

Mid- Season Evaluation of Foliar Insecticides for Control of Lepidopterans on Sweet Corn, 2011: 'Xtra Tender 372A' sweet corn was planted on June 15 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. All applications were made using a CO₂ pressurized back pack sprayer and a two nozzle boom equipped with D2 hollow cone nozzles delivering 66 gpa at 40 psi. At harvest (Aug 12), 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. .

| Trt # | Treatment - Rate/A | Application Date |
|-------|--|---|
| 1 | A,C,E - Voliam Xpress - 9 oz B,D,F - Warrior II - 1.92 oz | A - 7/22, C-7/29, E-8/5 B - 7/26, D - 8/2, F - 8/9 |
| 2 | A,B,C - Voliam Xpress - 9 oz D,E, F - Warrior II - 1.92 oz | A - 7/22, B - 7/26, C- 7/29 D - 8/2, E- 8/5, F - 8/9 |
| 3 | A,C,E - Coragen 1.67 SC - 5 oz B,D,F - Lannate LV - 24 oz + Asana XL - 9.6 oz | A - 7/22, C- 7/29, E-8/5 B - 7/26, D - 8/2, F - 8/9 |
| 4 | A,B,C - Coragen 1.67 SC - 5 oz D,E,F - Lannate LV - 24 oz + Asana XL - 9.6 oz | A - 7/22, B - 7/26, C- 7/29 D - 8/2, E- 8/5, F - 8/9 |
| 5 | A,C,E-Belt 480 SC - 3 oz + Li-700 0.25% B,D,F-Baythroid XL- 2.8 oz | A - 7/22, C- 7/29, E-8/5 B - 7/26, D - 8/2, F - 8/9 |
| 6 | A,B,D,E -Belt 480 SC + NIS + Baythroid XL C,F-Lannate LV - 24 oz/A + Baythroid XL -2.8 oz | A - 7/22, B - 7/26, D - 8/2, E- 8/5 C- 7/29, F - 8/9 |
| 7 | Larvin 3.2F - 30 oz | A - 7/22, B - 7/26, C- 7/29 D - 8/2, E- 8/5, F - 8/9 |
| 8 | Radiant - 6 oz | A - 7/22, B - 7/26, C- 7/29 D - 8/2, E- 8/5, F - 8/9 |
| 9 | A,C,E -Gemstar - 5 oz + Li-700 0.25% v/v B,D,F Radiant - 6 oz | A - 7/22, C- 7/29, E-8/5 B - 7/26, D - 8/2, F - 8/9 |
| 10 | Untreated | ----- |

| Trt # | % Clean Ears (Fresh Market) | % Clean + Tip Damaged Ears (Processing) | Percent Damaged Ears | |
|-------|--------------------------------|---|----------------------|-------------|
| | | | CEW | Sap Beetles |
| | | | | |

| | | | | |
|----|---------|-----------|---------|---------|
| 1 | 70.97a | 96.64a | 6.06d | 23.46c |
| 2 | 53.04ab | 93.87a | 7.43d | 39.10bc |
| 3 | 33.72bc | 83.05abcd | 20.84cd | 51.49bc |
| 4 | 22.88cd | 78.44bcd | 15.60cd | 60.22b |
| 5 | 32.75bc | 71.50de | 21.70cd | 38.46bc |
| 6 | 57.58a | 88.87abc | 8.14d | 33.82bc |
| 7 | 25.56c | 59.38e | 46.88b | 28.67c |
| 8 | 33.14bc | 74.23cde | 20.16cd | 46.24bc |
| 9 | 21.14cd | 59.75e | 35.14bc | 42.39bc |
| 10 | 0.45d | 1.27f | 98.32a | 98.32a |

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