

Guam Coconut Rhinoceros Beetle Project

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Sanitation at the UOG Agricultural Experiment Station

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The UOG Agricultural Station at Yigo is being used as a site for development of integrated pest management for the coconut rhinoceros beetle. On June 26, 2014, the Guam CRB project crew joined forces with the agricultural station crew to start a survey to detect CRB breeding sites on the station. We found one natural breeding site: a dead standing coconut palm, and two artificial breeding sites: a covered compost pile and its adjacent feed pile of green waste. We used a back hoe to pull out decaying coconut material from beneath five groups of coconut palms and were surprised to find that this material was not infested.

1 Breeding Sites Discovered

- A dead standing coconut tree at N13.53029 E144.87306 was felled and taken apart. This breeding site contained 2 first instars, 16 third instars, and 1 adult male (Fig. 1, 2, 3).
- We inspected a portion of a compost pile and found 3 second instars and 54 third instars (Fig. 5). The pile was covered with a thick rubberized tarp. However, CRB exit/entrance holes were visible (Fig. 4).
- We inspected the supply pile of green waste next to the compost pile and found 2 eggs, 16 first instars, 49 second instars, 34 third instars, and 4 adults (2 males and 2 females).
- We examined coconut debris beneath five groups of coconut palms and were surprised to find that this material was not infested.



Figure 1: Standing dead coconut.



Figure 2: Felled standing dead coconut.



Figure 3: CRB infesting standing dead coconut.



Figure 4: Exit/entrance hole in compost pile cover.



Figure 5: CRB-infested compost pile. Fifty-seven 2nd and 3rd instar rhino beetle grubs were found in this small part of the pile.