

Mid-Season Evaluation of Foliar Insecticides for Control of Lepidopterans on Sweet Corn, 2009: 'Xtra Tender 372A' sweet corn was planted on June 11 at the University of Delaware Research and Education Center located near Georgetown, Delaware. Plots were 25 ft long and one row wide, planted on 30 inch centers. Each treatment was replicated 4 times and arranged in a RCB design. All treatments listed in the table were applied once in the whorl on July 22 by directing sprays into the whorl with a two nozzle boom delivering 35 gpa at 37 psi. Silk sprays began at ear shank emergence and were applied on a 3-4 day schedule (July 28 and 31; Aug 4,7,11,14). All applications were made using a CO₂ pressurized back pack sprayer and a two nozzle boom equipped with D2 hollow cone nozzles delivering 41 gpa at 37 psi. At harvest (Aug 17), 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 significantly higher percentage of clean and processing ears compared to the untreated check. All treatments provided a significantly lower percentage of CEW and sap beetle damaged ears compared to the untreated check. Overall, the Belt treatments provided the lowest level of sap beetle control; however, this would be expected since it is only consider a " worm" material. No phytotoxicity was observed.

Treatment	Rate/A	Application Date	% Clean Ears (Fresh Market)	% Clean + Tip Damaged Ears (Processing)	Percent Damaged Ears ¹	
					CEW	Sap Beetle
Belt 480 SC + LI-700	3 oz + 0,25% v/v	July 28, 31; Aug4,7,11,14	45.73cd	57.81bc	17.28bc	36.10bc
Belt 480 SC	3 oz	July 28, 31; Aug4,7,11,14	33.28d	54.33c	18.29b	47.48b
Coragen 1.67 SC + MSO Lannate LV + Asana XL	3.5 oz + 0.5% v/v 24 oz + 9.6 oz	July 28,31; Aug4 Aug 7,11,14	61.05bc	70.63abc	8.71bc	32.20bcd
Coragen 1.67 SC + MSO Lannate LV + Asana XL	5 oz + 0.5% v/v 24 oz + 9.6 oz	July 28,31; Aug4 Aug 7,11,14	69.26abc	83.26ab	3.68bc	27.08bcde
Coragen 1.67 SC + LI-700 Lannate LV + Asana XL	3.5 oz + 0.5% v/v 24 oz + 9.6 oz	July 28,31; Aug4 Aug 7,11,14	75.27ab	82.50ab	6.30bc	18.43cde
Lannate LV + Asana XL	24 oz + 9.6 oz	July 28, 31; Aug4,7,11,14	75.03ab	81.36abc	10.57bc	14.41cde
Warrior II	1.92 oz	July 28, 31; Aug4,7,11,14	62.70bc	71.41abc	17.35bc	24.74bcde
Voliam xpress Lannate LV + Warrior II	9 oz 24 oz + 1.92 oz	July 28,31; Aug4 Aug 7,11,14	90.00a	94.00a	0.00c	4.00e
Voliam xpress Warrior II	7 oz 1.92 oz	July 28,31; Aug4 Aug 7,11,14	89.23a	96.17a	1.63bc	7.53e
Voliam xpress Warrior II	9 oz 1.92 oz	July 28,31; Aug4 Aug 7,11,14	93.38a	95.30a	0.00c	11.62de
Voliam xpress Alternate with Warrior II	7 oz 1.92 oz	July 28; Aug 4, 11 July 31;Aug 7,14	79.73ab	85.66a	5.12bc	14.15cde
Untreated	---	----	2.08e	5.21d	83.39a	83.39a

¹ Means in the same columns followed by the same letter are not significantly different (Tukey's; P=0.05).