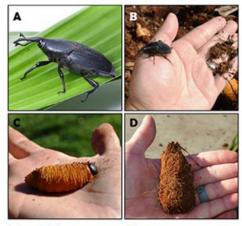
SOUTH AMERICAN PALM WEEVIL

The South American palm weevil (*Rhynchophorus palmarum* (L.) was first detected in San Diego County in 2011. The weevil has a strong preference to attack Canary Island date palms (*Phoenix canariensis*), and when these palms are not available, it can infest açaí palm (*Euterpe oleracea*), African oil palm (*Elaeis guineensis*), coco de palmito (*Euterpe edulis*), coconut (*Cocos nucifera*), edible date palm (*Phoenix dactylifera*), and sago palm (*Metroxylon sagu*).

1. Biology and lifecycle

The adults weevils, black and approximately 1.5" in length, lay eggs into a hole they chew in the crown area of the palms. The larvae that emerge are cream colored and can grow to be up to 5" in length. The larvae create tunnels as they feed, which fill with excrement and plant sap. These tunnels cause significant damage to palms, resulting in reduced vigor or death. The larvae form cocoons using course palm fiber and pupate inside the center of palms, and adult beetles emerge from the



(A) and (B) adult SAPW. (C) Mature SAPW larva.
(D) SAPW cocoon. Photo credits: (A) Mike
Lewis, Center for Invasive Species Research,
UC Riverside, (B), (C), and (D), Ricardo Aguilar,
Aguilar Plant Care.

cocoons to continue feeding on the palm trees for two to three months. Adults continue to mate and lay eggs, and are strong flyers ensuring the infestation and life cycle can continue when they find a new palm host.

2. Symptoms

Dieback of the apical (newest, uppermost) fronds is one of the most common symptoms of a palm weevil infestation. Additional symptoms include:

- Notching patterns on fronds where adults feed on leaf tissue
- Tunnels at the base of palms
- "Gnawing" sounds produced by larvae during feeding
- Plant sap oozing from tunnel holes
- Insect frass accumulation near tunnels or near the leaf bases





Dieback of infested palm fronds. Photo by UC Riverside

Infested trees are more likely to litter fruit, fronds, and other plant material. If the infestation is not managed, trunk breaking or crown toppling has been reported. Unmanaged trees present a safety risk if infested trees are in yards, streets, and other urban areas.

3. Management

In Encinitas, palms are regularly inspected for signs and symptoms of the weevil. As of January 2024, 67 City-owned palms have been reported to be infested. Palms can be treated with systemic insecticides <u>before</u> infestation occurs to protect against a weevil attack. Once trees are infested, rapid removal of the palm is recommended to prevent further spread.

4. Resources

For more information on the palm weevils, consult the following fact sheets:

South American palm weevil, University of California Riverside (UCR) Biocontrol Program: https://biocontrol.ucr.edu/south-american-palm-weevil

South American palm weevil, Center for Invasive Species Research, UCR: https://cisr.ucr.edu/blog/2018/10/18/south-american-palm-weevil-invasion-san-diego-county-california

To report an infested palm:

http://cisr.ucr.edu/palmarum_survey.html

