

# RHINO

## INVASIVE SPECIES ALERT

### Coconut Rhinoceros Beetle

*Oryctes rhinoceros*

#### Introduction

The coconut rhinoceros beetle (CRB) is an invasive species that was found on Guam on September 11, 2007. An invasive species is a non-native species whose introduction into an ecosystem is likely to cause harm to the environment, economy, or human health.

#### Damage

While CRB larvae are rather harmless, adult rhino beetles are highly destructive to coconut trees and other palms. This is because the adults bore into the crowns (tops) of palms, where they feed on sap. When a beetle bores through developing leaves, the leaves grow with a distinct V-shaped cut. Over time, excessive leaf damage may rob the palm of vital nutrients and the ability to grow, eventually resulting in the death of the plant.

#### Biology

There are four life stages of CRB: eggs, larvae, pupae and adults. Eggs are laid in organic debris, such as rotting logs, where they grow through the larvae and pupae stages and emerge as adults roughly four months later. Adult CRB (pictured above) are large, black beetles approximately two inches in length. Adults possess distinctive horns, which give the beetle its name.

#### Eradication

Eradication efforts of CRB have been unsuccessful on Guam, partly due to this particular genotype's resistance to biological controls, such as species-specific viruses. However, some efforts to limit growth and spread of the infestation have proven to be successful. One such strategy is the conversion of breeding sites to effective traps through the use of Tekken - a gill net historically used by Chamorro fishermen. This particular net, which is the exact size necessary to entangle the rhino beetle's head, can be placed over a pile of organic debris to catch adult beetles going into the debris to mate, as well as young adults emerging from these sites.

Visit the United States Department of Agriculture's website at [www.aphis.usda.gov](http://www.aphis.usda.gov), to learn more about signs of infestation, traps and what you can do to help protect the island's native coconut trees from the coconut rhinoceros beetle.



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