



University of Guam Coconut Rhinoceros Beetle Biological Control Project

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

Bioassay Report: V23BperOS

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

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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 |

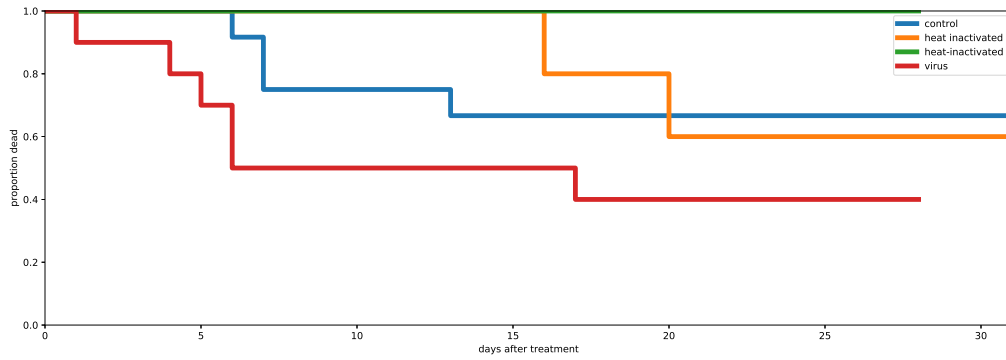


Table 2: Pairwise differences among mortality curves.

| | | 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

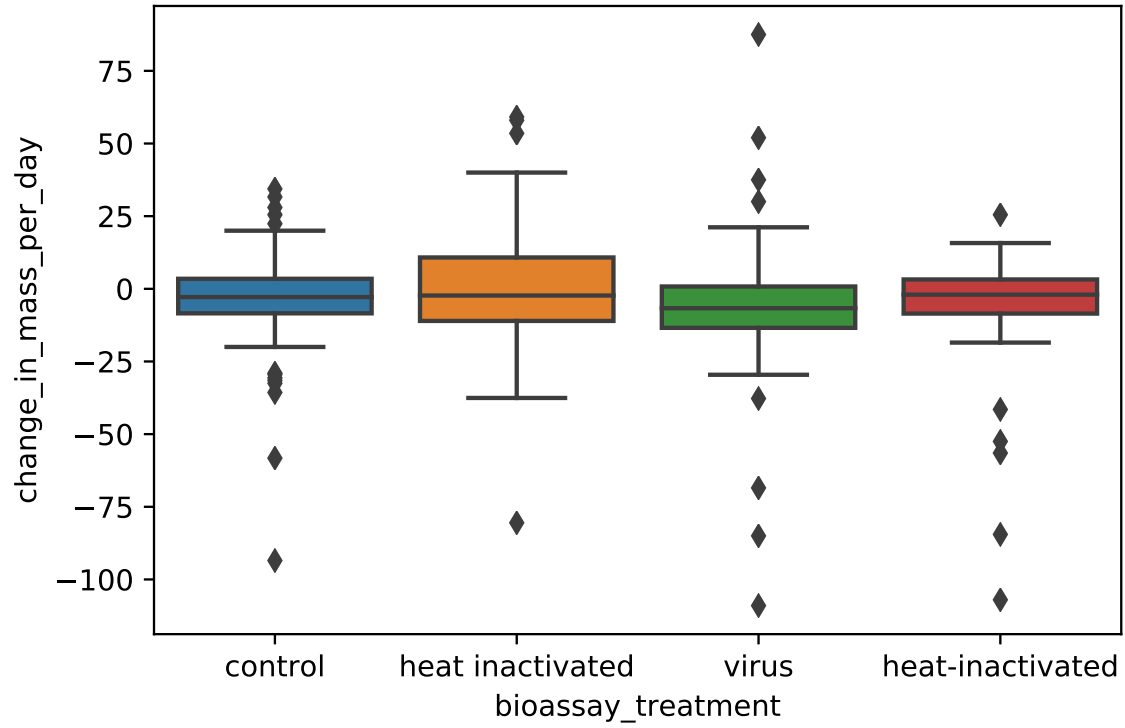


Table 3: Results of pairwise significance tests for differences in change in mass.

| | 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

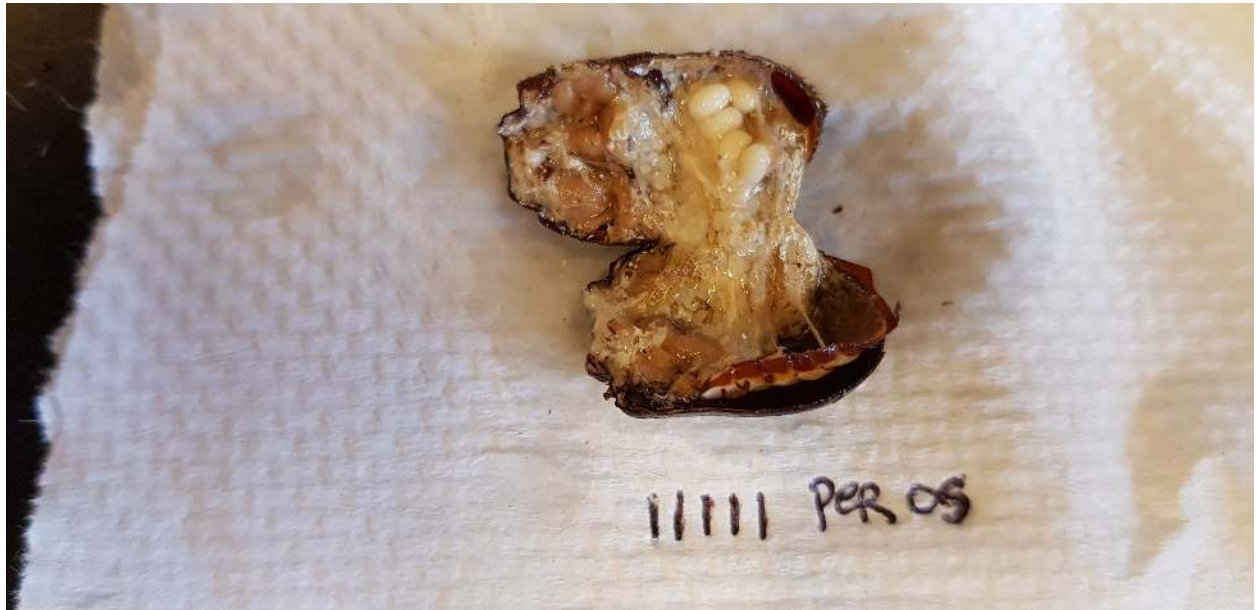


Figure 1: Bioassay: V23BperOS-1; Treatment: control; Beetle ID: 1394



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

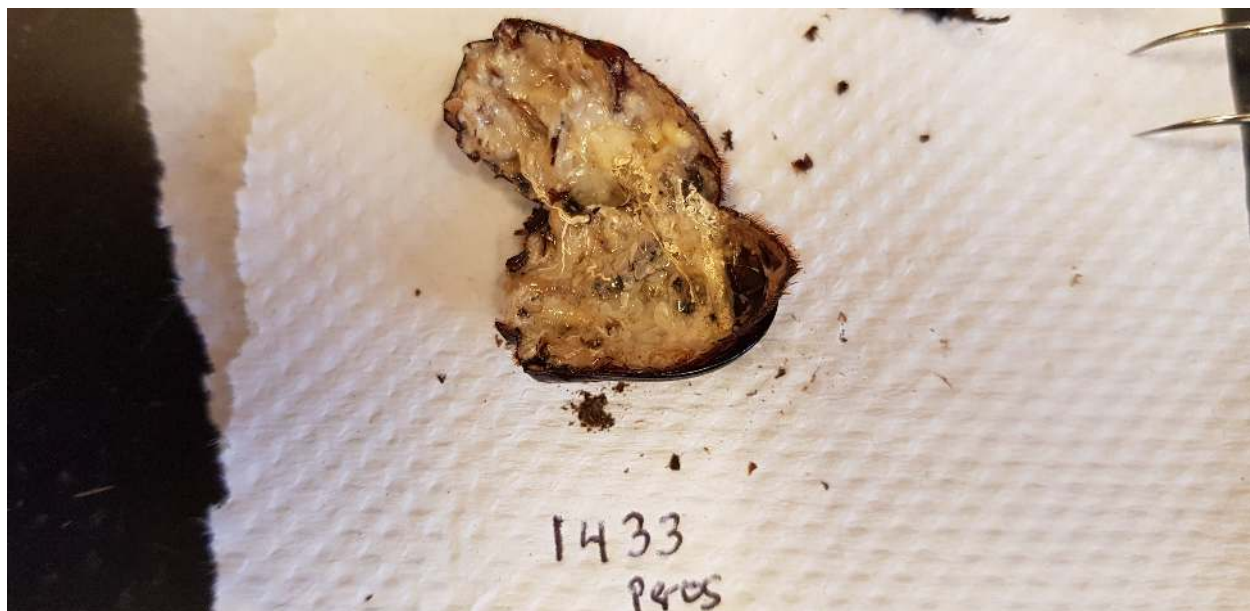


Figure 12: Bioassay: V23BperOS-2; Treatment: virus; Beetle ID: 1433