

## Research in Support of the Guam Coconut Rhinoceros Beetle Eradication Project



# CRB Rearing

Prepared by

Aubrey Moore

University of Guam Cooperative Extension Service

March 5, 2014\*

### Abstract

We rear CRB individually in Mason jars. Larvae feed on a commercial steer manure/soil blend. Adults are kept in moist peat moss and are fed a banana slice biweekly.

## 1 Methods

We rear CRB individually in one quart Mason jars ([Ball](#)) because:

- these have proven to be escape proof. CRB larvae and adults are very strong insects and they can bore through most types of plastic.
- CRB larvae can be cannibalistic
- they can be autoclaved for reuse; if any CRB become diseased they can be removed to prevent spread to the rest of the colony

Each jar is engraved with a unique number for record keeping. The top of each jar is enclosed with a metal disk that has a single hole punched in it. A piece of cloth or paper towel is trapped between the top of the disk and the screw ring to prevent small flies from entering or leaving the jars.

Grubs are reared on a commercial steer manure blend ([EarthGrow](#)). This medium is changed whenever a grub has converted the steer manure to fecal pellets. When a third instar grub becomes

---

\*Revised March 7, 2014

/home/aubrey Moore/Documents/CRB Tech Reports/2014-03-05 CRB Rearing/CRB Rearing.lyx

a prepupa, it has finished feeding. The jar is not serviced until an adult has eclosed. Pupae are very delicate and they should not be handled.

Once an adult has emerged, the steer manure is changed to moist peat moss. Adults are fed a banana slice biweekly.

Breeding takes place by putting equal numbers, 10 to 30, adult males and females in a large tub containing steer manure blend. First instar grubs are removed and placed in individual Mason jars containing steer manure blend.

All rearing and breeding takes place at constant room temperature, about 75<sup>o</sup> F with a 12 h photoperiod. Generation time can be reduced by increasing the temperature. Raltive humidity of the rearing room is not important provided that steer manure and peat moss are kept moist.

## References

J L Gressitt. The coconut rhinoceros beetle (*Oryctes rhinoceros*) with particular reference to the palau islands. Honolulu, 1953. URL <http://guaminsects.myspecies.info/sites/guaminsects.myspecies.info/files/Gressitt%20-%201953.pdf>.

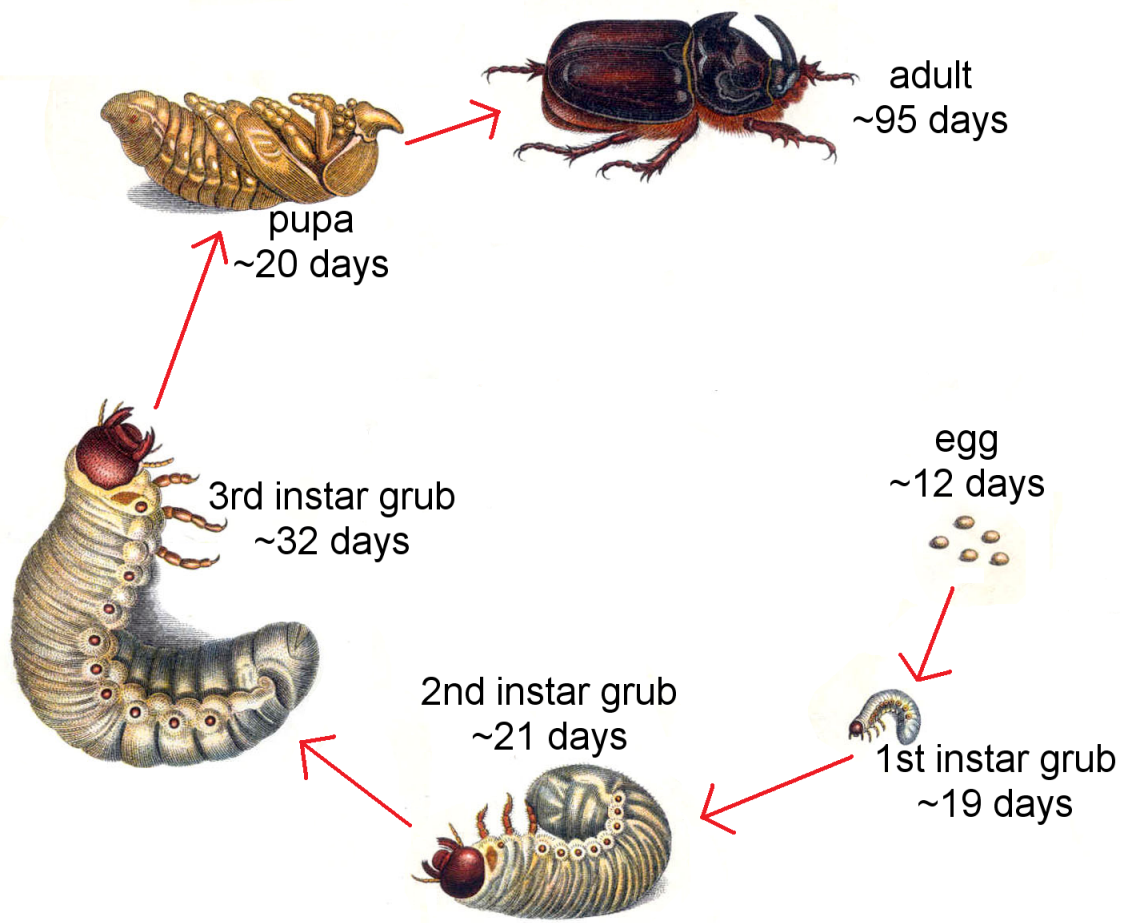


Figure 1: Coconut rhinoceros beetle life cycle. Timing data are from [Gressitt \[1953\]](#).