Section 1
Mites and Sap-sucking Insects

Effect of Mites and Aphids on Yield and Brewing Quality of Hops

> W. W. Cone and L. C. Wright WSU-IAREC, P.O. Box 30 Prosser, WA 99350

The following were tested as miticides: Abamectin, Mitac (amitraz), Apollo (clofentezine), Brigade (biphenthrin), Vendex, Savey (hexathiazox), and dicofol (Kelthane). Abamectin, Vendex, Mitac, and Brigade performed well at rates tested. Tested as aphicides were: Lorsban (chlorpyrifos), Disyston (disulfoton), Monitor (methamidophos), Supracide (methidithion), Thiodan (endosulfon), phosdrin, Cymbush (cypermethrin), Brigade (biphenthrin), RH7988 (a Rohm and Haas product), disulfoton, and Spur. Excellent control was achieved with Spur, disulfoton, Brigade, and RH7988. The other compounds tested gave acceptable results. Granular phorate (Rampart) applied as granules in the soil at training and at the time vines reached the top of the trellis provided very good aphid control. Ten newer hop varieties were tested for plant burn using recommended rates of Omite, diazinon plus zinc, applied with an air-blast sprayer in 125 gallons of water/A. On a rating scale (1=low and 5=high), five varieties rated 0-1, two varieties 1-2, and Tettnanger 21491 and Hallertauer 2-3, none were rated higher.

Section 1
Mites and Sap-sucking Insects

Effect of Mites and Aphids on Yield and Brewing Quality of Hops

W. W. Cone
WSU-IAREC, P.O. Box 30
Prosser, WA 99350

Three treatments of acaricides/aphicides in an advanced screening stage and having the potential to be commercial treatments were tested in 7-hill plots, replicated three times on each of 5 hop varieties. The 5 hop variety blocks were: L1, Cascade, Galena, Olympic and Nugget. The sprays were applied June 30, July 20 and August 11 using 1400, 2100 and 2100 1/ha of water, respectively. All sprays were applied with a handgun operated off an air-blast sprayer at 300 psi. The spray was distributed over the plant to achieve uniform coverage. The treatments and rates (kg AI/ha) were: Brigade (0.09), Vendex (1.68) + Spur (0.17), Abamectin (0.22) + disulfoton (1.12) and an untreated check. A selective aphicide RH7988 (Rohm and Haas) was combined with Vendex and tested on 3 varieties. Yields (across varieties) for the treatments listed above were: 6.58, 7.00, 7.32 and 2.77 bales/A, respectively.