

***Insect Management in Cucumbers with Seed Treatments, 2005:***

**Investigators:** Alan Taylor, Cornell University; Joanne Whalen and Marty Spellman, University of Delaware

'Sassy' cucumbers were planted on June 8 at the University of Delaware's Research and Education Center located near Georgetown, DE. Plots consisted of four 20 ft-long plots on 30-inch centers. Treatments were replicated four times in a RCB design. Seed-applied treatments were applied with a DISCO 'A' film coating polymer in A. Taylor's lab at Cornell University. Stand counts, cucumber beetle damage and aphid levels were evaluated on a weekly basis from June 14 to June 30. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

Cucumber beetle and aphid pressure was light. No significant differences were observed between the treatments and the untreated check. No phytotoxicity was observed.

**I. Stand Count**

Treatments *	Rate g ai/100 kg seed	Stand Count – 40 ft of row	
		June 14	June 22
Apron XL LS + Thiram 42-S	0.64 oz/100 lbs 4.5 oz/100 lbs	75.75a	75.00a
Regent 6.2 FS	2.58 g ai / 100 g	82.00a	80.00a
Cruiser 5FS	1.55 g ai /100 g	83.25a	77.00a
Cruiser 5FS	2.58 g ai / 100 g	81.50a	81.50a
Cruiser 5FS	4.30 g ai / 100 g	82.75a	79.25a

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

\* All cucumber treatments have Apron XL LS (0.64 fl.oz./100 lbs. of seed), and 42-S Thiram (4.5 fl. oz./100 lbs. of seed).

**II. Cucumber beetle Counts and Damage**

Treatments	Rate g ai/100 kg seed	Cucumber beetles per 20 plants			% Cucumber Beetle Damaged		
		Jun 14	Jun 22	Jun 30	Jun 14	Jun 22	Jun 30
Apron XL LS + Thiram 42-S	0.64 oz/100 lbs 4.5 oz/100 lbs	0	0.50a	1.75a	2.50a	13.75a	22.50a
Regent 6.2 FS	2.58 g ai / 100 g	0	1.50a	1.50a	1.25a	16.25a	18.75a
Cruiser 5FS	1.55 g ai /100 g	0	3.00a	2.00a	0.00	18.75a	10.00a
Cruiser 5FS	2.58 g ai / 100 g	0	1.00a	4.25a	1.25a	3.75	6.25a
Cruiser 5FS	4.30 g ai / 100 g	0	1.00a	1.75a	2.50a	5.00a	5.00a

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

### III. Aphid Counts and Infestation Levels

Treatments	Aphids per 20 Plants	
	June 22	June 30
Apron XL + Thiram	1.50a	2.50a
Regent 6.2 FS	0.00a	1.00a
Cruiser 5FS	11.25a	0.00a
Cruiser 5FS	0.00a	0.00a
Cruiser 5FS	0.00a	0.00a

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