

# PROJECT REPORT

**Project Title:** Wax bait block reformulation.

**Research Agency:** Genesis Laboratories

**Principal Investigator:** Mach

**Budget:** \$63, 932.00

## **Summary/ Abstract:**

Objectives:

Genesis Laboratories will develop and evaluate a wax bait block rodenticide formula, with diphacinone (0.005%) as the active ingredient. Genesis will verify its acceptance and efficacy in laboratory rats (*Rattus norvegicus*, strain Wistar) and laboratory house mice (*Mus musculus*, strain Swiss-Webster) according to the US EPA Office of Pesticide Programs (OPP) guidelines.

August - October 2003

After testing 13 formulas, we have a short list of 5 acceptable formulas that have achieved both sufficient results with the rat and mouse testing. The formulas have some ingredients common to each other, but other ingredients are unique and range from 6 to 14 ingredients. Some of the common ingredients include corn, milo, wheat, oats, sugar, millet, sunflower, corn oil, granular wax, peanut butter, and molasses. These ingredients also come in many physical forms such as cracked, meal, flour, whole, and processed. Proportion of the ingredients in the bait is very important.

From this short list of 5 formulas, a prospective formula or 2 should be further tested for verification of previous results. From these results, a final formula will be chosen for the final testing as the final step.

November 2003 - January 2004

Tests of the laboratory effectiveness of CDFA Formula J3 Rat and Mouse Bait Bar were conducted on 40 Norway rats from 3 - 23 November 2003 and on 40 house mice from 5 - 21 January 2004. The CDFA bait was offered to each group with the standard EPA challenge diet in 11-day tests. Overall mortality for the treated rats was 100% and 0% in the control group. Overall bait acceptance for the rats was 36.7%. Overall mortality for the treated mice was 100%

and 0% in the control group. Overall bait acceptance for the mice was 67.7%. A mortality rate of 90% or greater following a 15-day exposure period, and a minimum of 33% test substance acceptance is the acceptance criterion.

**Last Updated:**

08/12/2009