

**Two Spotted Spider Mite Management in Watermelons - 2007:** 'Jamboree' watermelon transplants were planted on May 24 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 12. All foliar treatments applied with a CO<sub>2</sub> 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-moderate. All treatments provided significantly better spider mite control 5 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 10		Mean # Spider Mites per 50 Leaves Post Counts		
		Number Spider Mites per 50 leaves	Percent Mite Infested Plants	July 17 5 DAT	July 24 12 DAT	July 31 19 DAT
Untreated	----	17.25a	40.00a	63.75a	50.50a	126.25a
Oberon 2SC	8.5 oz/A	11.75a	32.50a	12.00b	17.75a	5.75a
Acramite 50WS + LI-700	1 lb + 0.5% v/v	15.00a	37.50a	16.75b	11.50a	6.00a
Zeal	2 oz	46.00a	47.50a	11.25b	18.75a	2.25a

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