PROJECT REPORT

Project Title: Phosphide Treated Artichoke Bracts, and Rozol® Pellets for Controlling California Voles in Artichokes.

Research Agency: University of California Cooperative Extension

Principal Investigator: Roger A. Baldwin

Background:
California meadow voles (Microtus californicus) are the primary vertebrate pest inartichoke fields around Castroville, CA. For many years, chlorophacinone treated artichoke bracts, chlorophacinone grain pellets (Rozol®), and zinc phosphide treated bracts have been the primary rodenticides used for vole control in artichokes. However, there has been much ambiguity about the current efficacy of these baits given known resistance to chlorophacinone in some voles in the local population, and an apparent lack of bait acceptance of zinc phosphide treated bracts by many voles in the population. Therefore, we initiated a study in winter 2011 to assess the efficacy of these baits to provide quantifiable data on this issue.

Results:

We found that chlorophacinone treated bracts provided the greatest efficacy of the tested rodenticides. Rozol was intermediate in efficacy, with zinc phosphide bracts least effective. Collectively, these results indicate that chlorophacinone treated bracts can still be an effective tool for helping to control vole populations in artichokes, while use of zinc phosphide treated bracts does not appear to be effective. Research into additional rodenticides is suggested to find other alternatives to chlorophacinone, as relying solely on this pesticide will likely lead to further resistance issues in the future.