Have you seen this insect?

The Diaprepes Root Weevil

DESCRIPTION

The Diaprepes root weevil, Diaprepes abbreviatus (L.) (Coleoptera: Curculionidae), is a large, colorful weevil, 3/8 to 3/4 inch (10 to 19 mm) long, with numerous forms, or morphs, ranging from gray to yellow to orange and black. Because of its broad host range, the Diaprepes root weevil poses a great threat to the citrus, avocado, ornamental, and other agricultural industries in California.

ORIGIN

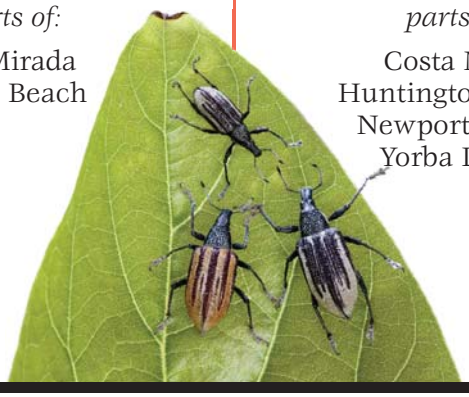
This weevil is native to the Caribbean region and was accidentally introduced into Florida in the 1960's where it has caused extensive damage. It has been intercepted in shipments of plants to California and in 2005 two isolated populations were found in Newport Beach (Orange County) and Long Beach (Los Angeles County).

QUARANTINE AREAS

Since the initial finds the weevil has been found in additional areas in Los Angeles, Orange, and San Diego Counties. To control this pest and prevent it from spreading the California Department of Food and Agriculture has established quarantine zones in the following cities:

Cities with Quarantine Zones

Los Angeles County	Orange County	San Diego County
parts of:	*parts of:*	*parts of:*
La Mirada	Costa Mesa	Carlsbad
Long Beach	Huntington Beach	Carmel Valley
	Newport Beach	Del Mar
	Yorba Linda	Encinitas
		Fairbanks Ranch
		La Jolla
		Oceanside
		Rancho Santa Fe
		Solana Beach
		Sorrento Valley



HOST PLANTS

This weevil will feed on about 270 different plants including citrus (all varieties), hibiscus, palm, birch, roses, coral trees, indian hawthorne, loquat, holly, and other ornamentals. Because of its broad host range, the Diaprepes root weevil poses a great threat to the citrus, avocado, ornamental, and other agricultural industries in California.

Fig. 1 – Frass left by feeding adults

FEEDING

The Diaprepes root weevil damages both the leaves and the roots of plants. The adult weevils damage leaves by chewing semi-circular areas out of the leaf margin (fig. 1). There may also be frass or weevil droppings near the areas that have been fed upon. The grub-like larva (fig. 4) feeds upon the roots of a plant weakening or killing a plant.

Fig. 2 – Leaves folded and glued together

LIFE CYCLE

In leaves that are folded and glued together (fig. 2), an adult female weevil lays clusters of eggs .04 inch (1mm) long (fig. 3). The eggs hatch in 7-10 days, and the newly emerged larvae drop to the soil. The larvae enter the soil and feed upon the roots of plants for several months. Full grown larvae are C-shaped and whitish, and can reach 1 inch (25mm) in length (fig. 4). The larvae then pupate in the soil (fig. 5). After the appropriate amount of time, adults will emerge and the life cycle begins again.

Fig. 3 – Diaprepes eggs on unfolded leaves

REPORT

If you see the adult weevils or have damage to plants you suspect is caused by the weevil, please contact the CDFA Exotic Pest Hotline at 1-800-491-1899. Personnel from CDFA will inspect plants for the presence of the Diaprepes root weevil and send any specimens collected to the CDFA diagnostic laboratory for identification.

Fig. 4 – Full grown Diaprepes larva

MORE INFORMATION

Read UC Publication 8131: Diaprepes Root Weevil (free) found on the University of California Division of Agriculture and Natural Resources publications website: http//anrcatalog.ucdavis.edu. Detailed information on the quarantine boundaries can be found on the California Department of Food and Agriculture PHPPS Regulations Activities website: http://pi.cdfa.ca.gov/pqm/manual/htm/417.htm

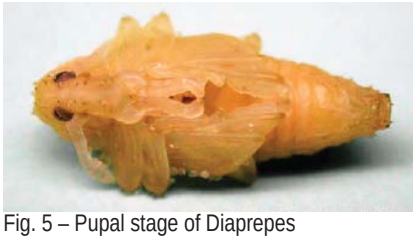


Fig. 5 – Pupal stage of Diaprepes

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