

**Mid-Season Evaluation of Foliar Insecticides for Control of Lepidopterans on Sweet Corn, 2010:** 'Xtra Tender 372A' sweet corn was planted on June 8 at the University of Delaware Research and Education Center located near Georgetown, Delaware. Plots were 25 ft long and two rows wide, planted on 30 inch centers. Each treatment was replicated 4 times and arranged in a RCB design. Silk sprays began at ear shank emergence. The purpose of the trial was to compare material applied on a standard (3-4 day) schedule to newly labeled materials (Coragen and Voliam xpress) applied on a reduced spray schedule as indicated in the table below. All applications were made using a CO<sub>2</sub> pressurized back pack sprayer and a two nozzle boom equipped with D2 hollow cone nozzles delivering 42 gpa at 42 psi. At harvest (Aug 5), all the ears from each plot were husked and evaluated for damage as percent clean ears (fresh market) and percent clean plus tip damaged ears (less than 1.0 inches from the tip- processing ears). The total number of live larvae of each species were identified and counted. Data were analyzed using Proc GLM and means were separated by Tukey's mean separation test (P=0.05).

Corn earworm and sap beetle pressure was high. All treatments provided a higher percentage of fresh market and processing ears compared to the untreated check. The reduced spray schedule using Coragen alternated with Lannate plus Asana, and the standard schedule of Proclaim resulted in the poorest corn earworm and sap beetle control.

Trt #	Treatment	Application Date	Rate/A
1	A,C,E - Voliam Xpress B,D,F – Warrior II	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	Voliam Xpress - 8 oz Warrior II - 1.92 oz
2	A,C,E - Voliam Xpress D,F – Warrior II + Lannate LV	A - 7/15, C – 7/22, D – 7/26 E – 7/29, F – 8/2	Voliam Xpress - 9 oz Warrior II - 1.92 oz + Lannate LV – 24 oz
3	A,C,E - Voliam Xpress F – Warrior II +Lannate LV	A - 7/15, C – 7/22, E – 7/29 F – 8/2	Voliam Xpress - 9 oz Warrior II - 1.92 oz + Lannate LV – 24 oz
4	A, F -Lannate LV + Asana XL  B, D -Coragen 1.67 SC	A - 7/15, B – 7/19, D – 7/26 F – 8/2	Lannate LV - 24 oz + Asana XL - 9.6 oz Coragen 1.67 SC - 3.5 oz
5	A,B,C,D,E,F – Proclaim 5SG	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	4.5 oz
6	A,B,C,D,E,F – Radiant 2SC	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	6 oz
7	A,C,E-Belt 480 SC + NIS B,D,F-Baythroid XL	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	Belt - 3 oz + NIS 0.25% v/v Baythroid XL - 2.8 oz
8	A,B,D,E -Belt 480 SC + NIS + Baythroid XL  C,F-Lannate LV +Baythroid XL	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	Belt -3 oz + NIS - 0.25% v/v + Baythroid XL 2.8 oz  LannateLV -24 oz + Baythroid XL -2.8 oz
9	A,B.C.D.E.F - Lannate LV + Warrior II	A - 7/15, B – 7/19, C – 7/22 D – 7/26, E – 7/29, F – 8/2	Lannate LV -24 oz + Warrior II 1.92 oz
10	Untreated	-----	-----

Trt #	% Clean Ears (Fresh Market)	% Clean + Tip Damaged Ears (Processing)	Percent Damaged Ears		
			CEW	FAW	Sap Beetles
1	83.85ab	95.79a	2.45c	0.00b	13.98bc

2	90.45a	93.80a	6.18bc	0.00b	3.82c
3	81.49ab	94.41a	6.74bc	0.00b	12.25bc
4	49.19cd	63.20c	18.70b	0.00b	31.68ab
5	36.40d	69.91bc	21.33b	0.00b	41.07a
6	67.40bc	81.87abc	7.23bc	0.00b	25.37abc
7	72.17ab	86.07ab	8.84bc	0.00b	18.99abc
8	92.08a	96.65a	2.07c	0.00b	5.85bc
9	94.39a	98.68a	2.20c	0.00b	2.96c
10	4.04e	4.04d	53.14a	16.73a	26.35abc

Means in the same columns followed by the same letter are not significantly different (Tukey's; P=0.05).