

PROJECT REPORT:

Project Title: Reregistration of CDFA baits for Control of Norway and Roof Rats in Agricultural Fields.

Research Agency: University of California – Integrated Pest Management

Principal Investigator: Roger A. Baldwin

Budget: \$106,033.00

Background:

Norway rats (*Rattus norvegicus*) and roof rats (*Rattus rattus*) are established pests in commensal settings, although their status as agricultural pests is still undefined. As such, the EPA defines rats as commensal pests, but not agricultural pests, meaning that all rat baits must meet the challenge diet restrictions to be considered for use. The challenge diet consists of foods highly preferred by rats in urban settings. However, these food sources are not as readily available in agricultural settings, and as such, baits will likely not need to meet this rigorous criteria to effectively control rats in agricultural fields. Therefore, to get rats added back onto current CDFA labels (Rodent Bait Chlorophacinone and Diphacinone Treated Grain [0.005%] and Diphacinone [0.005%] Bait Block), it must first be proved that rats are agricultural pests. Once this is established, baits will need to be tested to determine their efficacy at controlling rat populations in agricultural fields. If proven effective, applications can be submitted to add rats back to the appropriate CDFA labels.

Currently, use of anticoagulant baits is allowed for control of rats in agricultural settings when baits are not exposed agricultural products. However, in 2010, all CDFA anticoagulant baits will no longer be registered for this purpose. This will leave few effective or efficient methods for controlling rat populations in agricultural fields, this may result in substantial crop losses for some California growers. Taking the appropriate steps required to verify their existence as agricultural pests, as well as determining the efficacy of CDFA anticoagulant baits on rat control, is necessary to reregister these valuable tools for rat control. Additionally, loss of these uses for CDFA baits will reduce revenues for VPCRAC, thereby limiting the quantity and quality of research that can be conducted on vertebrate pest problems in the future, likely resulting in greater crop losses for many growers in California.

We plan to verify that rats are agricultural pests in California. As such, poison baits will not need to pass stringent bait acceptance standards required for rodents in commensal settings, thereby allowing the use of current CDFA baits in agricultural settings. The efficacy of CDFA baits will be determined in agricultural fields, providing needed data to add rats back onto current CDFA labels. This should increase grower effectiveness at controlling rats thereby reducing potential losses to crop production. Additionally, adding rats back onto CDFA labels will result in added bait sales by CDFA, ultimately providing additional funds for future research on vertebrate pest control.

Objectives:

1. Establish that rats are agricultural pests in California.
2. Determine efficacy of CDFA baits for controlling rats in agricultural setting.
3. Reregister CDFA baits for control of rats in agricultural settings.

Progress To Date:**Last Updated:**

01/27/2011