## COMPLETED PROJECT REPORT

**Project Title:** Diphacinone residues in Alfalfa.

**Research Agency:** Genesis

Principal Investigator: Baroch

**Budget:** \$70,815.00

**Summary:** 

**April** 1998

This study assessed residue loads on alfalfa treated with 0.01% diphacinone-treated crimped oat groats. Application by mechanical broadcast is required when an infestation is severe and widespread application is necessary for effective control. CDFA initiated the study in order to petition for a residue tolerance for 2 crop applications per year by mechanical ground broadcasting methods.

Two test sites were selected to represent different regions and growing conditions: one in Modoc County in northeastern California, and a second site in San Joaquin County near Stockton, in central California.

The bait was applied at 2 rates at each site: 2 applications at a rate of 10 lb/ac (the proposed label rate); and 2 applications at double the proposed rate, or 20 lb/ac. Applications were made 2 days apart at each site using a ground driven broadcast seeder. A placebo bait was applied to the control plots.

Applications in Modoc County were made in early May, after the crop had broken dormancy and 42 days prior to cutting. Applications in San Joaquin County were made in early September, just after the 5th cutting of the year and 25 days prior to cutting.

Alfalfa samples were collected prior to treatment, immediately after treatment, and about every 2 weeks until harvest. Cut hay samples were also collected. All samples were analyzed at Genesis Laboratories.

The diphacinone bait did not leave detectable residues of the active ingredient on any alfalfa samples collected from test plots treated at the proposed label rates, nor on plots treated at double the proposed label rates.

## **Last Updated:**

02/13/09