CONTROL OF SPIDER MITES IN COTTON WITH SELECTED MITICIDES IN ARKANSAS, 2010 Jason Fortner

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Abstract

The two-spotted spider mite (*Tetranycus urticae*) is one of the most expensive pests to control in Arkansas and the Midsouth. It is considered an occasional pest of cotton that causes damage to the leaves by sucking the contents of epidermal cells. Mites are most often found on the underside of leaves; however, when large populations occur they will also feed on fruiting structures. Mite damage first appears as yellow speckling on the leaves, and as the population of mites and damage increases, leaf abscission occurs. To evaluate the efficacy of currently labeled products for mite control, a trial was conducted in Clay County, Arkansas 2010. At 4 DAT all treatments significantly reduced mite numbers below the UTC, and Oberon at 8 oz/a reduced mite numbers below Brigade and Zephyr at 12 oz/a. At 7 and 13 DAT, products still had fewer mites than the UTC; however, Brigade had more mites than all other treatments. Brigade only managed to provide suppression of the population with 50% control. Numerically, Oberon at 8 oz/a, Comite II at 36 oz/a and Zeal at 1.0 oz/a had the fewest number of mites throughout the season but were not different from the other treatments except Brigade. Results of this study demonstrate the efficacy of select compounds for the control of spider mites.