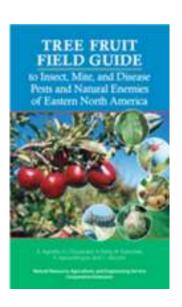
BMSB State-wide Monitoring Network, and A New Search Engine for Tree Fruit Pests and Diseases



Julianna Wilson

Department of Entomology

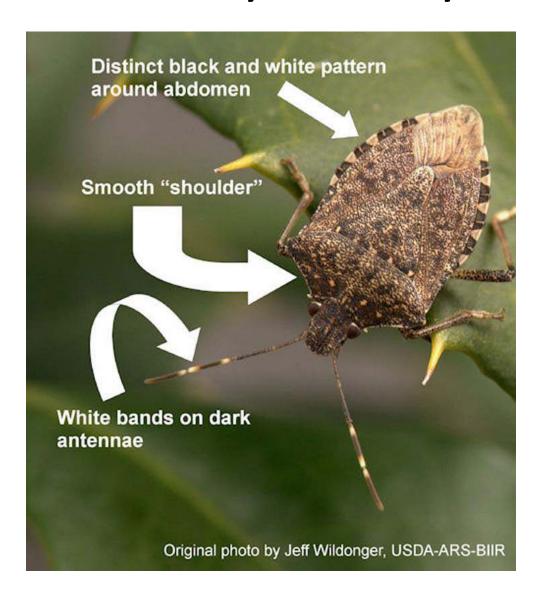
Michigan State University



BMSB Project Acknowledgements

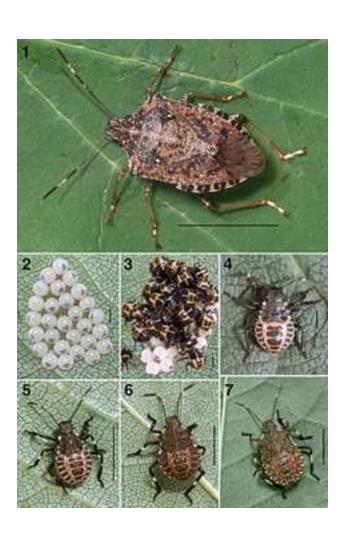
- Funding from Project GREEEN, MAC
- BMSB monitoring team:
 - Mike Haas, Peter McGhee, Brad Baughman,
 Bob Tritten, Lina Rodriguez Salamanca,
 Emily Pochubay, Karen Powers, Ben Phillips, Amy
 Irish-Brown, Mark Longstroth, Carlos Garcia Salazar, Mark Whalon, Ben Werling

History and key characteristics



- First detected in PA in 1996.
- Has become a major pest in mid-Atlantic tree fruit since 2006.
- First detected in MI in 2011.

Lifecycle & Habits



- Adults are 1/2 by 5/8 inch.
- Five instars, nymphs and adults cause damage.
- 1-2 generations in Michigan.
- Overwinter as adults in manmade structures or under the bark of dying trees.

Alternate and preferred hosts

- Too numerous to list.
- Many exotic plants, wild, ornamental, and crop.
 - Especially Tree-of-heaven and English holly.
- Can complete entire lifecycle on peaches.
- Move into apples later in the season.



Examples of BMSB fruit damage



Monitoring in 2014

Tree fruits

 Monitored >80 sites (up from 50 in 2013)

Sweep net, limb-jarring

Visual at suspect locations

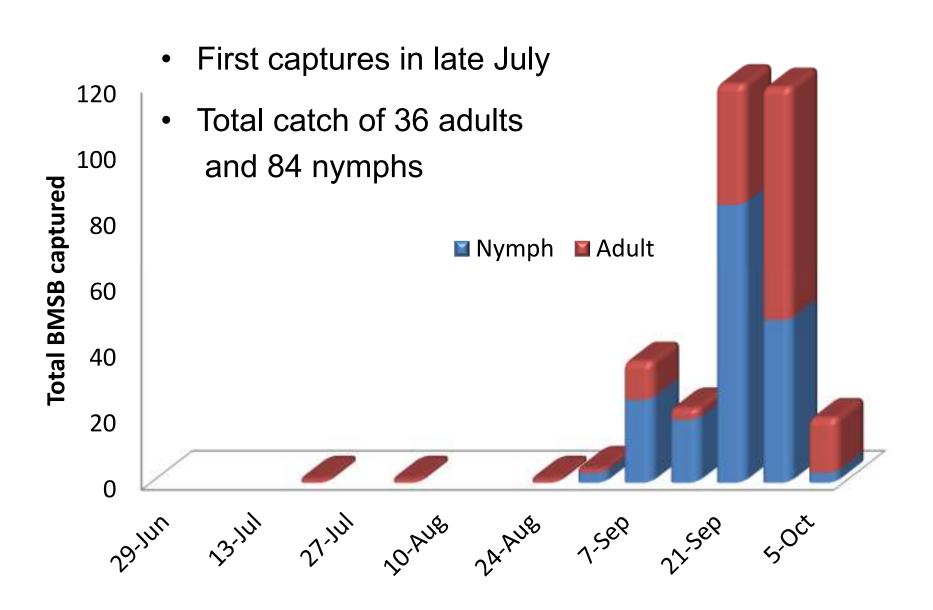
Pyramid or Rescue traps baited

with pheromone

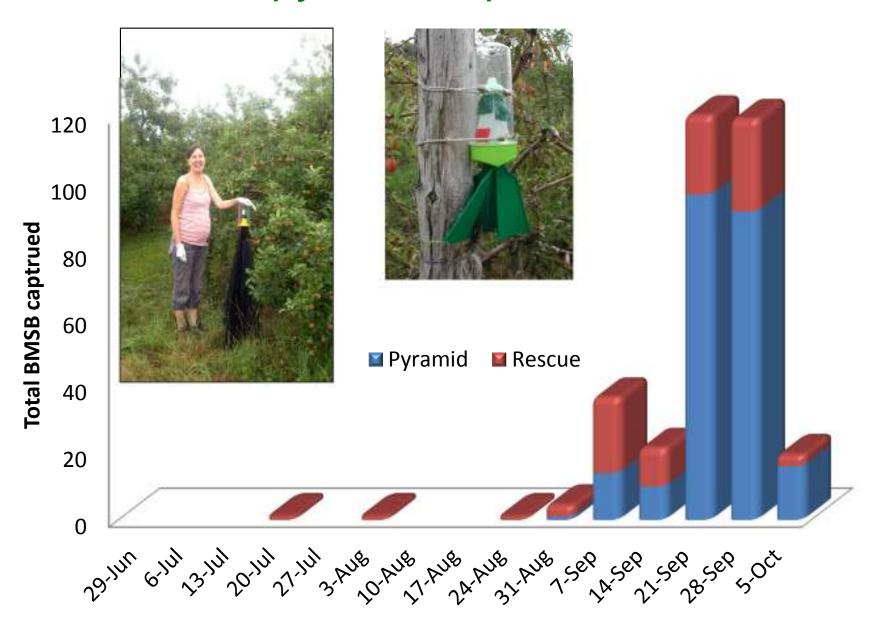




BMSB Detections - 2014

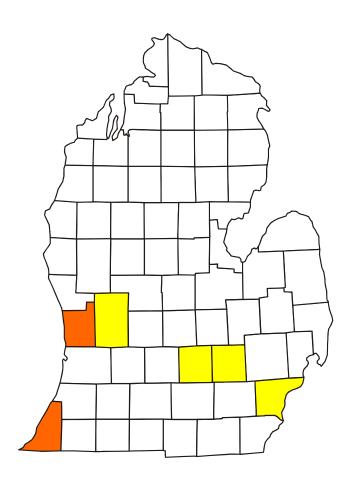


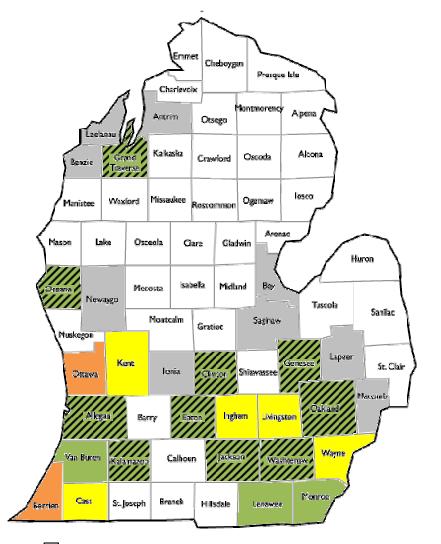
Lure-baited pyramid traps most effective



- First captures in mid July.
- No detections in apple orchards
- "Hot spots" remain in Berrien and Ingham counties; nuisance reports in Berrien, Cass, Kent, Ingham, Livingston, and Wayne Co.
- Suspected BMSB injury in peach in Ottawa and Berrien Co.







The Good News

- No detections in apple orchards.
- Fewer captures in 2014 than in 2013.
- Not captured in traps in majority of counties in 2014.

- Monitored for BMSB, but none found as of 2014
- BMSB found previously, but none in 2014
 - BMSB detected at low levels in 2014
- Nuisance reports in 2014
- Nuisance reports & fruit damage in 2014

Take-home message on BMSB

- The primary concern for the apple industry are the building populations in Berrien County
- An effective trap and lure is available
- MSU will continue monitoring for BMSB
- Information is being provided in a timely manner (special section in Management Guide)

Michigan brown marmorated stink bug report for September 12, 2014

More nymph and adult brown marmorated stink bugs were caught during the week of Sept. 5-11, 2014, at seven sites in Berrien, Lenawee and Ingham counties. Homeowners in Berrien County are starting to report them in greater number.

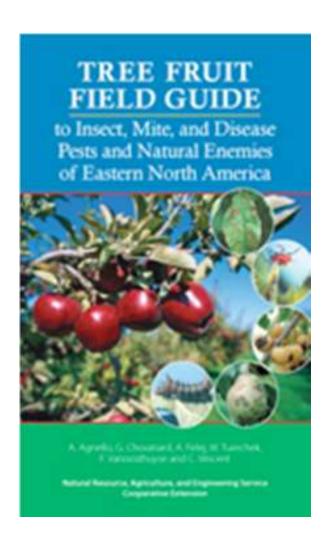
Posted on **September 15, 2014** by **Julianna Wilson**, and Larry Gut, Michigan State University Extension, Department of Entomology



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- Original authors:
 - Art Agnello, Gerard Chouinard, A. Firlej, William
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- Conversion of content for search engine:
 - Julianna Wilson, Joy Landis, Mallory Fournier

Turning a Tree Fruit Field Guide into an online tool



Home > Agriculture > Fruit > Pest and Beneficial Search

Pest and Beneficial Search

Use this search to identify diseases, insect and mite pests and beneficials found in crops and landscapes, a critical step in any integrated pest management (IPM) plan. This beta version covers tree fruit pests and is based on the "Tree Fruit Field Guide to Insect, Mite, and Disease Pests and Natural Enemies of Eastern North America." We plan to expand the search to other crops in the future. Please give us your feedback to improve the IPM search through this survey ...

Location on Plant

Crop

Use our alphabetical index to find a pest name.

Search by name

And/Or

Search by category

Type	
Plant Stage	

Search