

Brown marmorated stink bug injury on vegetable crops

Tom Kuhar

Department of Entomology, Virginia Tech, Blacksburg, VA





Brown marmorated stink bug Halyomorpha halys





Impact of BMSB on Vegetable Crops

- T.P. Kuhar, K.L. Kamminga, J. Whalen, G.P. Dively, G. Brust, C.R.R. Hooks, G. Hamilton, and D.A. Herbert. 2012 The Pest Potential of Brown Marmorated Stink Bug on Vegetable Crops. *Plant Health Progress*. May 2012. doi:10.1094/PHP-2012-0523-01-BR.
- Sweet corn, peppers, tomatoes, beans, eggplant, and okra are preferred



Crops less preferred by BMSB than other vegetables



Vegetable crops that are probably not suitable host plants by BMSB



Sweet corn

- Damaged ears can exceed 100% for certain planting dates and small fields
- Sweet corn can be attacked as early as late June in VA





Sweet corn may be attacked from July-Aug







- Damage Evaluations in DE (Whalen & Cissell)
 - Discolored Kernels
 - Sunken Kernels
 - Blasted Kernels
 - Collapsed
 - Aborted



Blister/M Check Silking lk

Conclusions

- Infestations occurring prior to pollination may result in incomplete kernel fill
- BMSB must be managed from ear shank emergence to harvest

Peppers heavily damaged



BMSB feeding damage



Bagged Pepper Plant Study - 2011

Control Plants

Infested Plants



Pepper variety plots

- In VA, MD, DE, and NJ, replicated plantings of bell (Paladin), banana (Bounty), and hot jalapeno (Sparky) peppers were planted
- Approximately equal damage among varieties



Tomatoes also can be badly injured

















BMSB can also transmit bacteria and yeasts such as *Eremothecium coryli* to various fruits and vegetables via stylet feeding? Jerry Brust and Karen Rane (U. MD)





When yeast is present in BMSB feeding site it causes a collapse of the feeding area resulting in a 'crater' appearance.



Edible-podded beans





That's all folks!

