Section II Foliage, Seed-Feeding and Mining Insects

MANAGEMENT OF INSECT PESTS ON WINE AND JUICE GRAPES W. W. Cone, L. C. Wright, M. M. Conant, and J. Perez Washington State University-Prosser Irrigated Agriculture Research and Extension Center Prosser, WA 99350 (509) 786-2226

I. Juice grapes. Concord. Grape mealybug, Pseudococcus maritimus (Erhorn).

Plots 12 vines long were replicated three times in a complete randomized block design to evaluate superior oil (2 gal/100), imidocloprid (0.02 lbs Al/A), chlorpyrifos (1.0 lbs Al/A), M-Pede (2 gal/100), Orthorix (2 qts/100), lime-sulfur (5 gal/100) and an untreated check for control of grape mealybug. The spray was applied April 28, 1993 using 200 gallons of water/acre. Samples consisting of buds and rough bark were taken April 28 (prespray), May 6, and May 21, 1993. Harvest samples indicated no statistical difference in berries with honeydew or berries with mold.

II. Wine grapes. Chenin blanc. Western leafhopper, *Erythroneura elegantula* and Virginia creeper leafhopper, *E. ziczac*.

Plots six vines long replicated four times in a complete randomized block design were used to evaluate pyrenone (6 and 12 oz/A), CGA 215944 (0.05 and 0.2 lbs Al/A), fenpropathrin (0.1 lbs Al/A), dimethoate (1.0 lbs Al/A), Imidocloprid (0.1 lbs Al/A) and an untreated check for control of grape leafhoppers. Spray was applied June 25, 1993 using 200 gallons of water/acre. Imidocloprid was superior and provided season-long control. Fenpropathrin and dimethoate provided adequate season-long control. CGA 215944 and pyrenone were re-treated at the higher rates listed above on July 8. Populations decreased following the second application, but soon recovered to levels similar to the untreated check.