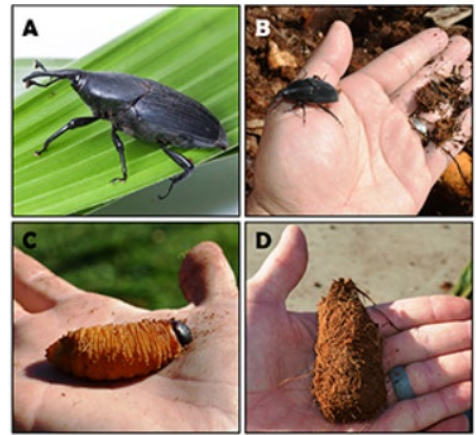


SOUTH AMERICAN PALM WEEVIL

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 açai 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 coarse palm fiber and pupate inside the center of palms, and adult beetles emerge from the 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.



(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.

2. Symptoms

Stressed palms are more susceptible to attack, but healthy palms can also become infested. 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. Currently, no City-owned palms have been reported to be infested. Depending on the jurisdiction and severity of the infestation, systemic insecticide programs and/or biological control of the weevils using parasitic flies may be recommended. Palms should be treated with systemic insecticides before infestation occurs to prevent 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://cizr.ucr.edu/blog/2018/10/18/south-american-palm-weevil-invasion-san-diego-county-california>

To report an infested palm:
http://cizr.ucr.edu/palmarum_survey.html