Abstract: A late season trial near Entiat, WA, was performed to evaluate some new miticides. Applications were made by handgun to single trees, replicated four times for each treatment. The plots were sprayed with a handgun sprayer operating at 400 psi, in a dilute spray of approximately 400 gallons per acre. The treatments were applied on 31 July. Spider mite counts were made just prior to the applications and at weekly intervals after application. The counts were made by collecting 25 leaves per tree, taking them to the lab and brushing them onto a glass plate covered with a thin film of soap solution using a standard mite brushing machine. The numbers of spider mite eggs and motile spider mites were counted on half of the area on the plate using a binocular dissecting scope. Initial examination of the test plot showed a level of infestation above tolerable levels (>0.5 mites/leaf). Two days post-application all samples showed a decrease in numbers of eggs and motiles. At one week, samplings showed a significant reduction in the number of eggs and motiles with the exception of the 2 lower rates of Fujimite®. By the last sampling, all products tested had made a significant impact on population size, while the untreated check continued to increase in number.

Chemical Control/New Products

Spider mite control in apple and tart cherry – 2002

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Abstract: The efficacy of a new registered acaricide, Acramide 50W (bifenazate), was compared to standard acaricides (Agri-Mek, Pyramite, and Vendex), horticultural oils (JMS Stylet and Supreme oils) and an untreated control for control of spider mites in apple and tart cherry. Phytophagous mite (twospotted spider mite, European red mite, and brown mite) densities were low in the apple trial and did not differ among treatments. In tart cherry, both rates of Acramide (0.75 and 1.0 lb/acre) and Vendex (2 lb/acre + 0.25% oil) significantly lowered phytophagous mite densities for two weeks post-treatment. The oil alone treatments (1.5% JMS Stylet oil and 1.5% Supreme oil) were not effective in lowering phytophagous mite densities below untreated levels. All acaricides tested lowered predaceous mite (Galendromus occidentalis and Zetzellia mali) densities for up to six weeks after treatment.