

**Brown Marmorated Stink Bug (BMSB) Management in Sweet Corn, 2013:** Two plots of “Obsession II “ Bt sweet corn were planted on May 30 and June 27 at the University of Delaware’s Research farm located in Newark, DE. For the first planting, two row plots 25 foot long planted on 5 foot centers were replicated four times in a RCB design. For the second planting, two row plots 20 foot long planted on 5 foot centers were replicated three times in a RCB design. All materials were applied with a CO<sub>2</sub> pressurized back pack sprayer using a two nozzle boom equipped with D2 hollow cone nozzles delivering 17.9 gpa at 40 psi. BMSB 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 both plantings, all the primary ears (top ear) from each plot were husked and evaluated for damage from BMSB (blemished kernels). Data were analyzed using Proc GLM and means were separated by Tukey’s mean separation test (P=0.05).

Table 1 . BMSB and Sap Beetle data – First Planting ( May 30)

Treatment	Rate/Acre	Timing	Application Dates	No. BMSB Adults & Nymphs per 3 minute count <sup>1</sup> July 24	% Sap Beetle Damaged Ears Aug 7 <sup>1</sup>	% BMSB Damaged Ears Aug 7 <sup>1</sup>
Warrior II	1.92 oz	Start at ear shank, 3-4 day schedule	7/19,7/22,7/25,7/29, 8/2 and 8/5	0.00a	0.00b	0.00b
Warrior II	1.92 oz	Silk, blister and milk	7/22,7/29, 8/5	0.00a	0.00b	0.00b
Warrior II	1.92 oz	Blister and Milk	7/29 and 8/5	0.75a	4.50ab	0.50b
Warrior II	1.92 oz	Milk	8/5	0.75a	6.50ab	0.00b
Hero EC	4.5 fl oz	Start at ear shank, 3-4 day schedule	7/19,7/22,7/25,7/29, 8/2 and 8/5	0.00a	0.50ab	0.00b
Hero EC	7 oz	Silk, blister and milk	7/22,7/29, 8/5	0.00a	1.50ab	0.50b
Hero EC	7 oz	Blister and Milk	7/29 and 8/5	1.75a	2.00ab	0.00b
Hero EC	7 oz	Milk	8/5	0.25a	10.00ab	4.50a
Untreated	--	--	--	1.25a	10.50a	1.00b

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

Table 2 .BMSB Population and Damage Data – Second Planting (June 27)

Treatment	Rate/Acre	Timing	Application Dates	No. BMSB Adults & Nymphs per 3 minute count <sup>1</sup>		Mean % BMSB Damaged Ears
				Aug 15	Aug 23	Aug 29 <sup>1</sup>
Warrior II	1.92 oz	Start at ear shank, 3-4 day schedule	8/8,8/13,8/16,8/20, 8/23 and 8/26	0.00a	0.00a	0.00b
Warrior II	1.92 oz	Silk, blister and milk	8/13, 8/20 and 8/26	0.33a	0.00a	0.00b
Warrior II	1.92 oz	Blister and Milk	8/20 and 8/27	1.00a	0.67a	0.00b
Warrior II	1.92 oz	Milk	8/27	0.00a	1.00a	2.28ab
Hero EC	4.5 fl oz	Start at ear shank, 3-4 day schedule	8/8,8/13,8/16,8/20, 8/23 and 8/27	0.00a	0.00a	0.00b
Hero EC	7 oz	Silk, blister and milk	8/13, 8/20 and 8/27	1.33a	0.00a	0.00b
Hero EC	7 oz	Blister and Milk	8/20 and 8/27	0.00a	0.00a	0.00b
Hero EC	7 oz	Milk	8/27	0.00a	0.00a	1.33ab
Untreated	--	--	--	0.00a	0.33a	4.17a

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