

UT Institute Of Agriculture To Research Organic Management Of Brown Marmorated Stink Bugs

The research is part of nine-university effort to control the pest

KNOXVILLE, TENN.

The University of Tennessee Institute of Agriculture is joining a multistate effort to develop new methods for organic farmers to contend with invasive brown marmorated stink bugs.

The UT Organic and Sustainable Crop Production Program has been awarded \$120,550 in federal funding to pursue two objectives. The first is to determine the importance of natural enemies on stink bugs and their impact on populations. The second is to determine the effectiveness of barrier fabrics as cultural control tactics.

“The brown marmorated stink bug is hard to manage in conventional agriculture, and organic growers are going to be hit the hardest, particularly on high-value crops such as fruits and vegetables,” said UT principal investigator Mary Rogers. Rogers, a research associate with the Department of Plant Sciences, will be joined by Vegetable Extension Specialist Annette Wszelaki on the project.

The research effort is part of a nine-university collaboration focused on organic management of the brown marmorated stink bug and funded with \$2.7 million by the U.S. Department of Agriculture’s National Institute of Food and Agriculture. The three-year initiative has the support or involvement of 25 researchers, three organic production organizations and 12 organic farmers.

In East Tennessee, organic farmer Elizabeth Malayter of Rogersville will be a partner in UT’s research. Malayter has a trap cropping experiment on her farm. Trap cropping, which is seen as a promising control method, consists of planting crops that are highly attractive to stink bugs on the margins of cash crop fields. Using the trap crops, producers can work to control the stink bugs in these narrow areas of their fields. UT will assist Malayter in collecting data and analyzing the results of experiments.

Brown marmorated stink bugs are an exotic pest from Asia, first discovered in the U.S. in Pennsylvania in 1998. Currently, the brown marmorated stink bug has been found in 35 states and was first identified in Tennessee in

2008. They have established themselves in the mid-Atlantic region and are already damaging organic crops, as well as becoming an invasive pest to homeowners. Nationally, an estimated \$21 billion worth of crops are at risk where



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Photo by Frank Hale, UTIA Department of Entomology and Plant Pathology.

stink bugs have been detected, and damage is increasing in Southern states.

Rogers, who joined UT in 2008, holds a Ph.D. in plants, soils and insects with a concentration in integrated pest management. The UT Institute of Agriculture’s commitment to organic production includes an Organic Crops Unit at the East Tennessee AgResearch and Education Center in Knoxville and the UT Organic and Sustainable Crop Production Program, which encompasses research, Extension and education.

Earlier this year, the Organic Farming Research Foundation ranked the Institute of Agriculture’s organics program as one of the top six in the country. Δ