

PROJECT REPORT

Project Title: Bird control in grapes.

Research Agency: University of California - Davis

Principal Investigator: M. Delwiche

Budget: \$146,754.00

Summary/ Abstract of Final Report:

Certain species of birds are pests for wine grape growers. In California, serious problems are caused by house finch (*Carpodacus mexicanus*), American robin (*Turdus migratorius*), and European starling (*Sturnus vulgaris*). The objectives of this research were to evaluate the effectiveness of different alarm and distress calls at hazing these species, to determine a protocol for use of broadcast calls in the field, and to measure the effectiveness of control. Species specific alarm and distress calls from birds being restrained, placed near a natural predator, or dosed with a toxicant were collected. Based on call testing and bird activity surveys, four starling calls, three finch calls, and one robin call were selected for use with the broadcast units. The units were deployed about the time of veraison at a density of 0.6 ha per broadcast unit, concentrated on the perimeter of the vineyard, and moved weekly in a fixed pattern. Three control strategies were compared: netting, conventional methods (reflective tape, propane cannons, pyrotechnics), and conventional methods supplemented with broadcast alarm and distress calls. Three different regions were selected in the Carneros American Viticultural Area and three commercial Pinot noir vineyards were chosen in each region to test the control strategies. Damage data were measured over two consecutive seasons, first to evaluate the effect of treatments without broadcast calls (year 1, 2004), and then to determine the effect of broadcast calls (year 2, 2005). From these tests it was found that broadcast distress calls significantly reduced damage compared with conventional control (5.7% vs. 13.0%) and netting yielded the least damage (2.3%).

Last Updated:

07/12/2009

