

Two Spotted Spider Mite Management in Watermelons - 2005: 'Jamboree' watermelon transplants were planted on May 31 at the University of Delaware Research and Education Center located near Georgetown, DE. Plots consisted of two 35 ft-long rows on 8 ft centers. Each treatment was replicated four times and arranged in a RCB design. Treatments were applied as a broadcast spray on July 12. All foliar treatments were applied with a CO₂ pressurized ATV 4-wheeled sprayer delivering 22 gpa at 60 psi. Mite populations were evaluated on a weekly basis from June 7 through July 27 by looking at 5 plants per plot to determine the percent infested plants and by collecting 20 leaves per plot and using a mite brushing machine to determine the number of mites per leaf. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

Spider population pressure was light. The CAPS treatment provided the lowest level of control. No phytotoxicity was observed.

Treatment	Rate/A	Pre-treatment July 6		Mean Number Spider Mites per Leaf Post Counts		
		Number Spider Mites per Leaf	Percent Mite Infested Plants	July 15 3DAT	July 20 8DAT	July 27 15DAT
Zeal 72WD	2 oz	0.66a	25.00a	0.60b	0.15a	0.23ab
Zeal 72WD	3 oz	1.60a	30.00a	0.60b	0.00a	0.00b
Zeal 72 WD	3 oz	1.37a	45.00a	0.28b	0.00a	0.00b
Oberon 2 SC	8.5 oz	0.37a	30.00a	0.49b	0.00a	0.00b
Capture 2EC	6.4 oz	0.96a	30.00a	0.41b	0.00a	0.00b
Agri-Mek 0.15 EC	8 oz	0.55a	35.00a	0.26b	0.00a	0.00b
CAPS	2.4 oz/gallon	4.05a	50.00a	3.19a	3.04a	1.24a
Acramite 75WG + Silwet	16 oz 3 oz/100 gal	0.13a	30.00a	0.56b	0.04a	0.00b
Acramite 50WS +Silwet	16 oz 3 oz/100 gal	0.27a	20.00a	0.38b	0.00a	0.00b
Untreated	-----	0.31	40.00a	1.69ab	1.18a	1.09ab

Means within a column followed by the same letter are not significantly different (Ryan's q-test; P=0.05).