

Commercial Horticulture

Making a Difference in the Food System (2018–19 Impacts)

► The Commercial Horticulture Program provides multidimensional research-based information, support services, and training to a growing horticulture industry across Alabama. This includes the nursery and landscape industry and specialty crop producers using conventional or organic production systems.

Impacts across Food System Tiers

One of the major tasks of the Alabama Extension Commercial Horticulture Team is to support the various components of the overall food production system. For this impact report, we have adopted the tiered food system framework developed by the University of Wisconsin–Madison Center for Integrated Agricultural Systems (figure 1). Clearly, the commercial horticulture programs are effective with new collaborations being forged with major food distributors as the specialty crop industry grows.



Figure 1. Alabama Extension Commercial Horticulture Program Return on Investment (ROI). Based on the University of Wisconsin–Madison Center for Integrated Agricultural Systems model, August 2010. www.cias.wisc.edu.

TIER 0 IMPACTS
(Personal Food Production)

Backyard, Urban & Community Gardens

Commercial Horticulture regional Extension agents and specialists, in collaboration with the Home Grounds Extension Team, provided more than 500 hours of training to 300 Master Gardeners. At one of the locations, this collaborative effort resulted in nearly 2,000 pounds of food production at a community garden in Florence. This food is valued at \$3,928 at the current retail market price. The community garden in Fayetteville, Georgia, is the largest donator of food to the food bank in Atlanta. With many new community gardens active around the state, the commercial horticulture team continues to support gardening efforts to raise public awareness regarding the local food production system and the health benefits at the individual level.



TIER 1 IMPACTS
(Direct or Retail Marketing by Farmers)

Several commercial horticulture team projects are in this category because a majority of specialty crop producers are small- to medium-sized diversified farms that grow multiple crops throughout the year. Food is marketed by growers through direct channels such as farmers markets, farm stands, restaurants, and community supported agriculture.

Alabama Beginning Farmer Program

Project Leader: Ayanava Majumdar

Background: Funded by the USDA Beginning Farmers and Ranchers Development Program (BFRDP), the Alabama Department of Agriculture and Industries Block Grants (ADAI-SCBG), and the Sustainable Agriculture Research and Education (SARE) programs, Operation Grow provides hands-on training and grassroots networking opportunities to beginning farmers, with special emphasis on underserved communities and military veterans. This is one of the flagship programs in Alabama Extension horticulture. Many technical service providers help amplify program effectiveness in all corners of the state.

Collaborators: Alabama Fruit and Vegetable Growers Association, Alabama Sustainable Agriculture Network, Southern Sustainable Agriculture Working Group, Farmscape Solutions, CrotoVina, Inc., The United Christian Community Association

Number of Participants: 1,161



Evaluation Techniques: On-farm interviews, event surveys, learning assessments, e-survey, and telephonic impact surveys

Adoption Rate for Recommendation: 90 percent for direct consultation

Beginning Farmer Success Rate: 64% with 70+ business/marketing/food safety plans developed

Value of Business Consultancy: \$506,363 (savings for farmers)

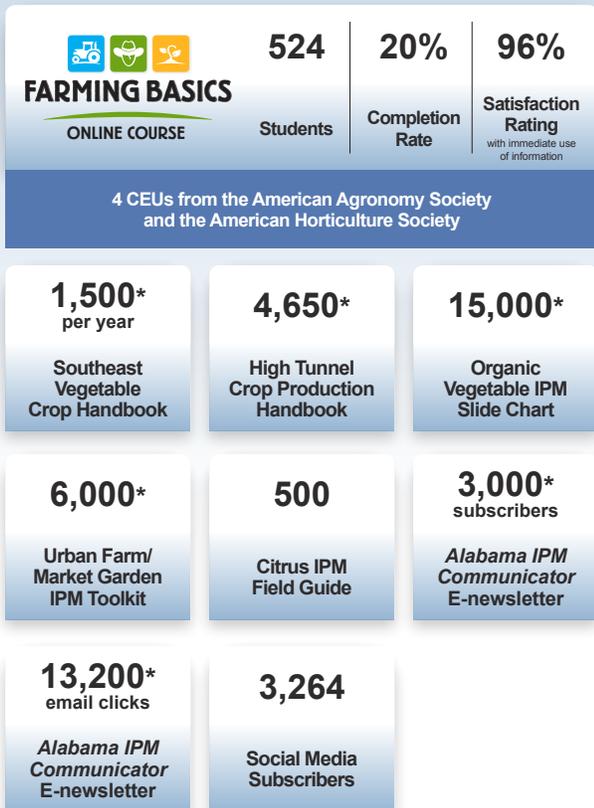
Crop Improved/Saved: \$2.5 million

Total Impact: \$2.9 million

Farming Barriers Reduced: 18% reduction in access to information; 30% reduction in need for marketing training; 55% crop losses prevented due to IPM plans.

Return on Investment: 10:1

Circulation/Viewership of Major Horticulture Resources:



*Communication award winners from the National Association of County Agricultural Agents, American Horticulture Society, and Southern Region IPM Center.



TIER 2 IMPACTS

(Wholesale Marketing with Strategic Partners)

These programs are aimed to support rapidly growing farms that sell produce to strategic marketing partners, such as food cooperatives, food banks, and other local or regional food distributors.

Sustainable Horticultural Crop Production Reactive Program

Background: Fruit, vegetable, and tree nut production in Alabama is one of the fastest growing farming systems and is valued at \$161 million with value addition of \$103 million. The commercial horticulture industry supports more than 1,100 jobs and is one of the fastest growing industries in the state. Fueled by population growth and rapid urbanization, the demand for local foods is at an all-time high.

Goals: Provide research-based answers to production-related issues in commercial horticulture. Offer reactive services (on-farm consultation) in response to producer queries; develop or update publications; train and support crop advisers for critical issues; develop marketing materials to increase consumer awareness of local food systems.

Outputs: Regional Extension agents, Extension specialists, and county Extension coordinators answer more than 9,000 phone calls and 20,000 emails along with 400+ field visits annually to support the rapidly growing commercial horticulture industry statewide. More than 50 public service announcements and social media alerts were created for producers and consumers. Since 2010, Commercial Horticulture has also provided 20+ pest and event alerts to all subscribers of the *Alabama IPM Communicator* e-newsletter (66,000 emails; viewership 25%).

Evaluation Techniques: Commercial Horticulture Extension Team has developed a rapid service quality survey using Qualtrics with a QR code that is used in the field by clients themselves or by regional Extension agents. This captures immediate impact along with grower testimonials regarding the quality of service.

Adoption Rate for Recommendations: Based on 59 responses from an impact survey, overall adoption rate was 96% with 20 to 40% yield improvement in specialty crops.

Overall Impact Estimate: Statewide economic impact exceeding \$18 million via direct programing

Return on Investment: 67:1

Tier 3 Impacts (Large Volume Aggregation with Major Food Distributors)

Commercial horticulture programs in Tier 3 assist producers in meeting the high-volume production and food safety standards demanded by some large national food aggregation and distribution companies, such as Sysco, Whole Foods, and Walmart).

Best Management Practices: Impact on Peach Producers

Project leaders: Gary Gray, Edgar Vinson, Elina Coneva

Background: This program promotes the use of best management practices in commercial horticulture industries, concentrating on optimization of practices related to pest management, freeze damage mitigation, dormancy issues as well as the proper cultivar selection to enhance economic, environmental, and community sustainability.

Collaborators: Alabama Fruit and Vegetable Growers Association

Audience Diversity: 90% white, 7% black, 3% other

Evaluation techniques: Event survey

Adoption rate for recommendation among producers: 61%

Impact estimate (regional): \$3.8 million

Key project resource: *Southeastern Peach, Nectarine, and Plum Pest Management and Culture Guide*



Produce Market Demands & Food Safety

Project Leader: Kristin Woods

Background: Market demands and regulatory requirements for food safety training are significant challenges facing Alabama produce growers. The Food Safety Modernization Act Produce Safety Rule (FSMA PSR) went into effect in January 2016. This law requires that a representative from each farm attend a Produce Safety Alliance (PSA) or equivalent training course. The PSA training held in Montgomery included 52 attendees who are now PSA trainers and able to conduct training for growers. Alabama trainers attending included representatives from Auburn University, Alabama A&M University, Tuskegee University, the Alabama Department of Agriculture and Industries, industry groups, nonprofit groups, and tribal nations.

The volume of trainers now available will ensure that Alabama growers are able to maintain competitiveness in the market and meet the FSMA PSR requirements.

Impact Estimate: This is a new, multiteam educational activity that benefits whole farms. The number of farms with produce safety compliance is on the rise.

Key Project Resource:
Produce Safety Alliance Curriculum

Return on Investment: 67:1



Produce Safety
ALLIANCE

Professional Services

Alabama Green Industry Training Center, Inc. (Professional Services)

Project Leader: John Nabors

Participants: Landscape contractors, hired workers, team managers

Direct Participants (Client Contact, Class Attendees, & Exams): 1,051

Indirect participants: Community Use, Partner Meetings, 832; AGITC web page and social media, Facebook, Twitter, 3,504; electronic class flyerviews, 6,374

Evaluation Techniques: Post-event surveys

Audience Diversity: Client direct contacts from across Alabama. Includes labor positions, small business owners, and corporate management. Social media posts are reaching well past state lines, and the electronic flyers are reaching worldwide.

Key Project Resources: The Alabama Green Industry Training Center website at www.agitc.org, www.alclp.org; "Ornamental and Turf Pest Control Manual"; "Common Insect and Disease Pests of Turfgrass and Ornamental Plants"; and the Alabama Extension commercial applicator website at <http://www.aces.edu/anr/pesticidemgt/CommercialApplicatorInfo.php>.



Alabama Fruit & Vegetable Growers Association

Collaborators: Board of Directors, Alabama Fruit and Vegetable Growers Association; Hunter McBrayer, Alabama Farmers Federation

Audience Diversity: 90% white, 7% black, 3% other

Evaluation Techniques: Event survey

Adoption Rate for Recommendation: 61%

Impact Estimate: \$3.8 million

Return on Investment: 67:1

"Info shared by Extension personnel is vital to our farming community. It helps our learning curve so we can be profitable quicker when branching out into other ventures. Advisement on chemicals and diseases is a critical area for us by Extension personnel in our peach operation."

Producer Testimonials

"The IPM newsletter is very valuable for me. I use the information and read all emails. Then click on the links. I like to look over the events section and decide which one I would like to attend."



Ayanava Majumdar, *Extension Specialist*, PPT Coordinator, Auburn University

For more information, contact your county Extension office. Visit www.aces.edu/directory.

For commercial horticulture personnel and program listings, refer to "Commercial Horticulture: Programs and People" (EX-0162).

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Revised October 2019, ANR-2185

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