laid in masses on the underside of a mature leaf, which is usually glued to the top side of an adjacent leaf to provide protection for the eggs. Diaprepes

larvae (Figure 3) are white in color, lack legs, and are not readily observed since they are found in the soil feeding on the root system of the tree.

DAMAGE:

Feeding by the adult weevils, observed as leaf notching (Figure 1), is the most easily recognizable damage caused by Diaprepes. However, this leaf damage has no effect on overall tree health and fruit yield. Damage which can result in economic loss is caused by the larval stages of Diaprepes which feed on the root system of the tree (Figure 4). Girdling of the roots can cause root dieback; girdling of the crown can lead to tree death. This direct feeding damage to the roots also increases the likelihood of Phytophthora infection, which may result in rapid tree decline.



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MANAGEMENT:

In groves with a history of significant Diaprepes damage, pesticide applications to reduce weevil populations may be justified. Two foliar sprays (spaced four weeks apart), targeting adult weevils after emergence begins, have been shown to reduce weevil populations and the associated root damage. Many of the foliar insecticides recommended for controlling adult Diaprepes will also provide control of the Asian citrus psyllid. Soil barrier sprays, applied shortly after peak adult emergence, may be used to control larvae as they emerge from egg masses in the canopy and fall to the soil. Previously, parasitic nematodes were also commercially available that could be used to target Diaprepes larvae in the soil. Currently, recommended nematode products for Diaprepes are commercially unavailable.

For more detailed information on control of Diaprepes root weevil, please refer to the 2012 Florida Citrus Pest Management Guide.

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CITRUS WEED SPOTLIGHT

Goatweed (Scoparia dulcis)

By Stephen H. Futch

LEAVES: opposite, blades narrow, toothed, ¹/₂ to 1¹/₂ inches long; dots on both sides

STEM: multiple, branched, erect,



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smooth or with soft, fine hairs; becomes woody rather quick

> **FLOWERS:** small, white, about 1/8 to 3/16 inch long, borne in the leaf axils

SEEDS: yellowishbrown capsules contain numerous, extremely small, brown seeds

LIFE CYCLE: perennial

HEIGHT: 1 to 2.5 feet tall

Stephen H. Futch is a multicounty citrus Extension agent based at the Citrus Research and Education Center in Lake Alfred.

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