

A SERIOUS THREAT

Although coconut and oil palms are the rhino beetle's preferred "host", more than 30 types of palms are also at risk, including areca, date, foxtail, Manila, royal, betel, and fan palms (endangered *Pritchardia* spp. are also at risk).

Rhino beetles also damage other important plants:

- agave
- banana
- cacao
- hala (pandanus)
- papaya
- pineapple
- sugarcane
- taro (dry and wetland)
- tree fern



Traps like this will be hung in trees to survey for adult beetles. Please do not remove or disturb these traps! If you see a fallen trap, please contact us.

For more information, visit:
www.hdoa.hawaii.gov/pi/main/crb/

THE PLAN

The Hawaii Department of Agriculture, U.S. Department of Agriculture, University of Hawaii, and cooperators are working together to eradicate the rhino beetle from Hawaii.

Pheromone traps are being used to capture adult beetles within the infestation zone, and as early detection tools everywhere else. Crews are surveying palm trees for beetle damage, and are looking at all mulch piles, compost, manure, and sick or dead standing palms as potential breeding sites.

Please help protect Hawaii:

- Do not move potentially infested materials such as compost or coconut palm trimmings.
- Call the CRB Eradication program at **(808) 679-5244**, email stoprhino@gmail.com, or dial the State Pest Hotline at **643-PEST** (643-7378) to report any sightings of rhino beetles or possible beetle damage on palms. Mahalo!



Department
of Agriculture

STATE OF HAWAII

STOP RHINO

**Honolulu
Coconut Rhinoceros Beetle
Eradication Program**



**Report all sightings:
CRB Eradication: 679-5244**

or

StopRhino@gmail.com

or

**State Pest Hotline
643-PEST (643-7378)**



RHINO BEETLE DAMAGE

The coconut rhinoceros beetle is a large scarab beetle that is a major pest of palms. Adult beetles bore into the crowns (tops) of coconut palms where they feed on sap. When a beetle bores through developing leaves, those leaves grow out with distinctive V-shaped cuts. Beetle damage weakens and may kill palms. When rhino beetles invaded Palau, they lost 50% of their coconut trees within ten years.



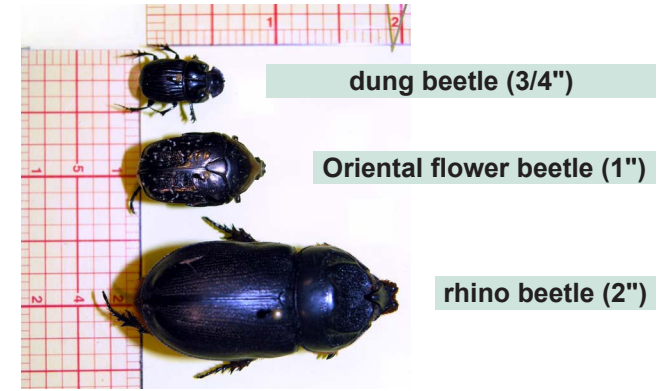
RHINO BEETLE IN HAWAII

The coconut rhinoceros beetle (*Oryctes rhinoceros*) is native to Southeast Asia and is invasive throughout the Western Pacific Region. This pest was first detected in Honolulu on December 23, 2013 and an eradication response was launched.



RHINO BEETLE BIOLOGY

- Adult rhino beetles are large (up to 2.5 inches long) black beetles.
- There are four life stages: eggs, larvae, pupae and adults.
- Eggs are laid in rotting logs, mulch, compost, or even manure. The larvae eat the rotting material until they pupate.
- The larvae are large white, C-shaped grubs which grow to about 3.5 inches in length.
- Adult beetles emerge about four months later. They are nocturnal (active at night) and can fly.



RHINO or NOT?

- Adult rhino beetles are nearly as long as a dollar bill is wide (up to 2.5 inches) and both male and female adults have horns.
- Adult Oriental flower beetles (*Proteatia orientalis*) are widespread and may be mistaken for the rhino beetle, but they lack a horn, are smaller (up to 1 inch in length), and have mottled white patches.
- Larvae of both beetles look similar, but rhino larvae crawl on their sides, and Oriental beetle larvae wiggle on their backs.
- Adult dung beetles (*Copris incertus*) are black, have a small horn, but are much smaller (3/4 inch) than rhino beetles.

