

# Brown marmorated stink bug biology and management options described in open-access article

September 3 2014

---



Adult brown marmorated stink bug (*Halyomorpha halys*). Credit: Ian Grettenberger, Penn State University

The brown marmorated stink bug (*Halyomorpha halys*) is an invasive, herbivorous insect species that was accidentally introduced to the United States from Asia. First discovered in Allentown, Pennsylvania in 1996, it has since been found in at least 40 states in the U.S. as well as Canada, Switzerland, France, Germany, Italy, and Lichtenstein.

In North America, it has become a major [agricultural pest](#) across a wide range of commodities. The insect is capable of eating more than 100 different plant species, and in 2010 it caused \$37 million worth of damage to apples alone.

Now a new, open-access article in the *Journal of Integrated Pest Management* describes available management options for this invasive [pest](#) species, as well as information about its origin and spread, its pest status in other invaded regions, descriptions of its life stages and biology, its chemical ecology, and the types of damage it does to various host plants. The authors of the article—some of the best known experts on the BMSB in North America—are from the the U.S. Department of Agriculture, Agriculture and Agri-Food Canada, and a number of universities.

Nearly a dozen color photographs of the BMSB and the damage it does to crops are included in the article, along with a list of natural insect enemies that can potentially be used for [biological control](#) programs.

"Ultimately, classical biological control using parasitoids native to Asia and conservation biological control to enhance the effectiveness of introduced and indigenous natural enemies may provide the most promising long-term solutions for landscape-level reduction of *H. halys* populations," the authors wrote.

They also discuss different chemical control options that can be used successfully in [integrated pest management](#) programs.

"To return to an integrated approach to managing all pests in the crops affected by *H. halys*, growers require a more sustainable strategy for chemical control that combines efficient use of insecticides with a better understanding of its biology and behavior," according to the authors.

**More information:** Biology, Ecology, and Management of Brown Marmorated Stink Bug (Hemiptera: Pentatomidae),  
[esa.publisher.ingentaconnect.com/content-IPM14002](https://esa.publisher.ingentaconnect.com/content-IPM14002)

Provided by Entomological Society of America

Citation: Brown marmorated stink bug biology and management options described in open-access article (2014, September 3) retrieved 2 May 2024 from  
<https://phys.org/news/2014-09-brown-marmorated-bug-biology-options.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--