

SUMMARY LOGIC MODEL **Biology, Ecology, and Management of Brown Marmorated Stink Bug (BMSB) in Orchard Crops, Small Fruit, Grapes, Vegetables, and Ornamentals**

SITUATION:



The brown marmorated stink bug (BMSB), *Halyomorpha halys* (Stål) is an invasive insect native to Asia that is well established in the mid-Atlantic and has been officially detected in 28 states and D.C. In 2010, BMSB populations increased dramatically and attacked many high value specialty crops. Damage in commercial tree fruit orchards reached critical levels. Serious problems were detected in other specialty crops including peppers, tomatoes, raspberries, grapes, and woody and herbaceous ornamentals. In addition, the risk to other specialty crops such as lima and snap beans is high, and questions of potential disease transmission and post-harvest issues continue to arise. While the threat posed by spreading BMSB populations to U.S. agriculture continues to increase, there is no established detection method, treatment threshold or control strategy for BMSB in any cropping system.

PRIORITIES:

Based on our Stakeholder Advisory Panel guidance and input and documented stakeholder concerns, input, and priorities captured by the BMSB Working Group (http://www.northeastipm.org/work_bmsbpriority.cfm), we propose to: (1) assess biology and phenology of BMSB in specialty crops; (2) develop monitoring and management tools for BMSB; (3) establish effective management strategies for BMSB in specialty crops; and (4) integrate stakeholder input and research findings to form and deliver practical outcomes.

