

Brown Marmorated Stink Bug (BMSB) and Native Brown Stink Bug (BSB) Management in Sweet Corn, 2014: Three plantings of “Passion II “ Bt sweet corn were established on May 28, June 20, and July 10 at the University of Delaware’s Research farm located in Newark, DE. All plots were two rows wide planted of 5 ft centers arranged in a RCB design with four replications. For the first two plantings, plots were 25 foot long and for the third planting, plots were 15 foot long. All materials were applied with a CO₂ pressurized back pack sprayer using a two nozzle boom equipped with D2 hollow cone nozzles delivering 38 gpa at 40 psi. BMSB and Native Brown Stink Bug population levels were evaluated by counting the number of adults and nymphs in a 3 minute visual inspections of all plants in the plot. At harvest for all plantings, all the primary ears (top ear) from each plot were husked and evaluated for damage from stink bugs (blemished kernels). No stink bug damage was detected in the second and third plantings. Data were analyzed using Proc GLM and means were separated by Tukey’s mean separation test (P=0.05).

Table 1 . Stink Bug and Sap Beetle Ear Damage Data: First Planting – May 28

Treatment	Rate/Acre	Timing	Application Dates	% Sap Beetle Damaged Ears Aug 6 ¹	% Stink Bug Damaged Ears Aug 6 ¹	Average Number Stink Bug Damaged Kernels Aug 6 ¹
Warrior II	1.92 oz	Start at ear shank, 3-4 day schedule	7/18,7/21,7/24,7/28, 7/31 and 8/4	0.82b	0.00a	0.00b
Warrior II	1.92 oz	Silk, blister and milk	7/18,7/24,7/31	3.49ab	0.00a	0.00b
Warrior II	1.92 oz	Blister and Milk	7/24, 7/31	6.87ab	0.68a	0.25ab
Warrior II	1.92 oz	Milk	7/31	20.24a	1.15a	0.75ab
Hero EC	4.5 fl oz	Start at ear shank, 3-4 day schedule	7/18,7/21,7/24,7/28, 7/31 and 8/4	2.51b	0.00a	0.00b
Hero EC	7 oz	Silk, blister and milk	7/18,7/24,7/31	5.62ab	0.00a	0.00b
Hero EC	7 oz	Blister and Milk	7/24, 7/31	2.17b	0.00a	0.00b
Hero EC	7 oz	Milk	7/31	12.76ab	3.52a	1.00ab
Untreated	--	--	--	17.00ab	3.97a	2.75a

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

Table 2 .BMSB and BSB Population Data: First Planting – May 28

Treatment	Average Number BMSB per 3 Minute Count ¹				Average Number BSB per 3 Minute Count ¹			
	Jul 16	Jul 21	Jul 28	Aug 4	Jul 16	Jul 17	Jul 21	Jul 28
Warrior II	0.00a	0.00a	0.00a	0.00a	0.01a	0.01a	0.00a	0.01a
Warrior II	0.00a	0.00a	0.00a	0.00a	0.01a	0.01a	0.00a	0.00a
Warrior II	0.00a	0.00a	0.00a	0.00a	0.00a	0.00a	0.01a	0.00a
Warrior II	0.01a	0.00a	0.03a	0.00a	0.01a	0.00a	0.01a	0.02a
Hero EC	0.00a	0.00a	0.00a	0.00a	0.02a	0.01a	0.00a	0.00a
Hero EC	0.00a	0.00a	0.00a	0.00a	0.02a	0.01a	0.01a	0.01a
Hero EC	0.00a	0.00a	0.00a	0.01a	0.01a	0.01a	0.01a	0.01a
Hero EC	0.01	0.00a	0.00a	0.00a	0.01a	0.00a	0.01a	0.02a
Untreated	0.00a	0.00a	0.00a	0.00a	0.00a	0.01a	0.00a	0.01a

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