

Demonstrating a Postemergence Vineyard Weed Management Program

Principle Investigators: T. Weigle, Senior Area Extension Educator, NYS IPM Program, R. Dunst, Research Support Specialist, NYSAES, Fredonia, and J. Bixby, Grape IPM Program Assistant.

The authors wish to thank the following growers: Ed Barger and Joel Rammelt of Westfield, NY for providing vineyards, equipment, herbicides and labor toward this project.

Introduction

Under the row weed management in Lake Erie vineyards has traditionally relied on the use of a pre-emergence herbicide application in the spring followed by an application of a postemergence herbicide in June (or around grape bloom). Concerns over the potential for ground water contamination through the use of pre-emergence herbicides applied directly to the soil, the persistence of these herbicides in the soil and the need to increase the rates of these herbicides to achieve reliable weed management caused researchers to examine other weed management options.

Research conducted by R. Dunst, et al., indicated that two properly timed applications of a broad spectrum, postemergence herbicide (early June and mid-late July) could be as effective as the conventional weed management program using persistent pre-emergence herbicides. In these experiments, the postemergence program selected for low growing winter annuals and managed annual grasses along with annual and perennial broadleaf weeds to an acceptable level.

In the first year's results of this implementation project were very encouraging with up to a 400% reduction in the amount of herbicide active ingredient applied. Growers participating in the project expressed an interest in continuing the project and expanding the acreage involved.

The goal of this project was to implement the post emergence weed management program in growers' fields to determine if: 1) it fit into a growers schedule of production practices, 2) was economically feasible, and 3) any persistent weed problems would result from continued use of a postemergence weed management program.

For a printed copy of the entire report, please contact the NYS IPM office at:

IPM House
630 W. North St.
New York State Agricultural Experiment Station
Geneva NY 14456
315-878-2353