



Minibucket Test

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This trap design catches beetles.

This is a test of a trap designed so that it can be built with mostly inexpensive items which can be purchased at most hardware stores. The UVLED and oryctalure must be provided separately.

1 Methods

A small paint bucket was placed in a cutout in the top of a plastic garbage can (Fig. 1). The top of the bucket contained four one-inch diameter holes. A UVLED was fitted through a hole at the center of the lid. An oryctalure was hung from the bottom of the UVLED inside the bucket. The larger garbage can was empty.

The experiment was performed in a large field cage. Beetles were released about 16 feet downwind of the trap at 7:00 PM on January 16, 2014. Beetle response to the trap was observed visually and also using a time lapse infrared camera programmed to take an image every five seconds. The experiment was closed down and trapped beetles were removed from the trap at 9:30 PM.

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C:/Documents and Settings/Administrator/My Documents/CRB Tech Reports/2014-01-16 Minibucket Test/CRB2014-01-16.lyx



Figure 1: Experimental setup.

2 Results and Discussion

Four beetles were trapped and 18 beetles were collected 'at large' within the cage. Two beetles were observed entering the trap. Both entered abdomen first. A time lapse video of the experiment is available at <http://www.youtube.com/watch?v=nvE6pJ6Q3FY&feature=youtu.be>.