

Title:**Evaluating Cultivar Selection and Management Practices to Support Blueberry Educators and Growers in the Mid-South****Name, Mailing and Email Address of Principal Investigator(s):**

Investigator	Project Role (s)
Natalie Bumgarner, Assoc. Prof., Extension Specialist, Dept. Plant Sciences 2505 EJ Chapman Drive, 112 Plant Biotech, Knoxville, TN 37996 nbumgarn@utk.edu	Trial site horticultural management, consumer perspectives, training material development
David Lockwood, Prof., Extension Specialist, Dept. of Plant Sciences 2505 EJ Chapman Drive, 112 Plant Biotech, Knoxville, TN 37996 Knoxville, TN 37996 lockwood@utk.edu	Cultivar selection, horticultural management, training material development
Melody Rose, Extension Agent III, UT Greene County Extension 204 North Cutler Street Greeneville, TN 37745 mteague@utk.edu	Trial site horticultural management, training material development
Rachel Painter, Extension Specialist, Center for Profitable Agriculture 1331 McArthur Street Manchester, TN 37355 Reather1@utk.edu	Marketing strategies and consumer perspectives, training material development

Project Objectives: This **outreach** project is designed to build upon previously funded SRSFC outreach projects to enhance existing on-site demonstrations and support agent trainings that will enable ongoing support of blueberry growers in Tennessee and the mid-south through three central objectives:

- 1) Update demonstrations that assess blueberry cultivar performance at two Tennessee sites (east and middle) to continue generating information that will help early-stage blueberry producers in the region (i.e., producers beginning fruit growing or those seeking to diversify or update their current operations) select types and cultivars of blueberries and market their crops.
- 2) Enable upgrades to growing systems through installation of fertigation and wildlife control systems at blueberry cultivar demonstration sites to showcase tools and best management practices for Extension personnel and growers at field days and in-service training events.
- 3) Develop and deliver Extension education materials and resources as well as training events to assist agents in supporting small and medium-scale growers in making informed decisions about cultivar selection, management, and marketing of blueberries.

Outreach Activity to Date and 2025 plans:

Objective 1. Update demonstrations that assess blueberry cultivar performance at two Tennessee sites (east and middle) to continue generating information that will help early-stage blueberry producers in the region (i.e., producers beginning fruit growing or those seeking to diversify or update their current operations) select types and cultivars of blueberries and market their crops.

This objective was undertaken and completed with any deceased plants replaced in both the spring of 2023 and 2024. Blueberry trial plots in middle and east Tennessee had some plant death due. Lost plants from 2019-2022 plants were primarily in cultivars of northern highbush cultivars. Stand counts were taken on all plots, and replacement plants were ordered and installed in early spring (Feb-Mar) of 2023. Early spring 2025 will provide an opportunity to take a new stand county and determine if any additional plants need to be replaced in the trials. Additionally, in early 2025 a new Extension fruit specialist (Dr. Annie Vogel) will be starting and will be brought in on this project.

Objective 2. Enable upgrades to growing systems through installation of fertigation and wildlife control systems at blueberry cultivar demonstration sites to showcase tools and best management practices for Extension personnel and growers at field days and in-service training events.

In 2024, fertigation systems were purchased for both the middle and east TN trial plots, and fertilization has been implemented in the trials as well as being featured in field day tours to showcase management practices. Likewise, wildlife control systems were purchased in 2024 but the full implementation will be completed in 2025.

Objective 3. Develop and deliver Extension education materials and resources as well as training events to assist agents in supporting small and medium-scale growers in making informed decisions about cultivar selection and management practices within the context of planning, installing, managing, and marketing blueberries.

Multiple tours and in-services were conducted in 2023 and 2024 by the PI team to educate agents and local growers about best practices in selection and management of blueberry crops.

- March 2, 2023 Agent in-service and grower training in Greeneville, TN
- March 6, 2023 Agent in-service and grower training in Spring Hill, TN
- June 13, 2023 Fruits of the Backyard UT Field Day in Spring Hill, TN
- Multiple 2023 public horticulture trainings were conducted in Greeneville, TN
- June 6, 2024 Agent in-service held in Chattanooga TN focused on serving small scale specialty crop growers
- June 11, 2024 Fruits of the Backyard Field Day field tours in Spring Hill, TN

In 2025, additional in-person tours and trainings will be conducted at the trial sites. And, information gained from these sites will also be used in the development of new Extension resources and agent training events scheduled for 2025 that will support agents in understanding the needs of small growers and best assisting them in accessing and utilizing Extension resources.