

Two Spotted Spider Mite Management in Watermelons - 2008: 'Jamboree' watermelon transplants were planted on May 28 at the University of Delaware Research and Education Center located near Georgetown, DE. Plots consisted of two 20 ft-long rows on 8ft centers. Each treatment was replicated four times and arranged in a RCB design. Foliar treatments were applied as a broadcast spray on July 11. All foliar treatments applied with a CO₂ back pack sprayer delivering 22 gpa at 40 psi. Mite populations were evaluated on a weekly basis from July 10 through July 31 by looking at 10 plants per plot to determine the percent infested plants and by collecting 50 leaves per plot to determine the number of mites per leaf. Data were analyzed using Proc GLM and means were separated by Tukey's mean separation test (P=0.05).

Spider population pressure was low. All treatments provided significantly better spider mite control 3 days after treatment compared to the untreated check. No phytotoxicity was observed.

Table 1. Spider Mite Counts on Leaves

Treatment	Rate/A	Pre-treatment July 7		Mean percent Mite infested plants	
		Number Spider Mites per leaf	Percent Mite Infested Plants	July 14 3 DAT	July 16 5 DAT
Untreated	----	0.16a	12.50a	48.50a	5.00a
Zeal 72WSP	2 oz	0.02a	2.50a	3.00b	5.00a
Oberon 2SC	8.5 oz	0.17a	12.50a	3.00b	0.00a
Capture 2EC	6.4 oz	0.32a	7.5a	0.00b	0.00a

Means within a column followed by the same letter are not significantly different (Tukey's mean separation test; P=0.05).