DEMONSTRATION AND EVALUATION OF PEST MANAGEMENT ALTERNATIVES IN FINGER LAKES GRAPES

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Summary. This project addressed several pest management problems including approaches for controlling European red mite (ERM) through prebloom applications of Stylet oil and biological control with T. pyri; evaluation of a novel sprayer that reduces drift and application volume, continued demonstration of post-emergence weed control, establishment of grafted vines to renew vineyards infested with tomato ringspot virus, and support for timely pest management decision making through bi-weekly pest management updates delivered by e-mail and code-a-phone.

In commercial scale applications, two prebloom Stylet oil applications reduced ERM populations compared to an untreated check, and did not eliminate T. pyri in the one block where it was present. Experimental releases of T. pyri in 10 vineyard blocks did not result in establishment during 1999, possibly due to the drought and lack of ERM in these blocks. Sampling of several cultivars revealed possible variety-specific differences in the propensity for vines to harbor T. pyri populations.

The prop-tec sprayer reduced spray drift compared to a conventional airblast sprayer, and may have provided superior coverage and disease control in a comparison conducted at Naples, NY. Lower spray volume used with this sprayer will allow each 'tank load' to cover more area than a conventional sprayer, thereby reducing costs substantially.

Grafted Baco noir and Vidal blanc vines were established in two cooperators' vineyards. Their growth and virus status will be monitored over the next few years to provide information on the economic feasibility of restoring productivity of vineyards that have been in decline for several years.

Data collection at five monitoring vineyards provided information used in twice-weekly pest management updates, distributed to over 130 e-mail addresses and over the 'code-a-phone'.

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