SARE: Advancing the Frontier of Sustainable Agriculture in...

West Virginia

Project Highlight: Seeking Solutions in the Fight Against Stink Bug

armer Clarissa Mathews struggled, along with many other West Virginia farmers, with the Brown Marmorated Stink Bug (BMSB). This highly invasive pest causes significant crop losses, and all vegetable and fruit crops are vulnerable. To manage the pest, frequent applications of broad-spectrum insecticides, toxic to beneficial organisms, are commonly used.

Two SARE-funded projects sought out alternative solutions. In one, Mathews investigated a non-chemical approach combining a highly attractive trap crop buffer with commercially available pheromone-baited traps. On a subsequent project, USDA researcher Tracy Lesky partnered with Mathews to manage BMSB in apples using the same tools.

Mathews found that stink bugs were

S2.7 million in

total funding

89 grant

projects

(since 1988)

For a complete list of grant

projects state by state, go to

highly attracted to a sunflower trap crop. However, reduced stink bug densities in cash crops did not mean significantly lower crop damage or higher yields. Thus, she concluded that while effective for organic farmers unable to use synthetic insecticides, the pheromone lure needed to be incorporated within the trap crop, not on the sides. Lesky's follow-up project is looking at the same approach, except farmers who are not organic will apply the insecticides near the attract and kill sites. Lesky is already finding success with the approach and interest from farmers.

For more information on these projects, see www.sare.org/projects, and search for project numbers LNE14-334 and FNE12-759.



SARE's four regional programs and outreach office work to advance sustainable innovations to the whole of American agriculture.

What is SARE?

Since 1988, the Sustainable Agriculture Research & Education (SARE) program has been the go-to USDA grants and outreach program for farmers, ranchers, researchers and educators who want to develop innovations that improve farm profitability, protect water and land, and revitalize communities. To date, SARE has awarded over \$287 million to more than 7,000 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining the SARE Learning Center-a library of practical publications, grantee-produced information products and other educational materials.



Sustainable Agriculture **Research & Education**

www.sare.org

SARE Grants in West Virginia

SARE has

awarded a

89 grants

since 1988

in West Virginia

total of

6 Graduate Student Grants

7 Professional Development Grants

13 Research & Education Grants

5 Community Innovation Grants 1 Research Only Grant

> 42 Farmer/ Rancher Grants



15 On-Farm Research Grants SARE's Impact

53 percent of producers report using a new production technique after reading a SARE publication.

79 percent of producers said they improved soil quality through their SARE project.

64 percent of producers said their SARE project helped them achieve higher sales.

Contact Your SARE State Coordinator

SARE sustainable ag coordinators run state-level educational programs for Extension and other ag professionals, and many help grant applicants and recipients with planning and outreach. Visit www.nesare.org/west-virginia to learn more.

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For detailed information on SARE projects, go to

www.SARE.org

USDA SARE Sustainable Agriculture Research & Education

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