

EVALUATION OF INSECTICIDES AND ACARICIDES FOR CONTROL OF AVOCADO PESTS

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Two tests were performed during this period. They consisted of tests against the avocado mite, *Oligonychus yothersi* and a test against the flower thrips *Frankliniella* spp. The test against avocado mite was conducted in a 20 year-old Monroe avocado orchard in Homestead, FL that had experienced high damage from avocado mite in previous years. Four treatments were replicated 20 times in a RCB design. Each replicate consisted of an individual tree. Treatments (Agrimek, Sanmite and Floramite) were applied using a hand-held sprayer operating at 200 PSI and delivering 200 gal/acre. We evaluated eggs, adults and nymphs 2 day before treatment and 3, 7, 14 and 21 days after treatment, by collecting 2 leaves per treatment per replication. Reduction of motile avocado mites was observed 21 days after treatment. Egg density was reduced on Floramite and Agrimek treated trees, during 3 and 14 days after treatment.

The evaluation of insecticide (Spinosad) against avocado flower thrips was done in a fifteen year-old avocado tree orchard located at the Tropical Research and education Center in Homestead, FL were treated with experimental insecticides for control of flower thrips. The test was a RCB design consisting of 20 replicates. Applications were made using a backpack air-blast sprayer calibrated to deliver 100 GPA. Applications were initiated when different flower stages were present per panicle. Infested panicles were evaluated by sampling one panicle using a beat-cloth and counting thrips that fell into the cloth. Differences among treatments were separated using ANOVA.

A high rate of Spinosad (12 fl oz/acre) provided a significant reduction of flower thrips in avocado during 3 days after application of the pesticide. However, thrips densities were not suppressed 8 days after treatment. Future tests will focus on control of avocado mites, mirids and flower thrips.