

## The pest

- **Rhinoceros beetle is the most prevalent pest of the coconut palm**
- **The abundance of breeding areas allows rapid population increase**
- **Adults are the destructive stage**

## Nature of Damage

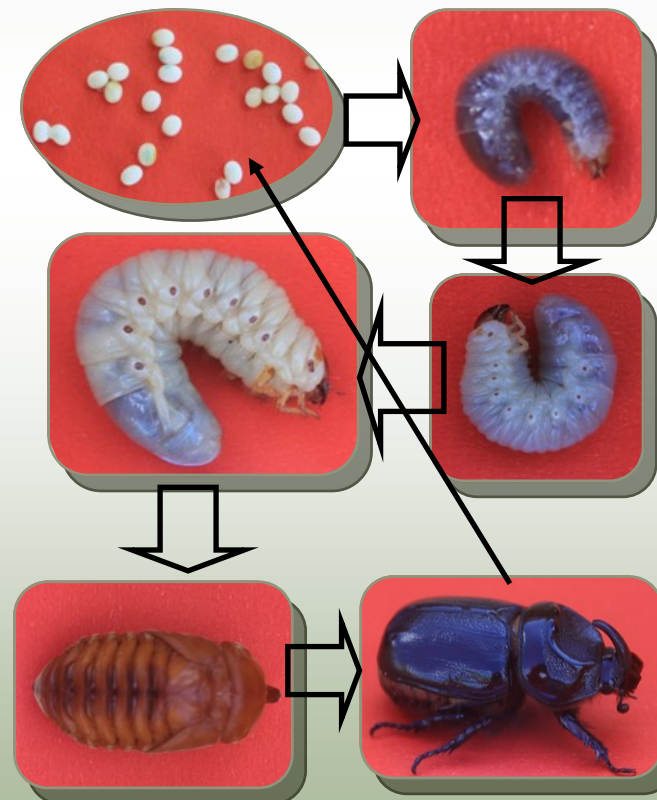


- **Adult bores into the crown, penetrating 10-50 cm down to the pith (Giblin-Davis, 2001)**
- **Beetle bites and sucks the juice through the tight core of the pith**
- **It bores outwards emerging from the base of a central frond**



- As the young leaves emerge, they bore the triangular cuts
- In young palms, the bud may be distorted or may loosen from the crown and eventually dies
- Tunnelling and feeding may hit the growing point and kill the palm
- Percent frond defoliation of 40% and higher can result to yield loss

## Life Cycle of Rhinoceros Beetle



## Opportunities for Beetle Outbreak





## Management Strategies

### Cultural Control

- Collect and utilize coconut debris like slabs, leaves, rachis, cabbage to avoid biomass piling
- Scatter thinly decomposed matter on the ground as fertilizer
- Plant covercrops if intercropping is not practiced
- Practice farm sanitation
- Regular inspection of all possible breeding sites and collection of all stages of the beetle



### Biological Control using the Green Muscardine Fungus (GMF)

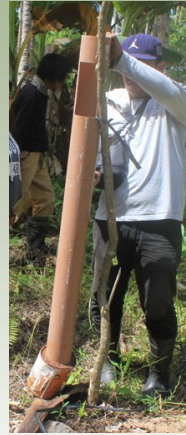


Establishment of coconut log traps inoculated with GMF granules

### Biological Control Using *Oryctes* nudivirius



## Chemical Control Using Pheromone



Rhinoceros beetle lure placed in traps enhanced with food bait



## INTEGRATED MANAGEMENT OF RHINOCEROS BEETLE (*Oryctes rhinoceros* L.)



For more information, write or call:

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