Outputs and Outreach



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Project Outputs USDA-NIFA-SCRI 2016-51181-25409

Research Publications (124)

- 2016 = 3
- 2017 = 35
- 2018 = 23
- 2019 = 30
- 2020 = 29
- 2021 = 6

Conference Presentations (330)

- 2016 = 40
- 2017 = 71
- 2018 = 67
- **2019 = 95**
- 2020 = 50
- 2021 = 7

Extension Publications (75) 2016 = 6 2017 = 21 2018 = 11 2019 = 18 2020 = 18 2021 = 1

Extension Presentations (322) 2016 = 9 2017 = 101 2018 = 101 2019 = 94 2020 = 13 2021 = 4

Project Outputs USDA-NIFA-SCRI 2016-51181-25409



A Few Extension Pages & Publications

- <u>https://entomology.ces.ncsu.edu/brown-marmorated-stink-bug-in-north-carolina-3/</u>
- <u>http://tfrec.cahnrs.wsu.edu/beers-tfentomology/bmsb/</u>
- <u>http://treefruit.wsu.edu/crop-protection/opm/brown-marmorated-stink-bug/</u>
- <u>https://extension.usu.edu/pests/research/invasive-species</u>
- <u>https://www.pubs.ext.vt.edu/Publications and Educational</u> <u>Resources | VCE Publications | Virginia Tech (vt.edu)</u>

Nuisance problems only

Aprioultural and nuisance problems (

Severe agricultural and nuisance problems reported

Mentoring young scientists

USDA-NIFA-SCRI 2016-51181-25409

- Conducting research related to a project objective:
 - Graduate Students
 = 29
 - Post DoctoralScholars = 29



Emily Ogburn poses with a larger-than-life model of a wasp parasitizing brown marmorated stink bug eggs, presented to her as a parting gift from Walgenbach Lab colleagues. Photo by Stephen Schoof.

Leveraged Funding

- TOTAL = \$4,152,444
 - 2017 = \$913,032
 - 2018 = \$1,679,458
 - 2019 = \$860,491
 - 2020 = \$693,463
- Original USDA funding = \$9,159,897
- Leveraged funding ratio = 0.45
- Additional funding may be obtained in 2021



StopBMSB.org

- 366,110 unique users
- Basics:

https://www.stopbmsb.org/stinkbug-basics/

- Management approaches: <u>https://www.stopbmsb.org/mana</u> <u>ging-bmsb/</u>
- Scientific publications: <u>https://www.stopbmsb.org/about</u> <u>-us/scientific-publications/</u>
- Biological control: <u>https://www.stopbmsb.org/biolo</u> <u>gical-control/</u>





BMSB ID kits

- 1,972 ID kits
- 25 states and Puerto Rico
- 4 Canadian provinces
- Other countries including Australia, New Zealand, Germany, Chile, and Brazil



INSIGHTS Newsletter

- NE IPM Center publication (USDA funding but not this project funding)
- June 2019 issue focused on BMSB
- 20 articles and announcements on BMSB since 2016
- <u>https://www.northeastipm.org/</u> <u>about-us/publications/ipm-</u> <u>insights/</u>

If your house is invaded by **25,000** brown marmorated stink bugs...



This group of bugs could produce a summer population of almost **3 million** in the immediate vicinity of your home.

KEEP THEM OUT

Check weather stripping around screens, windows, and doors. Caulk up holes, and make sure that window screens fit tightly.

Inspect for cracks and holes, especially where utilities pass in and out, and seal them with caulk (small gaps) or foam (large ones).

To exterminate the rascals, put them in a reusable plastic food storage container and toss them in the freezer for a couple of days.

2017 NE IPM Center Webinar



https://www.northeastipm.org/ipm-in-action/the-ipmtoolbox/learn-about-bmsb-and-the-latest-ipm-techniqueswebinar-recording/

2020 Stakeholder Survey

- Sent to research, Extension and private IPM practitioners
- 105 responses:
 - 40% Extension, 35% co-Pls, 10% consultants, 4% SAP members, and 12% other
- In general, for all practices, co-PIs tended to estimate the levels of adoption higher than the non-co-PIs
- Barriers to management adoption:
 - High cost of implementation NOT a top barrier

 Data suggest that more, improved research and Extension will lead to increased adoption of IPM

StopBMSB.org Contact page

 Find people and ask questions at <u>https://www.stopbmsb.org/about-us/contact-us/</u>

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