



University of Guam Coconut Rhinoceros Beetle Biological Control Project

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<https://github.com/aubreymoore/rearing3>

# Bioassay Report: V23BperOS

Aubrey Moore and James Grasela

University of Guam Coconut Rhinoceros Beetle Biocontrol Project

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<https://github.com/aubreymoore/rearing3/raw/master/bioassay-V23BperOS.pdf>

## Contents

|          |                            |          |
|----------|----------------------------|----------|
| <b>1</b> | <b>Summary</b>             | <b>2</b> |
| <b>2</b> | <b>Mortality</b>           | <b>3</b> |
| <b>3</b> | <b>Change in Mass</b>      | <b>4</b> |
| <b>4</b> | <b>Post Mortem Images</b>  | <b>5</b> |
| 4.1      | control . . . . .          | 5        |
| 4.2      | heat inactivated . . . . . | 9        |
| 4.3      | virus . . . . .            | 11       |

# 1 Summary

Summary not available for "V23BperOS"

## 2 Mortality

Table 1: Mortality summary.

|   | bioassay_treatment | ntotal | ndead | mortality | adjusted_mortality | significance |
|---|--------------------|--------|-------|-----------|--------------------|--------------|
| 0 | control            | 12     | 4     | 0.333333  | 0.0                | 1.000000     |
| 1 | heat inactivated   | 5      | 2     | 0.400000  | 0.1                | 1.000000     |
| 2 | virus              | 10     | 6     | 0.600000  | 0.4                | 0.391284     |

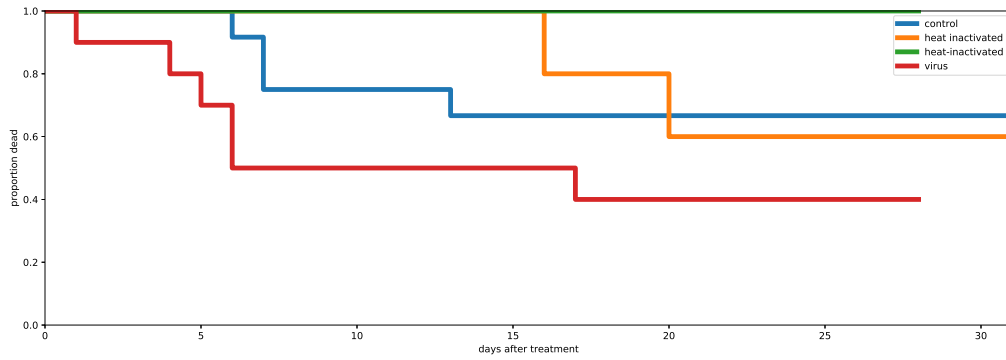


Table 2: Pairwise differences among mortality curves.

|                  |                  | test_statistic | p        |
|------------------|------------------|----------------|----------|
| control          | heat inactivated | 0.000026       | 0.995943 |
|                  | heat-inactivated | 1.943154       | 0.163327 |
|                  | virus            | 2.269337       | 0.131956 |
| heat inactivated | heat-inactivated | 2.242236       | 0.134287 |
|                  | virus            | 0.974923       | 0.323455 |
| heat-inactivated | virus            | 4.201991       | 0.040377 |

### 3 Change in Mass

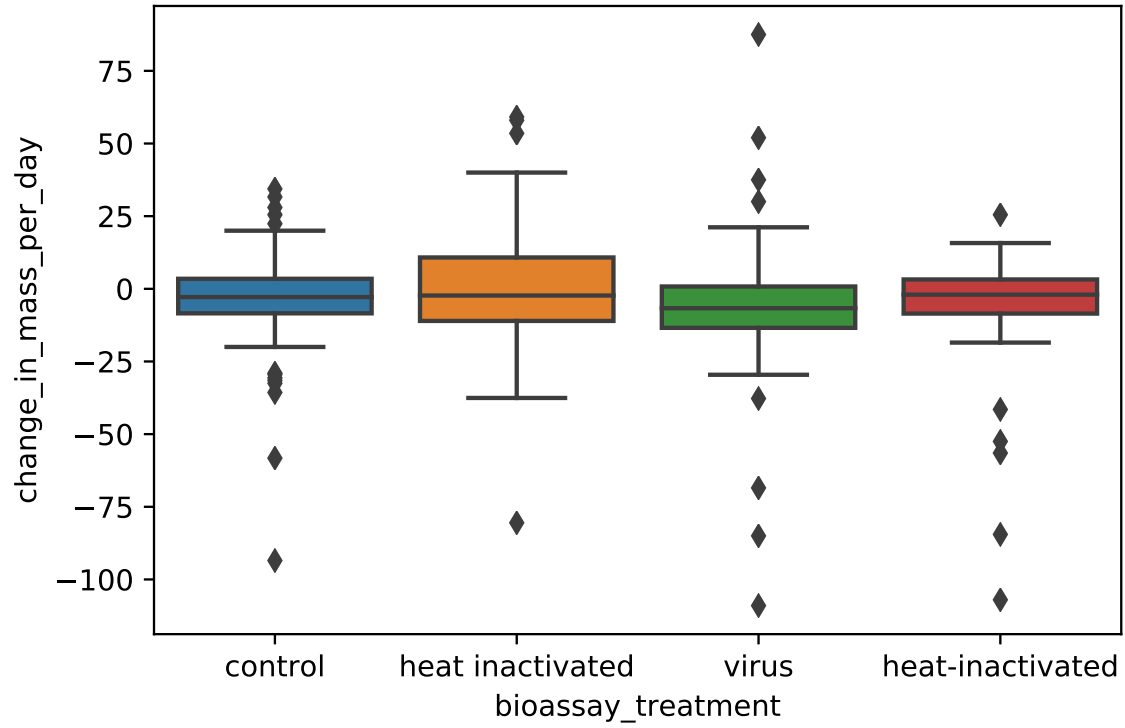


Table 3: Results of pairwise significance tests for differences in change in mass.

|                  | control   | heat inactivated | heat-inactivated | virus     |
|------------------|-----------|------------------|------------------|-----------|
| control          | -1.000000 | 1.000000         | 1.000000         | 0.560673  |
| heat inactivated | 1.000000  | -1.000000        | 1.000000         | 0.259404  |
| heat-inactivated | 1.000000  | 1.000000         | -1.000000        | 0.812923  |
| virus            | 0.560673  | 0.259404         | 0.812923         | -1.000000 |

## 4 Post Mortem Images

### 4.1 control

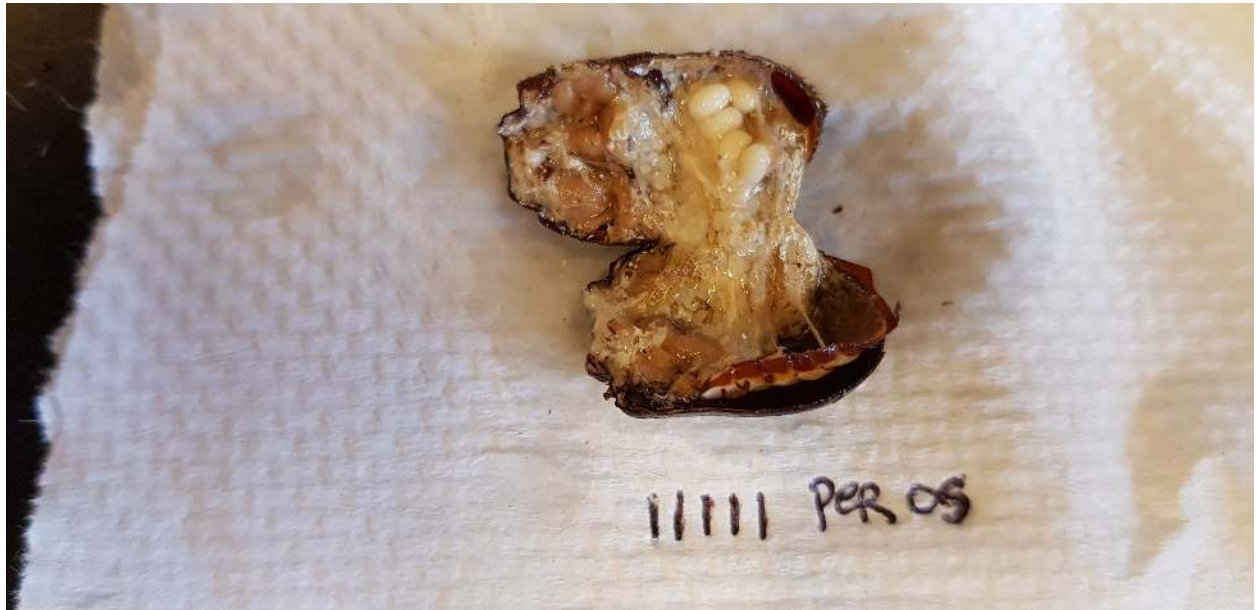


Figure 1: Bioassay: V23BperOS-1; Treatment: control; Beetle ID: 1394



Figure 2: Bioassay: V23BperOS-1; Treatment: control; Beetle ID: 1395



Figure 3: Bioassay: V23BperOS-1; Treatment: control; Beetle ID: 1397



Figure 4: Bioassay: V23BperOS-1; Treatment: control; Beetle ID: 1431



#### 4.2 heat inactivated



Figure 5: Bioassay: V23BperOS-1; Treatment: heat inactivated; Beetle ID: 1402



Figure 6: Bioassay: V23BperOS-1; Treatment: heat inactivated; Beetle ID: 1432

#### 4.3 virus



Figure 7: Bioassay: V23BperOS-1; Treatment: virus; Beetle ID: 1403



Figure 8: Bioassay: V23BperOS-1; Treatment: virus; Beetle ID: 1404



Figure 9: Bioassay: V23BperOS-1; Treatment: virus; Beetle ID: 1405





Figure 10: Bioassay: V23BperOS-1; Treatment: virus; Beetle ID: 1406



Figure 11: Bioassay: V23BperOS-1; Treatment: virus; Beetle ID: 1407

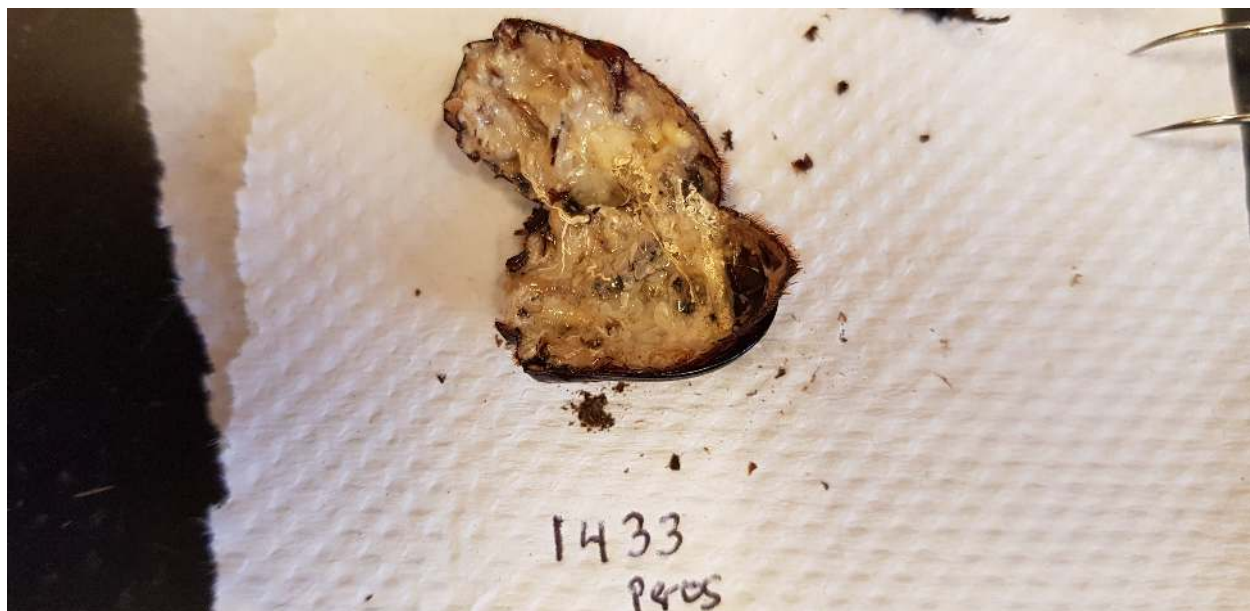


Figure 12: Bioassay: V23BperOS-2; Treatment: virus; Beetle ID: 1433