

***Insect Management in Bell Peppers, 2009:*** “Paladin” bell peppers were transplanted on June 18 at the University of Delaware Research and Education center located near Georgetown, DE. Two row plots 20 ft long on 8 ft centers were replicated 4 times in a RCB design. All foliar materials were applied beginning at first flower/small fruit on July 17 and then on a weekly basis on July 24, 30; Aug 7, 12 and 19. Applications were made with a CO<sub>2</sub> pressurized 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 68 gpa at 35 psi. Plots were sampled on a weekly basis from June 22 through Aug 4 for green peach aphid (GPA) aphids, European corn borer (ECB) egg masses, beet armyworm (BAW) egg masses, and corn earworm(CEW) and fall armyworm(FAW) damaged fruit. All commercial size peppers were harvested on Aug 11 and Aug 24 and evaluated for ECB, BAW, CEW and FAW damage. Data were analyzed using Proc GLM and means were separated by Tukey’s mean separation test (P=0.05).

Insect pressure was light. No damaged fruit were detected at the first harvest (August 11). All treatments provided significantly better BAW control compared to the untreated check on Aug 24. No phytotoxicity was observed.

Treatment	Rate/Acre	Trt. Dates	Mean No. GPA /50 lvs August 4 <sup>1</sup>	Mean Percent Damaged Fruit – August 24 <sup>1</sup>	
				European Corn Borer	Beet Armyworm
Synapse 24 WG + LI-700 Baythroid XL	2 oz + 0.25% v/v 2.8 oz	July 17, 24 30; Aug 7 Aug 12,19	0.75a	0.00a	0.00a
Synapse 24 WG + LI-700 Baythroid XL	3 oz+ 0.25% v/v 2.8 oz	July17,24,30 Aug 7,12,19	3.00a	0.00a	0.00a
Radiant 1SC	5 oz	July 17, 24 30; Aug 7, 12,19	4.00a	0.00a	0.39a
Coragen 1.67SC Avaunt 30WDG	5.0 oz 3.5 oz	July17,24,30 Aug 7,12,19	0.75a	0.00a	0.26a
Orthene 97 Warrior II	1 lb 1.92 oz	July 17, 24 July 30, Aug 7, 12,19	0.50a	0.00a	0.00a
Avaunt 30WDG Coragen 1.67SC	3.5 oz 5.0 oz	July 17, 24 30; Aug 7 Aug 12,19	3.75a	0.00a	0.00a
Warrior II	1.92 oz	July 17, 24 30; Aug 7, 12,19	2.50a	0.00a	0.54a
Vetica Warrior II	12 oz 1.92 oz	July17,24,30 Aug 7,12,19	1.25a	0.00a	0.00a
Intrepid 2F	10 oz	July 17, 24 30; Aug 7, 12,19	2.50	0.35a	0.00a
Untreated	----	-----	2.25a	0.57a	3.07b

<sup>1</sup> Means within a column followed by the same letter are not significantly different (Tukey's, P=0.05).