

**Late-Season Evaluation of Foliar Insecticides for Control of Lepidopterans on Sweet Corn, 2010:** 'Xtra Tender 372A' sweet corn was planted on July 1 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 materials 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 23), 30 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 pressure was high. All treatments sprayed on a standard spray schedule (3-4 day), resulted in a higher percentage of clean ears compared to the untreated check, except the Proclaim treatment. All treatments resulted in a higher percentage of processing ears compared to the untreated check except the Proclaim treatment. Voliam xpress alternated with Warrior II, Belt + Baythroid alternated with Lannate + Baythroid, and the Lannate plus Warrior treatments on a 3-4 day schedule provided the best corn earworm control. Overall, the use of the reduced spray was not effective under the 2010 season conditions.

Trt #	Treatment	Application Date	Rate/A
1	A,C,E - Voliam Xpress B,D, – Warrior II	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	Voliam Xpress - 8 oz Warrior II - 1.92 oz
2	A,C,E - Voliam Xpress D – Warrior II+Lannate LV	A - 8/6, C –8/13 D – 8/17, E – 8/20	Voliam Xpress - 9 oz Warrior II - 1.92 oz + Lannate LV – 24 oz
3	A,C,E - Voliam Xpress	A - 8/6, C –8/13, E – 8/20	Voliam Xpress - 9 oz
4	A, -Lannate LV + Asana XL B,D -Coragen 1.67 SC	A - 8/6, B –8/10, D – 8/17,	Lannate LV - 24 oz + Asana XL - 9.6 oz Coragen 1.67SC – 3.5 oz
5	A,B,C,D,E – Proclaim 5SG	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	4.5 oz
6	A,B,C,D,E – Radiant 2SC	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	6 oz
7	A,C,E-Belt 480 SC + LI-700 B,D,-Baythroid XL	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	Belt - 3 oz + LI-700 - 0.25% v/v Baythroid XL - 2.8 oz
8	A,B,D,E -Belt 480 SC + LI-700 + Baythroid XL  C - -Lannate LV +Baythroid XL	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	Belt -3 oz + LI-700 - 0.25% v/v + Baythroid XL 2.8 oz  LannateLV -24 oz + Baythroid XL -2.8 oz
9	A,B,C,D,E - Lannate LV + Warrior II	A - 8/6, B –8/10, C –8/13 D – 8/17, E – 8/20	Lannate LV -24 oz + Warrior II 1.92 oz
10	Untreated	-----	-----

	% Clean Ears (Fresh Market)	% Clean + Tip Damaged Ears	Percent Damaged Ears		
			CEW	FAW	Sap Beetles

Trt #		(Processing)			
1	61.67a	81.67ab	38.34c	0.00b	0.83a
2	18.33bc	40.84d	79.17b	0.00b	2.50a
3	15.00bc	43.33d	82.50ab	0.00b	1.67a
4	19.17bc	47.50cd	80.84ab	0.00b	0.00a
5	0.00c	4.14e	100.00a	0.00b	0.00a
6	21.67b	45.00d	77.50b	0.00b	0.83a
7	33.33b	65.84bc	65.84b	0.00b	0.83a
8	78.33a	90.00a	18.34c	0.00b	1.67a
9	71.67a	85.83a	27.50c	0.00b	0.83a
10	0.00c	0.00e	100.00a	12.50a	0.00a

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