

Program Name: Brown Marmorated Stink Bug
Project ID: 2500
Lead Agency: Florida Department of Agriculture and Consumer Services Division of Plant Industry

Strategy and Biennial Report Objective Addressed: 2-B.1
Invasive Species Strategic Action Framework Goal: 1

Project Synopsis: The Brown Marmorated Stink Bug, *Halyomorpha halys* (Heteroptera: Pentatomidae) was accidentally introduced in Pennsylvania in 1998 from Asia probably in packing material. By 2013 it had spread or been reported in 38 states and it is has been intercepted several time in the last years in Florida. Its host range includes temperate & tropical fruits, vegetables, legumes, ornamentals and weedy plants. This insect survives the winter by invading houses and other enclosed structures becoming a household nuisance pest. In the spring, adults migrate into field crops where they develop high populations and cause significant feeding damage.

The egg parasitoid *Trissolcus halyomorphae* (Hymenoptera: Scelionidae) was found and collected in China and brought back into quarantine facilities in the U.S. as a potential biological control agent of the Brown Marmorated Stink Bug.

As part of the risk assessment, host-specificity tests (choice, no-choice) are conducted at the quarantine facilities in Gainesville, Florida exposing *T. halyomorphae* adult females to several species of stink bugs including phytophagous and predators in the Pentatomidae, Plataspidae and Scutelleridae families. A single adult female *T. halyomorphae* is exposed to an egg mass in a small clear plastic container in a growth chamber on a 16-hour photoperiod (16:8 h L/D) at 20°C and 60% RH for 24 hours.

Results of the host-specificity tests (choice, no-choice) with the egg-parasitoid *Trissolcus halyomorphae* indicated that the higher level of parasitoid emergence (>80%) was obtained with *Halyomorpha halys*, the target pest. Risk assessment continues with *T. halyomorphae* as well as several other potential natural enemies.

Current Status: Ongoing (project up for renewal annually)

Project Schedule:

Start Date: 8/4/2013
 Finish Date: 8/3/2014

Detailed Project Budget Information

	2014	2015	2016	2017	2018	Balance to Complete	Total
Federal	\$138,600						
Total	\$138,600						

Contact: Dr. Greg Hodges, Chief-Entomology, Nematology and Plant Pathology, Division of Plant Industry, Florida Department of Agriculture and Consumer Services.

Hyperlink: <http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Science/Biological-Control/Brown-Marmorated-Stink-Bug-Biological-Control>