

Exploring Opportunities to Expand Organic Production & Research in the Southeast U.S.

December 1, 2023 | Virtual Convening Event

Introduction

Interest in organic products has steadily increased in the last several years. As demand has grown, so has the need for increased production. Between 2011 and 2016, the number of certified organic farms in the United States grew by 56 percent.¹ This growth, however, was not sustained. In more recent years from 2017 to 2022, the number of certified organic farms declined, creating a gap between supply and demand as well as an opportunity to invest in organic agriculture.²



Organic farming predominates on the West Coast, Midwest and Northeast, but lags in the Southeast U.S. for several reasons, including pest and disease pressures, financial inequality and a lack of appropriate support for organic researchers and producers. Farmers in the Southeast often lack adequate access to resources that could increase organic production in this region.

Historically, “organic production has been low in southern states” according to the Rodale Institute, “but the U.S. Department of Agriculture’s National Agricultural Statistics Service reported that the South saw the most growth in organic farming from 2011-2016. For

¹ Bialik, Kristen, and Kristi Walker. “Organic Farming Is on the Rise in the U.S.” Pew Research Center, 10 Jan. 2019, www.pewresearch.org/short-reads/2019/01/10/organic-farming-is-on-the-rise-in-the-u-s/.

² “2022 Census of Agriculture” United States Department of Agriculture, National Agricultural Statistics Service, Feb 2024. https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_US/usv1.pdf.

example, Alabama and South Carolina both saw increases of more than 200% since 2011. And several other Southern states saw their certified organic farm count more than double in those five years.”³

This indicates an increasing need and opportunity for research and education across the organic sector. Expanded communication and collaboration is needed to include the growing organic markets of the southeast region in the larger conversations about organic agriculture growth in the U.S. To increase access to resources for organic research and extension in the southeast, Black, Indigenous and people of color (BIPOC) farmers and researchers from minority-serving institutions need a seat at the table.

In 2022, the Foundation for Food & Agriculture Research (FFAR) in collaboration with Clif Bar and Tuskegee University announced a [\\$2 million endowment](#) to support the advancement of organic agriculture and farming practices. As one of the first activities under this partnership, [FFAR](#), [Clif Bar](#), [Tuskegee](#) and [The Organic Center](#) hosted a [virtual convening event](#) on December 1, 2023 to discuss opportunities for organic production expansion and research in the Southeastern U.S. The event was attended by a wide range of stakeholders, including organic researchers, producer groups, and organizational leaders.

“Organic farming research can assist producers in implementing sustainable soil health management practices, increase resilience to climate change and strengthen our food systems.

FFAR is proud to partner with Clif Bar to maximize investment in the advancement of organic agriculture and support equity in farming through this endowment to Tuskegee University.”

**Dr. LaKisha Odom,
Scientific Program
Director, FFAR**

Objectives of the Virtual Convening Event

This event was co-hosted by FFAR, Clif Bar, Tuskegee University and The Organic Center. FFAR is a non-profit that builds private-public partnerships to advance food and agriculture

³ “Rodale Institute Southeast Organic Center.” Rodale Institute, 27 Mar. 2023, rodaleinstitute.org/about/facilities-and-campuses/regional-resource-centers/southeast-organic-center/.



research. Organic agriculture has been identified as a sector that furthers FFAR's mission of providing every person access to affordable, nutritious food grown on thriving farms. Clif Bar is committed to funding organic agriculture as it aligns with their company commitments but also due to growing interest in organic products from their consumers.

Tuskegee University has been identified as an organic leader in the Southeast due to the organization's extensive history of organizing and research in this space.

The Organic Center has previously worked with FFAR to co-fund organic research and professional development programs. The Organic Center is working on a [database of organic research resources](#) that will complement the efforts of the endowment.

Together, these four organizations have partnered to determine the challenges currently facing BIPOC growers in organic production and research in the Southeast and to collect information from stakeholders to determine how to address and overcome these challenges.

With a specific focus on the Southeast region of the U.S., the objectives of the virtual event were to:

1. Gather information about the current organic regional landscape.
2. Engage with stakeholders such as organic and organic-aligned researchers in the 1890s community, BIPOC organic farming communities, farmer groups, and other federal and non-federal partners.
3. Create a dynamic space for discussion among a wide range of stakeholders.
4. Identify barriers to organic production in the Southeast as well as opportunities for organic research, with a focus on BIPOC farmers.

Agenda

- 11:00 am** **Welcome, Context Setting and Introductions**
Dr. Kokoasse Kpombrekou (Tuskegee University)
[Speaker bios are available here](#)
- 11:10 am** **Overview of the state of organic research resources in the Southeast**
Dr. Amber Sciligo (The Organic Center)
Margaret Harris (Spelman College)
Ashlynn Freeman (Tennessee State University)
Elora Bevacqua (Arizona State University)
- 11:30 am** **Donor Perspective and Overview of [the Endowment](#)**
Dr. LaKisha Odom (Foundation for Food & Agriculture Research)
Philippa Lockwood (Clif Bar)
- 11:40 am** **Panel Discussion and Q&A:** Producer perspectives on the unique needs, challenges and research gaps related to organic production and research in the Southeast.
Karen McSwain (Carolina Farm Stewardship Association)
Dr. Juan Carlos Rodriguez (Florida Organic Growers)
Charlotte Pate (Alabama Sustainable Agriculture Network)
- 12:30 pm** **10-minute Break (Including interactive Zoom poll)**
- 12:40 pm** **Research Overview & Large Interactive Discussion with Audience**
Dr. Kokoasse Kpombrekou (Tuskegee University)
- 1:40 pm** **10-minute Break (Including interactive Zoom poll)**
- 1:50pm** **Small Breakout Groups:** Discussion of research gaps, needs and opportunities related to adoption of and transition to organic practices, and organic research efforts across the Southeast.
- 2:35 pm** **Return to Full Group for Report Out and Full Group Discussion**
- 2:55 pm** **Next Steps and Closing Statements**
- 3:00 pm** **Adjourn**

Presentation Summaries

Overview of the state of organic research resources in the Southeast

[Dr. Amber Sciligo](#) and The Organic Center Fellows Margaret Harris, Ashlynn Freeman and Elora Bevacqua gave presentations detailing the current state of organic resources in the Southeast. The Organic Center is currently pursuing a project that will result in an interactive database of organic research resources to help expand organics in the U.S. Preliminary research results in Figure 1 show that the West Coast, Midwest and Northeast are the predominant organic “hotspots,” or areas with an abundance of organic resources such as organic scientists, conferences and funding. In comparison, the South and Southeast are considered “cold spots,” as they lack similar resources.

The Organic Center database will document various Southeast organic research data and resources including organic research farms, organic-related meetings and events, research funding opportunities for faculty and students, and university researcher and extension contacts. The Organic Center Science Program Fellowship was created to support database mapping in collaboration with Dr. Emily Burchfield from Emory University. Burchfield served as a co-mentor to the Fellows and created the various heatmaps used throughout the presentations.

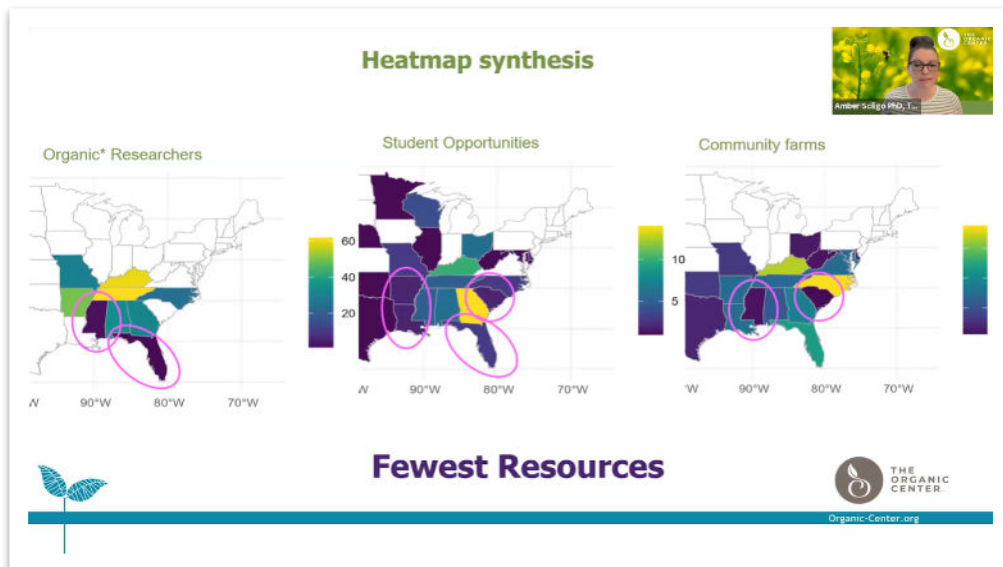


Figure 1: Dr. Amber Sciligo discusses a synthesis of the data collected by The Organic Center

The Organic Center Fellows presented their research that contributed to the heatmap in Figure 1. Margaret Harris from [Spelman College](#) discussed the number of researchers actively working in the Southeast, including academics, extension specialists and farmer support experts who appear to be organic-aligned based on information found at respective institution websites. Ashlynn Freeman from [Tennessee State University](#) focused on student opportunities like internships, work experience, and scholarships in organics, while Elora Bevacqua from [Arizona State University](#) presented on community agriculture throughout the Southeast, including the presence of urban farms, community and school gardens, research farms and food production community organizations. The fellows noted that the accessibility of information online was variable, which warranted a need to use communication routes other than internet searching and email. Based on the lack of email responses, a direct communication channel will be a useful addition for more effective networking as the interactive database continues to be developed.

Overall, the abundance of organic researchers, student opportunities and community agriculture locations varied across states. For example, Kentucky and Tennessee had the highest abundance of organic researchers, while Georgia and North Carolina had the highest number of student opportunities and community agriculture, respectively. Conversely, Mississippi and Florida had the lowest abundance of organic researchers; Arkansas, Louisiana, South Carolina and Florida had the lowest number of student opportunities; and Mississippi and South Carolina had the lowest presence of community agriculture. This suggests that strategies to increase resources in the South will require a nuanced approach. Accurately mapping deficiencies and abundances of resources will help develop effective strategies to improve collaboration and resources across the Southeast.

Donor Perspective & Overview of the Endowment

[Dr. LaKisha Odom](#) from FFAR and Philippa Lockwood from Clif Bar gave presentations on why their respective organizations are involved with the organic sector. FFAR, a non-profit dedicated to connecting funders, researchers and farmers, recognized that financial inequality and a lack of representation has put Southeastern farmers at a disadvantage when it comes to organic production. In response to this gap in resources, [FFAR and Clif Bar have co-funded a \\$2 million endowment](#) that will support Tuskegee professors and researchers, Dr. Kpomblekou and Dr. Quarcoo, in developing a network of organic research among Southeast academic institutions, with an emphasis on Historically Black Colleges and Universities (HBCUs). FFAR has been an active facilitator in the growth of organic production over the past several years. FFAR previously awarded the Organic Farming Research



Foundation several grants and has co-funded multiple requests for applications and extension prizes with The Organic Center.

Clif Bar's environmental and social commitments align well with organic agriculture. As a business, Clif Bar is seeing growing consumer interest in organic products, driving the company to use more organic ingredients. However, Clif Bar noted that the organic sector is not advancing fast enough to keep up with demand. Considering that organic foods are often imported, there is untapped potential in the U.S. to grow more and rely less on outside production. Therefore, Clif Bar joined FFAR in funding the \$2 million endowment to Tuskegee University to help facilitate the growth of organic production and research in the Southeast.

Research Overview & Large Interactive Discussion with the Audience

[Dr. Kokoasse Kpombrekou-A](#) from Tuskegee University gave a presentation detailing Tuskegee's 25-year history with the organic sector in the Southeast. Dr. Kpombrekou-A's original research focus was on cover crop adaptation trials and broiler (chicken) litter characterization. The results of his work demonstrate that the best strategy to successfully grow cover crops is to plant a mixture of different species (legumes, grasses and non-legumes) of cover crops so that if climatic conditions are not suitable for some species, they may be favorable for other species to grow well and thrive.

Broiler litter can be an excellent fertilizer due to its nitrogen and phosphorus content, however, trace metals present in the litter can be harmful to plants and humans. To test these different components, 33 broiler litter samples were collected around Alabama and analyzed for organic carbon and total nitrogen content. The samples tested low in almost all trace metals except for arsenic, which is a common element found in pesticides used in chicken houses. The samples were also tested to determine their nitrogen mineralization patterns. Broiler litter samples with pine chips as bedding materials showed the most nitrogen released (or mineralized) while those with pine shavings as bedding materials showed the least. Lastly, different fractions of phosphorus present in the broiler litter samples were determined — a significant amount of phosphorus in the samples is in the form of phytate, which is not available for plant uptake. Dr. Kpombrekou invented a process to remove phytic acid-phosphorus from broiler litter, eventually patenting the idea in 2015.

In addition to research, Tuskegee has engaged extensively with the surrounding organic community. In October 2011, Tuskegee organized the very first statewide organic farming

forum. In 2016, the Southeast Organic Partnership at Tuskegee University (SOPTU) was established. SOPTU was created with several objectives, including organization of consumer education and marketing research and the development of a participatory extension and evaluation program to support organic food systems. Since 2022, Tuskegee has been involved with the [National Organic Program](#) (NOP). The NOP intends to create an organic agricultural outline to increase the number of organic farmers and diversity within those farmers.

Breakout Group Discussions

Attendees were divided into four breakout groups to brainstorm and discuss current challenges and needs within the organics sector, with an emphasis on the Southeast. The following questions were provided to each breakout group to guide the conversations:

1. Ground-truthing Organic Center presentation on the state of organic research resources – Does the information feel accurate or surprising?
2. What are the research needs in the organic space? What are the gaps and opportunities unique to the Southeast?
3. What challenges are you facing related to organic transition, research or extension?
4. What would it take to increase collaboration between the 1890s Land-grant Universities and between those universities and other stakeholders?

The following common themes were identified throughout the discussion:

The Role of Market Development & Consumer Education

Consumers play an important role in shaping the organic sector. Consumers can encourage farmers to transition away from conventional and towards organic agriculture. However, consumer education is lacking, which can cause hesitancy when it comes to organic purchases. It was suggested that if consumers see farmers they trust transitioning to organic, the consumers can be influenced to follow the farmers' lead. Overall, there needs to be a market for organic products outside of the Southeast to encourage more farmers to transition. There was consistent feedback provided through the breakout groups that there needs to be more detailed discussion around the potential role of the private sector to encourage and incentivize market development.

Communication, Education & Outreach are Key

There was general consensus in the breakout group discussions that there is a disconnect between researchers and farmers. Research results are not sufficiently communicated to farmers, and it is difficult for farmers to find information about the organic research resources that are available. A significant amount of organic research has been done and results are available, but dissemination and community outreach are lacking. Conversely, farmers need to be acknowledged as experts themselves with knowledge to share. More opportunities are needed for engagement, networking and relationship-building.

The Need for Cultural Competence

There is a discrepancy between BIPOC and white farmers and their views on the organic movement. Southeast BIPOC farmers may mistrust organic production due to previous experiences with inequity. To effectively reach out to these farmers, culturally sensitive resources must be intentionally created. There is also a disconnect between urban and rural communities, and the language used to describe the benefits to organic transition. In addition, there are culturally relevant crops that are important to BIPOC communities, but these crops are not given the same amount of research attention and resources as other crops. Researchers need to learn the language and culture of BIPOC growers and rural communities for collaboration efforts to be successful.

Resources & Research Funding to Address Challenges

A significant number of participants in the breakout groups noted the lack of resources available for organic research. The main categories of resources include:

- Help for transitioning farmers
- Access to funding for organic research
- Decision support to determine the most optimal organic practices
- Research on organic farming in light of climate change

Outcomes & Next Steps

This event provided a wealth of information regarding the current state of organic research and production in the U.S., and specifically in the Southeast. There is growing nationwide demand for organic products, but local demand for crops grown specifically in the Southeast will play a large role in determining farmer transition in the region. To further organic food systems, researchers and farmers must have an open line of communication with one another to exchange ideas and build trusting relationships.



Southeast BIPOC farmers need researchers who “speak their language” and can provide them with relevant resources. While there are varied levels of academic and community resources available across the Southeast, there is a notable lack of cross-sector outreach to communicate such resources to the farmers who would use them. Attendees at the convening event highlighted their strong desire to grow organic markets and increase organic production in the region, and collaboration between local farmers and researchers will be key to encouraging practice transition.

The information gathered at this virtual convening will be used to coordinate an in-person session at the next [Professional Agriculture Workers Conference](#) (PAWC) held in November 2024.

The Mission & Vision of the Foundation for Food & Agriculture Research

With significant input from its stakeholders, FFAR [unveiled a new Research Strategy](#) in late 2023 that supports thriving farms, environmental resilience and producer well-being. For additional information about FFAR Research Priorities Areas, see the [full Research Strategy here](#).

FFAR builds public-private partnerships to fund audacious research addressing the biggest challenges in food and agriculture.

Our world is changing rapidly. The global population is increasing, climate change is causing extreme weather events, and natural resources are diminishing. FFAR brings together leading experts to identify and investigate the researchable questions whose answers have the potential to enhance the economic and environmental resilience of our food supply.

FFAR envisions a world in which ever innovating and collaborative science provides every person access to affordable, nutritious food grown on thriving farms.

FFAR believes that this common goal can be met by working together with the research community of nonprofits, foundations, governments, individual researchers and producers, colleges and universities, and companies who can support and implement necessary science. The research FFAR supports aims to achieve this vision by producing food in an



economically and environmentally sustainable way. Part of FFAR's role in this collaborative effort is to convene individuals and groups who can pool creative ideas, expertise and resources to make an impact together.

The Mission & Vision of Clif Bar

At Clif we're guided by our values — our aspirations. Like striving to create a healthy and sustainable food system. Ensuring our brands and business are healthy so that we can do more good. And caring about the people, places and communities we touch.

The Mission & Vision of Tuskegee University College of Agriculture, Environment & Nutrition Sciences

[Tuskegee University's College of Agriculture, Environment and Nutrition Sciences](#) (CAENS) offers an education that prepares future professionals and leaders in the agricultural, environmental and nutritional sciences, as well as veterinary medicine through course work along with internships, research and outreach activities related to their chosen majors. The curricula within CAENS is designed to prepare students who will ultimately become professionals in areas that include agricultural sciences, food and nutritional sciences, biochemical and biomedical sciences, human and veterinary medicine or other health-related fields, environmental policy and natural resource management, and rural development at local, regional and international levels.

The Mission & Vision of The Organic Center

Our goal is to empower you to make informed choices in your everyday life. By providing you with the facts on organic, you can make healthy choices for your family and the planet.

Our mission is to conduct and convene credible, evidence-based science on the environmental and health effects of organic food and farming and communicate the findings to the public.



Join the Conversation!

FFAR looks forward to continuing to build strong public-private partnerships within the agriculture community and welcomes your input. Please feel free to contact Dr. LaKisha Odom at lodom@foundationfar.org to learn more about how you can engage with FFAR.

To stay up to date on future funding opportunities, please join FFAR's newsletter mailing list: <https://foundationfar.org/newsletter-signup/>

Many thanks to our steering committee members for their hard work and support!

Steering Committee for the Convening Event “Exploring Opportunities to Expand Organic Production and Research in the Southeast U.S.”

*Dr. Kokoasse Kpomblekou-A, **Tuskegee University***

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