

www.sare.org

# 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 \$4.8 million to more than 104 initiatives [1].

#### 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 an online library of practical publications, granteeproduced information products and other educational materials.

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

## Tennessee

Project Highlight: Cover Crops Help Manage Appletree Borer

The flatheaded appletree borer (FAB) is a significant economic pest in orchards, nurseries and urban landscapes, and in Tennessee's production nurseries, red maples are one of the most problematic trees for FAB attacks. Determined to find a solution to this problem, Tennessee State University researcher Karla Addesso and her project team used a SARE grant to evaluate the efficacy of applying a winter cover crop to field-grown nursery red maple trees to act as a barrier to FAB oviposition, an aid to preventing leaching of imidacloprid (a commonly used insecticide) from the root zone of the trees, and as a natural weed suppression technique.

After trying a few mixes, the team determined that a ryegrass/crimson clover mix was extremely effective at camouflaging the tree trunks from the pest, making it less likely to lay eggs. The cover crops reduced pest attacks by 95 percent. In addition to acting as a barrier, the cover crop mix also reduced the temperatures of the tree trunks, making the trees a less preferable egg-laying site.

Based on their highly promising results, the team proposes a systems approach to in-field nursery tree production by incorporating a winter cover crop combined with optimized pesticide use to simultaneously maximize FAB control and plant growth while minimizing crop damage, weed competition and insecticide runoff.

For more information on this project, see sare.org/projects, and search for project number OS14-084.

#### SARE in Tennessee

southern.sare.org/state-profiles/tennessee/



[1] These totals reflect available data; complete information may not be available for all grant programs prior to 2016.

#### SARE in Tennessee, 2020-2025

This is a summary of recent SARE-funded activities and impacts in the state. To search all SARE projects visit projects.sare.org. For a list of all projects in Tennessee visit projects.sare.org/state-fact-sheets/.

#### **Grants awarded**

## Total awards: 35 grants

- 2 Farmer/Rancher
- 4 Research and Education
- 2 Professional Development Program
- 3 On Farm Research/Partnership
- 7 Graduate Student
- 12 PDP State Program [2]
- 5 Education Only

#### Total funding: **\$2,346,450**

\$23,551	Farmer/Rancher
\$1,443,979	Research and Education
\$159,898	Professional Development Program
\$69,973	On Farm Research/Partnership
\$114,899	Graduate Student
\$317,928	PDP State Program [2]
\$216,222	Education Only

[2] The Professional Development Program (PDP) State Program is a noncompetitive award that funds the activities of the state coordinator(s). See more below.

For a complete list of Tennessee awards, visit: projects.sare.org/state-fact-sheets/

#### **Farmer and rancher impacts**

SARE grantees have reported the following impacts from their projects:

**9,048** farmers participated in a SARE-funded project

**482** farmers reported a change in knowlege, awareness, skills or attitude

#### **33** farmers changed a practice



Learn about local impacts at: southern.sare.org/sare-in-your-state/tennessee/

#### **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 southern.sare.org/state-profiles/tennessee/ to learn more.

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USDA National Institute of Food and Agriculture

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