

Aphid Management in Watermelons, 2007: ‘Jamboree’ watermelons transplants were planted on May 24 at the University of Delaware’s 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 6. All foliar treatments applied with a CO₂ back pack sprayer delivering 22 gpa at 40 psi. Aphid population levels were evaluated on a weekly basis from May 29 through July 24. Aphid population levels were assessed on 10 plants per plot to determine the percent infested plants and the number of aphids per 50 leaves. Data were analyzed using Proc GLM and means were separated by Tukey’s mean separation test (P=0.05).

Aphid populations were low. No differences were seen between the treatments and the untreated check. No phytotoxicity was observed.

Table 1. Percent Melon Aphid Infested Plants

Treatment	Rate/A	Mean % Infested Plants (Pre-treat)		
		June 7	June 19	June 26
Untreated	--	2.50a	2.50a	0.00a
Movento + NIS	5 oz + 0.25%V/V	2.50a	0.00a	0.00a
Assail 30SG	4 oz	10.00a	5.00a	0.00a
Assail 30 SG	5.3 oz	0.00a	0.00a	0.00a
Volium Flexi 40WG	4 oz	2.50a	0.00a	0.00a
Beleaf 50SG	2.8 oz	0.00a	0.00a	0.00a

Means in a column followed by the same letter are not significantly different (P= 0.05; Tukey’s Test).

Table 2. Melon Aphid Count

Treatment	Rate/A	Aphids per 10 plants June 7 Pre-trt	Mean Number of Aphids per 50 Leaves		
			June 19 Pre-trt	July 17 11 DAT	July 24 18DAT
Untreated	--	0.75a	7.00a	15.75a	18.00a
Movento + NIS	5 oz + 0.25%V/V	0.25a	0.00a	5.25a	15.00a
Assail 30SG	4 oz	2.00a	0.25a	7.25a	27.50a
Assail 30 SG	5.3 oz	0.00a	0.00a	2.00a	8.50a
Volium Flexi 40WG	4 oz	0.25a	0.00a	0.00a	6.50a
Beleaf 50SG	2.8 oz	0.00a	0.00a	0.25a	10.50a

Means in a column followed by the same letter are not significantly different (P= 0.05; Tukey’s Test).