

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 \$4.7 million to more than 102 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, grantee-produced 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 osare.org/projects, and search for project number osare.org/projects.

SARE in Tennessee

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

\$4,710,371 in total funding

102 grant projects

(since 1988 [1])

For a complete list of grant projects state by state, go to projects.sare.org/state-fact-sheets/ North Central Northeast

Western

Southern

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

SARE in Tennessee, 2019-2024

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 this state visit projects.sare.org/state-fact-sheets/.

Grants awarded

Total awards: 35 grants

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

Total funding: **\$2,268,469**

\$33,221 Farmer/Rancher

\$1,443,979 Research and Education

\$79,998 Professional Development Program

\$40,000 On Farm Research/Partnership

\$114,899 Graduate Student

\$340,150 PDP State Program [2]

\$216,222 Education Only

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

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

Farmer and rancher impacts

SARE grantees have reported the following impacts from their projects:

7,956 farmers participated in a SARE-funded project

429 farmers reported a change in knowlege, awareness, skills or attitude

36 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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