Section I. Mites and Sap-Sucking Insects

MANAGEMENT OF LEAFHOPPER POPULATIONS ON WASHINGTON WINE GRAPES

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Expt. 1. Control of leafhopper nymphs on Chardonnay grapes.

Old and new formulations of fenpropathin (Danitol®) (0.1 lbs AI/A) and old and new formulations of dibrom (0.5 lbs AI/A) were compared with dimethoate (1.0 lbs AI/A) as a standard and an untreated check. Sprays were applied July 22 to six-vine plots replicated 4 times using an air blast sprayer at 300 psi. Volume was 3,741 l/ha (400 gal/A). Plots were separated by single row borders, and a large canvas shield in the row opposite the spray application helped prevent cross-row contamination.

Counts of nymphs were made weekly on 10 leaves from each vine (n=240 for each treatment) from July 17 to Sept. 12. Results indicated best results with dimethoate. Danitol and dibrom reduced numbers for 2-3 weeks. There was no statistical difference between old and new formulations.

Expt. 2. Control of leafhopper nymphs on Chenin Blanc grapes.

Danitol (0.1 lbs AI/A), M-Pede® (formerly Safer soap) as 1% or 2% solutions and Sun Spray Ultra Fine Oil (SSUFO) as 2% and 8% suspensions were compared with an untreated check using methods described for Expt. 1. Results indicated best control with Danitol. The 8% suspension of SSUFO reduced leafhopper numbers for 2-3 weeks and was better than the 2% rate of SSUFO or the two rates of M-Pede.

Expt. 3. Comparison of leafhopper abundance and egg parasitization by Anagrus epos on ten varieties of grapes.

The variety Foch had highest leafhopper populations and highest incidence of egg parasitism. Seibol 10868, Chardonnay, Semillion, Pinot Noir, and Gamay Beaujolois had intermediate densities of leafhoppers and parasitized eggs. White Riesling and Cabernet Sauvignon had lowest leafhopper densities and 0% egg parasitism.