

**Control of Lepidopterous Larvae in Fall Cabbage - 2003:** Promising new chemistry and labeled insecticides were evaluated for control of the cabbage insect complex. 'Greencup' field-grown cabbage transplants were planted on Aug 4 at Papen Farms, Inc., Dover, DE. Plots consisted of one 20-ft-long row on 3-ft centers. Each treatment was replicated four times and arranged in a RCB design. The evaluated materials are listed in the tables. In furrow materials were applied at planting using a CO<sub>2</sub> backpack sprayer with a one-nozzle boom delivering 8.5 gpa at 40 psi. All foliar materials were applied on Aug 13, 20, 29; and Sept 9 and 22. Applications were made with a CO<sub>2</sub> backpack sprayer with a one-row boom, having 3 hollow-cone nozzles per row (one over the top and one drop nozzle on each side) delivering 38 gpa at 40 psi. Surfaid NIS was included in all applications at a rate of 0.25% vol./vol. The number of Lepidopterous larvae on each of 5 randomly selected plants per plot was recorded on a weekly basis from August 11 through September 26. The number of marketable heads were determined by examining feeding damage on the head and two wrapper leaves on September 26. Data were analyzed using ANOVA and means were separated by Ryan's q-test (P=0.05).

DBM populations were moderate. CL populations were low throughout the season and no differences were seen between the treatments and the untreated check. All treatments provided significantly better DBM control compared to the untreated check except the Warrior treatments on Sept 2. Overall, Warrior provided a lower level of DBM control compared to the other treatments. All treatments provided a significantly higher percentage of marketable heads compared to the untreated check. The Warrior treatments provided a significantly lower percentage of marketable heads compared to the other treatments. No phytotoxicity was observed.

**Table 1 – Diamondback Moth (DBM) Counts**

Treatment	Application Method	Rate/A	% Marketable Heads	Mean Number DBM Larvae per 5 plants				
				Aug 18	Aug 25	Sept 2	Sept 12	Sept 17
Platinum 2SC Proclaim 5SG	In-furrow Foliar	5 oz 3.20 oz	97.07a	0.75c	0.00c	0.50b	0.00c	0.50c
Platinum 2SC Proclaim 5SG	In-furrow Foliar	5 oz 4.8 oz	98.61a	0.25c	0.00c	0.50b	0.00c	0.25c
Platinum 2 SC Warrior 1CS	In-furrow Foliar	5 oz 3.76 oz	54.88b	4.75b	4.50b	7.50a	8.00ab	5.00b
Proclaim 5SG	Foliar	3.2 oz	98.69a	0.25c	0.00c	0.75b	0.00c	0.25c
Proclaim 5G	Foliar	4.8 oz	98.75a	0.00c	0.00c	0.00b	0.00c	0.50c
Warrior 1CS	Foliar	3.76 oz	49.27b	1.75bc	2.50bc	6.50ab	4.50bc	6.25b
Avaunt 30WG	Foliar	3.5 oz	98.61a	0.25c	0.50c	0.25b	0.50c	0.50c
Spintor 2SC	Foliar	4.3 oz	100.00a	0.00c	0.00c	0.50b	0.25c	0.25c
Assail 70WP	Foliar	1.7 oz	94.23a	0.50c	0.00c	0.00b	0.00c	0.50c
Diamond 0.83EC	Foliar	12 oz	100.00a	0.50c	0.00c	0.00b	0.00c	0.75c
Diamond 0.83EC	Foliar	15 oz	100.00a	0.00c	0.00c	0.00b	0.00c	0.00c
Untreated	----	----	1.47c	10.50a	12.00a	11.25a	11.00a	8.75a

- All foliar sprays were applied with an NIS(Surfaid) at a rate of .25% V/V
- Means within a column followed by the same letter are not significantly different (Ryans'sQ, P=0.05).

**Table 2 – Corn leaf aphid counts**

Treatment	Application Method	Rate/A	Mean Number Aphids per 5 plants		
			Aug 18	Aug 25	Sept 2
Platinum 2SC Proclaim 5SG	In-furrow Foliar	5 oz 3.20 oz	1.75a	0.00a	0.00a
Platinum 2SC Proclaim 5SG	In-furrow Foliar	5 oz 4.8 oz	0.25a	0.00a	0.00a
Platinum 2 SC Warrior 1CS	In-furrow Foliar	5 oz 3.76 oz	1.50a	0.50a	0.00a
Proclaim 5SG	Foliar	3.2 oz	4.25a	3.25a	0.00a
Proclaim 5G	Foliar	4.8 oz	2.75a	2.75a	0.00a
Warrior 1CS	Foliar	3.76 oz	4.00a	1.50a	2.50a
Avaunt 30WG	Foliar	3.5 oz	2.75a	4.50a	2.00a
Spintor 2SC	Foliar	4.3 oz	3.00a	5.00a	0.00a
Assail 70WP	Foliar	1.7 oz	3.25a	0.75a	0.00a
Diamond 0.83EC	Foliar	12 oz	3.25a	0.25a	0.00a
Diamond 0.83EC	Foliar	15 oz	0.75a	0.25a	0.00a
Untreated	----	----	9.00a	2.00a	0.00a

Means within a column followed by the same letter are not significantly different (Ryans'sQ, P=0.05).