

# Southern Region Integrated Produce Safety Conference



October 5-8, 2020

12 pm - 5 pm daily

Zoom

<https://sc.ifas.ufl.edu/resources/>

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## Southern Region Integrated Produce Safety Conference

October 5-8, 2020

Welcome to the third annual **Southern Region Integrated Produce Safety** Conference. While delivery of this conference looks different from the previous years, we are excited to bring you the latest news from our region. This conference agenda was developed by a program planning committee that pivoted from an in-person event to this virtual offering. This week we will hear from a number of organizations, researchers, extension educators, growers, and regulatory bodies on a wide variety of topics relevant to FSMA. Additionally, this program booklet contains state update reports from the 13 states in the southern region and abstracts for the poster presentations on Monday. Despite not being able to meet in person, we hope that you will benefit from this meeting and enjoy hearing about all of the amazing work being performed around the region. We also hope you leave with new connections and a better understanding of how different groups approach produce safety.



Michelle Danyluk, PhD  
Professor and Extension Specialist, UF  
SC Co-PI



Keith Schneider, PhD  
Professor, UF  
SC PI



Renée Goodrich Schneider, PhD  
Professor, UF  
SC Co-PI

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*Cover photos courtesy of Achyut Adhikari (LSU) and Canva.*

## **Program Planning and Logistical Support Committee**

**Achyut Adhikari**-Louisiana State University Ag Center  
**Jamie Allen-Hitt**-Oklahoma Department of Agriculture  
**Ramkrishnan Balasubramanian**-Florida Organic Growers  
**Iris Cole-Crosby**-University of Arkansas at Pine Bluff  
**Natacha Cureau**-University of Arkansas System Division of  
Agriculture Cooperative Extension Service  
**Elizabeth Danforth**-Georgia Department of Agriculture  
**Michelle Danyluk**-University of Florida  
**VJ DeSantis**-Tennessee Department of Agriculture  
**Allison Dumas**-Louisiana Department of Agriculture and  
Forestry  
**Laurel Dunn**-University of Georgia  
**Cheryl Fontenot**-Louisiana Department of Agriculture and  
Forestry  
**Julia Fryer**- University of Arkansas System Division of  
Agriculture Cooperative Extension Service  
**Trevor Gilbert**-Food and Drug Administration  
**Natalie Glover**-Louisiana Department of Agriculture and  
Forestry  
**Renée Goodrich Schneider**-University of Florida  
**Chris Gunter**-North Carolina State University  
**Janice Hall**-Auburn University  
**Rodney Holcomb**-Oklahoma State University  
**Brooke Horton**-South Carolina Department of Agriculture  
**Armitra Jackson-Davis**-Alabama A&M University  
**Ravi Jadeja**-Oklahoma State University  
**Lynette Johnston**-North Carolina State University  
**Matt Krug**-University of Florida  
**Taylor Langford**-University of Florida  
**Fatemeh Malekian**-Southern University Agricultural Land  
Campus  
**Scott McClure**-Florida Department of Agriculture and  
Consumer Services



**Billy Mitchell**-National Farmers Union  
**Bahia Nightengale**-Central Louisiana Economic Development Alliance  
**Chelsea Peebles**-Florida Department of Agriculture and Consumer Services  
**Amanda Philyaw-Perez**-University of Arkansas System Division of Agriculture Cooperative Extension Service  
**Joyjit Saha**-University of Florida  
**Tommy Saunders**-Produce Safety Alliance  
**Keith Schneider**-University of Florida  
**Juan Silva**-Mississippi State University  
**Christy Smith**-Alabama Department of Agriculture  
**Katelynn Stull**-University of Florida  
**Laura Strawn**-Virginia Tech  
**Matt Taylor**-Texas A&M University  
**Chelsea Triche**-Southern University  
**Rip Weaver**-University of Arkansas System Division of Agriculture Cooperative Extension Service  
**Kristin Woods**- Alabama Cooperative Extension System, Auburn University  
**Annette Wszelaki**-University of Tennessee  
**Veerachandra (Kranti)Yemmireddy**-University of Texas Rio Grande Valley

## 2020 Virtual Southern Region Integrated Produce Safety Conference Agenda

October 5-8, 2020  
12-5PM ET Daily  
Zoom

### Monday, October 5

Time	Session	Speaker
12:00 pm	Day 1 Welcome and Meeting Instructions	Michelle Danyluk, UF
	<i>Meeting Moderator: Michelle Danyluk, UF</i>	
12:15 pm	<b>Updates</b>	
	Southern Center	Keith Schneider, UF
	Produce Safety Alliance	Tommy Saunders, PSA
	Food and Drug Administration- Produce Safety Network	Trevor Gilbert, FDA-PSN
	Food and Drug Administration- Office of Regulatory Affairs	Erin Hale, FDA-ORA
	Association of Food and Drug Officials	Brenda Morris, AFDO
	National Association of State Departments of Agriculture	Bob Ehart, NASDA
	<b>Indigenous Food and Agriculture Initiative</b>	
1:15 pm	Recent work with Tribes and Alternative Curricula	Josiah Griffin, IFAI
2:00 pm	<i>Break</i>	
	<i>Meeting Moderator: Renée Goodrich Schneider, UF</i>	
	<b>Historically Black Colleges and Universities and Hispanic- serving Institutions Role in Food Safety and the Produce Safety Rule</b>	
2:15 pm	Produce Extension and Education activities from HBCUs and HSIs	Armitra Jackson-Davis, AAMU Veerachandra Yemmireddy, UTRGV Chelsea Triche, SU
2:45 pm	Panel Discussion on Unique Challenges faced by Educators and Growers <i>Panel Moderator: Armitra Jackson-Davis, AAMU</i>	Andrew Williams, Deep South Food Alliance Kristin Woods, AL Extension Benjamin Chapman, NCSU Michelle Danyluk, UF

		Trevor Gilbert, FDA-PSN Fatemeh Malekian, SU Juan Silva, MSU Keawin Sarjeant, FAMU Veerachandra Yemmireddy, UTRGV
3:45 pm	Break	
3:50 pm	Posters <i>Posters Moderator: Allison Dumas, LDAF</i>	Taylor Langford, UF Camila Rodrigues, UGA Juan Silva, MSU Kristin Woods, AL Cooperative Extension, Auburn Julia Fryer, UArk Thomas Yeargin, UArk Dilhani Jayawardhana, Clemson Stuart Vermaak, VT
5:00 pm	Day 1 Adjourn	
<b>Tuesday, October 6</b>		
12:00 pm	Day 2 Welcome	Kristin Woods, Alabama Extension
	<i>Meeting Moderator: Kristin Woods, Alabama Extension</i>	
	<b>COVID-19</b>	
12:05 pm	Economic Ramifications of COVID-19	Ron Rainey, UArk
12:25 pm	Farmer's Changes During the Pandemic	Angelina Harrison, Market Umbrella
12:45 pm	Emergency Inspections During the Federal Shutdown	Bobby Donato, SCDA
1:05 pm	The Effect of COVID-19 on the H2A Program	Mike Carlton, FFVA
1:25 pm	Training Challenges and Changes During Coronavirus Pandemic	Tommy Saunders, PSA
1:35 pm	Break	
1:50 pm	<b>Food Safety Requirements of Produce Buyers</b>	
	Panel Discussion with Buyers <i>Panel Moderator: Chelsea Triche, Southern University</i>	Terreca Bates-Wells, Capitol City Produce Tom Lovelace, McEntire Produce Andrew Williams, Deep South Food Alliance Stasia Greenewalt, Local Food Hub Tara Eavey, 4P Foods

	<i>Meeting Moderator: Allison Dumas, LDAF</i>	
3:20 pm	<b>Non-governmental Organizations and Community-based Organizations Impact on the Food System and Education</b>	
	Panel Discussion with NGOs and CBOs in the Southern Region <i>Panel Moderator: Ramkrishnan (Ram) Balasubramanian, FOG</i>	Frances “Frankie” Bayne, Texas Organic Farmers & Gardeners Association Maggie Kaiser, National Young Farmers Coalition Carolyn Jones, Mississippi Minority Farmers Association Sagdrina Jalal, Georgia Farmers Market Association
4:20 pm	<i>Break</i>	
4:25 pm	Guided Discussion-Day 1 and 2 Topics	Katelynn Stull, UF
5:00 pm	Day 2 Adjourn	
<b>Wednesday, October 7</b>		
12:00 pm	Day 3 Welcome	Laura Strawn, VT
	<i>Meeting Moderator: Laura Strawn, VT</i>	
	<b>Biological Soil Amendments</b>	
12:05 pm	Current Research Update	David Ingram, FDA-CFSAN
12:50 pm	Composter Perspective	Grant M. Estrade, Laughing Buddha Nursery
	<b>Cleaning and Sanitizing</b>	
1:05 pm	Virtual Tour-Citrus Packing Line	Keith Schneider, UF
1:25 pm	Cleaning and Validating Cleaning of Wood Implements and Surfaces	Matt Taylor, TAMU
1:45 pm	Dry Cleaning Concerns and Best Practices	Michelle Danyluk, UF
2:00 pm	Ice Breakout Activity	Chris Gunter, NCSU
2:35 pm	<i>Break</i>	
	<i>Meeting Moderator: Billy Mitchell, NFU</i>	
	<b>Water</b>	
2:50 pm	WELL-The source of my water and how I can protect IT!	Gary Hawkins, UGA
3:20 pm	Variability of Microbial Water Quality: Experiences from the Field	Ronald Bond, UC Davis
3:50 pm	<i>Break</i>	
3:55 pm	Guided Discussion-Day 3 Topics	Katelynn Stull, UF

5:00 pm	Day 3 Adjourn	
<b>Thursday, October 8</b>		
12:00 pm	Day 4 Welcome	Keith Schneider, UF
	<i>Meeting Moderator: Keith Schneider, UF</i>	
12:05 pm	<b>State Departments of Agriculture Updates</b>	
	Presentations from State Departments of Agriculture	
		Christy Smith, AL
		Scarlet Waters, AR
		Scott McClure, FL
		Maggie Hart, GA
		Mark Reed, KY
		Allison Dumas, LA
		Kevin Riffin, MS
		Sarah J. Cope, NC
		Justin McConaghy, OK
		Kelly Johnson, SC
		Viktoria Einecker, TN
		Richard De Los Santos, TX
		Erik Bungo, VA
1:35 pm	<i>Break</i>	
	<i>Meeting Moderator: Tommy Saunders, PSA</i>	
1:50 pm	<b>Typical Inspection Experience</b>	
	Panel Discussion with State Department of Agriculture representatives <i>Panel Moderator: Allison Dumas, LDAF</i>	Chelsea Peebles, FL Brandon Thornton, MS Justin McConaghy, OK Katherine Jones, SC Rene Nieto, TX
3:05 pm	<i>Break</i>	
3:10 pm	<b>Grower Experience</b>	
	Grower Panel-FSMA Perspectives <i>Panel Moderator: Julia Fryer, UArk</i>	James Meeks, AR Rhonda Ford, MS Thomas Hesselgrave, MS Jennifer Edwards, MS
4:15 pm	Guided Discussion-Day 4 Topics and topics for SRIPS 2021	Katelynn Stull, UF
5:00 pm	Day 4 Adjourn	

## **Considerations for Virtual Delivery**

### Connection Information:

- Connection information was provided by Zoom upon registration. To receive your registration information again, please contact Katelynn Stull at [k.stull@ufl.edu](mailto:k.stull@ufl.edu). The same connection information will be used each day. Additionally, please feel free to enter and exit the conference meeting as your schedule permits.

### Audio/Video

- To ensure minimal technical impacts we ask that you keep your audio muted unless prompted by a speaker or moderator. To conserve bandwidth, we ask that you keep your video off unless you are participating in a breakout session. Speakers will have their video on. Zoom has different options for viewing speakers. If it is a one-person presentation select active speaker view. Panel discussions and breakout rooms are best viewed using the gallery mode. For more information, visit: [https://support.zoom.us/hc/en-us/articles/201362323-Changing-the-video-layout-Active-Speaker-View-and-Gallery-View-#h\\_01EF2V8EACKNQ0R96A2WJMPSC2](https://support.zoom.us/hc/en-us/articles/201362323-Changing-the-video-layout-Active-Speaker-View-and-Gallery-View-#h_01EF2V8EACKNQ0R96A2WJMPSC2)

### Discussion Breakout Rooms

- We are using the Zoom Breakout Room feature to host small group discussions on Tuesday, Wednesday, and Thursday. Participants will be placed into a randomized breakout room with a pre-selected facilitator. These facilitators will have a list of discussion questions for each group regarding content shared during the conference. Each facilitator will take a set of notes to share with the planning committee for summary and publication on <https://sc.ifas.ufl.edu/resources/> after the conference.

### Recording

- This conference will not be recorded.

### Slide Availability

- After the conference slides that have received presenter permission will be posted in PDF format to: <https://sc.ifas.ufl.edu/resources/>

# **State Update Reports**



## State Update Report - Alabama

### Department of Agriculture & Industries

#### Project/Initiative Titles:

<b>Program Area</b>	<b>Responsible Party</b>	<b>Status Update</b>
1.) CAP Project Designation	Department of Agriculture & Industries	Alabama is both competition A and B. We have a subaward in place with Auburn University Extension who has taken lead on outreach and education.
2.) PSA Grower Training	Auburn University Extension	Conducted 20 trainings to date and have planned 4 in the fall of 2020. Grower trainings are hosted by Auburn University and Alabama Cooperative Extension agents who assist in teaching modules. Our PSA Training are a one day, 8-hour course format.
3.) OFRR	Department of Agriculture and Auburn as support staff	We have completed 12 OFRRs. 8 of those were very small/ small farms and 4 were large farms. We have not had a large demand for OFRRs. Farmers are busy and have chosen to go ahead with inspection over OFRR as schedule is limited during harvest seasons. Farmers can sign up online and/or mail in form to request OFRR and we also call farms to attempt to set up OFRR. ADAI inspectors are the lead for the OFRR with extension staff being support. All information gathered during OFRRs are confidential and we leave all notes with the farmer.
4.) Inspection	Department of Agriculture & Industries	ADAI has taken lead on all PSR inspections. We have completed 35 inspections and have another 26 to be scheduled for the remainder of 2020. Our goal will be met for 2020 inspections by end of 2020 if scheduling inspections goes as planned the remainder of 2020.
5.) State Rule Making	Department of Agriculture & Industries	ADAI had authority to be on farms for inspections. ADAI made decision to adopt PSR by reference into our food safety laws to ensure we have full authority to enforce PSR.

#### What metrics of quantitative success can you provide?

<i>Number of trainings provided?</i>	Grower Trainings – 20 completed, 5 additional scheduled for Fall 2020; 223 trained
<i>Number of growers reached?</i>	Mailing Flyers, PSA Grower Trainings, phone calls and face to face meetings - 286
<i>Number of packers reached?</i>	17- Reached through grower trainings, PCQI training, phone calls and face to face meetings.

*Development of materials*

Record Keeping booklet for farmers to use, Flyers developed to advertise PSA Grower trainings, 'Are you Covered' pamphlets to help farmers determine if they are covered under PSR.

*Presentations given at educational event*

PSR presentations given at Fruit & Vegetable Grower Conferences, Commodity Educational Meetings, Regional Extension horticulture meetings, Farm Service Agency meetings

**Other information you would like to share?**

Alabama Extension in partner with Alabama A&M University Small Farms Research Center, Deep South Food Alliance, Fort Valley State University and the National Farmers Union is rolling out a Mobile hands-on food safety and conversation trailer. This is a 3-state project.





## State Update Report – Arkansas

### Arkansas Department of Agriculture

#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Arkansas Department of Agriculture	Arkansas is a competition A and B state. We are a Tier 4 program that began in 2016. We have one subaward in place with the University of Arkansas Cooperative Extension Service to help with education and outreach activities. Dept. of Ag. staff include one program manager, two inspectors, and one administrative assistant.
2.) <i>PSA Grower Training</i>	University of Arkansas Cooperative Extension Service	20 grower trainings have been completed to date. We currently have four additional remote trainings scheduled for fall/winter 2020.
3.) OFRR	University of Arkansas Cooperative Extension Service	15 OFRRs have been completed, with 9 being large farms and 6 being a small farm. Growers are asked directly by both ADA staff during farm visits, and UA Extension staff during grower trainings if they'd be interested in receiving an OFRR prior to inspection. If growers want an OFRR, they are contacted by UA



Extension for scheduling. All OFRRs are confidential, and all notes are left with the growers.

4.) Inspection	Arkansas Department of Agriculture	We have completed 10 initial inspections for large farms, 4 initial inspections for small farms, and 6 routine inspections for large farms. No egregious conditions have been observed during these inspections (as of 9/28/2020).
5.) State Rule Making	Arkansas Department of Agriculture	We have completed the rule-making process and have a state rule in effect as of summer 2020.
6.) Farm Visits	Arkansas Department of Agriculture	ADA produce safety staff conduct farm visits with growers. These visits are completed prior to OFRRs, inspections, and sometimes PSA grower trainings, to introduce ourselves and provide information. We use these farm visits to build our inventory and classify farms into their appropriate categories. So far, we have completed 62 of these visits.

**What metrics of quantitative success can you provide?**

*Number of trainings provided?* 20

*Number of growers reached?* 298

*Number of packers reached?* 0

*Development of materials* 6 Educational Bulletins/Handouts; 7 County Extension PSR Office Displays; 3 educational brochures on inspections, PSR Guidance, and OFRRs; notepads; record templates; OFRR flyer; survey cards for inventory development.

*Publication* 4 YouTube videos – PSR in Arkansas (184 Views), Electric Fence Designs for Deterring White-tailed Deer (822 views), Local Produce Safety During COVID-19 (14 views), COVID-19 Guidance for Employers and Guest Workers (135 views); 3 Fact Sheets (Electric Fence Designs for Deterring White-tailed Deer, Food Safety Modernization Act Produce Safety Rule, and Food Safety Modernization Act Produce Safety Rule: Guidance for Bacterial Water Quality Compliance); Arkansas Grown Magazine 4-page feature; Arkansas Dept. of Agriculture Newsletter feature.

*Presentations given at educational event* 4 poster presentations; 8 education/outreach events; 43 presentations/talks; 10 booths hosted at events; 4 Farm Bureau podcasts; Facebook for 2019/2020 program year: reach of 12,689 and page like increased by 146.



## Other information you would like to share?

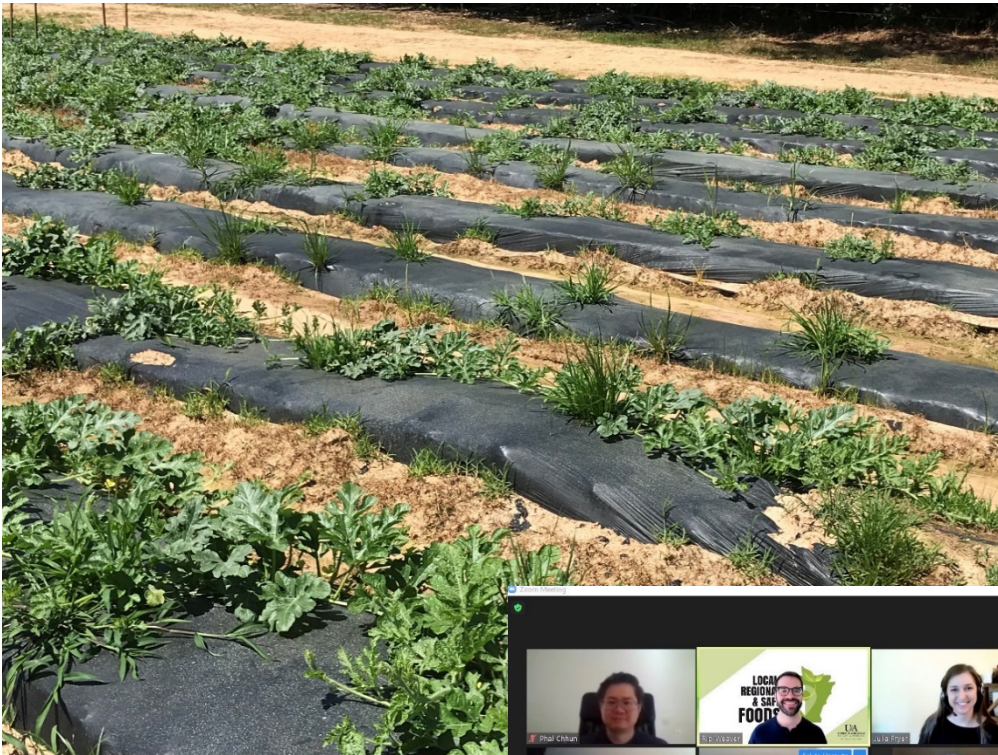
ADA website: [www.agriculture.arkansas.gov/plant-industries/regulatory-section/produce-safety-program/](http://www.agriculture.arkansas.gov/plant-industries/regulatory-section/produce-safety-program/)

UA Extension website: [www.uaex.edu/producesafety](http://www.uaex.edu/producesafety)

UA Local, Regional and Safe Foods Facebook:

<https://www.facebook.com/localfoodsUAExtension/>

Team attended 13 produce safety related trainings



## State Update Report – Florida

### Florida Department of Agriculture and Consumer Services

**Project/Initiative Titles:**

<b>Program Area</b>	<b>Responsible Party</b>	<b>Status Update</b>
1.) CAP Project Designation	Florida Department of Agriculture	Competition A and B
2.) PSA Grower Training	Florida, as part of our CAP funds partners with the University of Florida to promote education and outreach, On Farm Readiness Reviews, and scheduling of PSA Grower Trainings. The Division of Fruit and vegetables is responsible for the regulatory inspections.	72 Grower Trainings to date, reaching about 1635 individuals
3.) OFRR	UF/IFAS in collaboration with the Florida Department of Agriculture	68 OFRR's completed, with 42 scheduled.
4.) Inspection	Florida Department of Agriculture	68 Inspection completed.
5.) State Rule Making	None	Florida enforces the rule under credentialing from the FDA.

**What metrics of quantitative success can you provide?**

<i>Number of trainings provided?</i>	72 PSA Grower Trainings
<i>Number of growers reached?</i>	1635 to include growers and packers
<i>Development of materials</i>	Development of materials are relevant to the needs at the time, pertinent to education and outreach, rule enforcement, trainings etc. Numerous posters with UF partners.
<i>Publication</i>	Same as development of materials.
<i>Presentations given at educational event</i>	Varies, not all education events include presentations. Past presentations have included overview of FSMA and PSR, Educational and outreach opportunities such as OFRRs, and commodity tailored presentations on the Produce Safety Rule.





**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

Florida growers are very receptive of our efforts to educate them on the rule and its enforcement. Regardless of their support for or against the rule, we have not had any pushback during our interaction. We feel this is because Florida already had in place a robust food safety environment for years.





## State Update Report – Georgia

### Georgia Department of Agriculture



#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Georgia Department of Agriculture	2 Tier State Composition A/B The Georgia Department of Agriculture, Produce Safety Program handles all Produce Safety Alliance Grower Trainings and On Farm Readiness Reviews. We have a Sub Award with the University of Georgia Extension to help with our PSA Grower Trainings and other supplemental information and help when needed.
2.) PSA Grower Training	Georgia Department of Agriculture in	The GDA Produce Safety Team coordinates the trainings and brings in extension specialists to assist with trainings. To date, GDA has hosted 27 trainings and has assisted Georgia Fruit and Vegetable

	collaboration with UGA extension	Growers Association with an additional 4 courses. The approximate number trained is 950. We are planning a remote training in October.
3.) OFRR	Georgia Department of Agriculture	The GDA Produce Safety Team has completed 40 On Farm Readiness Reviews and continues to schedule OFRR's as requested by producers.
4.) Inspection	Georgia Department of Agriculture	The GDA Produce Safety Team has completed 37 inspections and continues to schedule inspections as the fall season begins.
5.) State Rule Making	Georgia Department of Agriculture	The Georgia Department of Agriculture adopted the Produce Safety Rule by reference on May 15th, 2019.



### **What metrics of quantitative success can you provide?**

<i>Number of trainings provided?</i>	PSA Grower Training- 31 PSA Train the Trainer-1
<i>Number of growers reached?</i>	PSA Grower Training Approximately 950 growers.
<i>Number of packers reached?</i>	Approximately 250 reached through educational visits and attending packing company meetings.
<i>Development of materials</i>	We have developed brochures, rack cards with compliance dates, flip chart training manuals for producers as well as promotional items. The flip charts are designed to show an audience a photo of produce safety related materials (for example: handwashing) and the presenter views talking



points to train farm employees. These are printed in English and Spanish.

*Publication*

We have educational articles printed in Vegetable Specialty Crop News, and we have created general information brochures as well as training resource flip charts for growers.

*Presentations given at educational event*

We have presented at extension production meetings, commodity group meetings, and other industry events. Our presentations usually include general program information, general PSR information, information on OFRR's and trainings, as well as contact information.



## State Update Report – Kentucky

### Kentucky Department of Agriculture

#### Project/Initiative Titles:

<b>Program Area</b>	<b>Responsible Party</b>	<b>Status Update</b>
1.) CAP Project Designation	Kentucky Department of Agriculture	The KDA is responsible for the CAP Project Designation and Implementation throughout Kentucky. □
2.) <i>PSA Grower Training</i>	University of Kentucky Extension	PSA Grower Trainings have been scheduled and taught by our counterparts with University of Kentucky Extension. Four of our KDA team members are PSA Trainer Certified and teach modules at trainings. During quarantine, we have moved all of our classes online and held 8 classes on at least a monthly basis since March.
3.) OFRR	KDA and UK Extension	We have completed 20 OFRRs to date and have hosted 3 mock OFRRs or other type of OFRR trainings on KY Farms. The OFRRs are completed by a member of UK's Produce Safety Extension members and a member of our KDA Produce Safety Team. We had intended to complete more OFRRs in the spring, but were limited by FDA's stop work order and have prioritized inspection. We have two new staff members in need of OFRR Training.
4.) Inspection	Kentucky Department of Agriculture	We have completed total 8 inspections on our all large covered farms and small covered farms that were not Qualified Exempt within the state. The inspections have gone well, with the biggest issues being documentation of employee training and pre & postharvest sanitation practices.
5.) State Rule Making	Kentucky Department of Agriculture	In the KY Spring 2020 General Session, Kentucky adopted the Produce Safety Rule by reference. KDA's Produce Safety Statute, KRS 260.765-772 became effective July 15th, 2020 giving KDA full state authority. KDA has also filed a Produce Safety Regulation (302 KAR 60.010) which is expected to be effective beginning January 2021. These two rules will provide the KDA Produce Safety Program with a sound regulatory foundation for conducting regulatory inspections under full state authority.

**KDA Announces New Produce Safety Rules  
For Kentucky Growers**

*Sign-up Deadline Is Saturday, May 9  
For First Grower Training Course On June 9*

**FRANKFORT, KY (May 7, 2020)** — Under legislation passed by the Kentucky General Assembly earlier this year, the Kentucky Department of Agriculture will begin implementing new produce safety rules across the Commonwealth.

"I wish to thank members of the General Assembly for passing House Bill 420, which allows the Kentucky Department of Agriculture (KDA) to serve as the primary agency for these rules instead of the Food and Drug Administration in Washington," said Agriculture Commissioner Dr. Ryan Quarles. "The new law eliminates the need for federal inspection of our produce farms and places inspectional oversight under KDA field representatives who work in cooperation with the University of Kentucky (UK) and the Kentucky Food Safety Branch. In short, producers will be working with Kentuckians who know them and know Kentucky agriculture."

Official Press Release describing KDA attaining state authority through passage of House Bill 420.

- 6.) Other KDA, UK Extension, Kentucky Food Safety Branch Various outreach events have been held or attended since the beginning of the program, this includes Farm Visits, Attending and Speaking at Conferences, Listening Sessions with Growers, Meetings with Extension Agents, Attending and Speaking at Field Days, Phone Calls and Emails with Growers.

**What metrics of quantitative success can you provide?**

- Number of trainings provided?* PSA Grower Training- 23
- Number of growers reached?* 2019- 300
- Number of packers reached?* 0
- Development of materials* We have developed several materials to help educate our growers on different parts of the Rule. These include a Farmer's Market Fact Sheet on FSMA, Qualified Exemption Applications, educational brochures, GAP/FSMA Differences and more. We have also created several methods of collecting farm inventory data in the form of Survey cards, an online portal, and handouts that explain how the PSR relates to KY farmers. We have developed a flash drive with all of our educational materials on it that we distribute at trainings and conferences.
- Publication* We have worked with UK Extension to publish several educational materials that pertain to Produce Safety that can be easily accessed on the UK Center for Crop Diversification page. Our Education and Outreach Coordinator has worked with UK Ag Communications to develop posters on toilet use, handwashing and U-pick guidance.



U-Pick poster developed with UK Extension to distribute to growers.

*Presentations given at educational event*

Our team has given presentations at a wide array of educational events including: Kentucky Fruit & Vegetable Conference, Kentucky Environmental Health Association Conference, Organic Association of Kentucky Conference, Kentucky RRT meetings, Regional and Local Farmers Market Vendor Meetings, UK Ag Water Quality Field Day, Farm Bureau Meetings, Produce Auctions, and more. Over the course of our program's existence we would estimate approximately 30 presentations at educational events, not counting impromptu opportunities to speak with growers.

**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

We have a large presence of Amish/Plain clothes growers across the state and have been pleasantly surprised with the relationship we have developed. Many that we have interacted with so far have experience implementing produce food safety and want their operations to be compliant, while maintaining their traditions. In some of our plain clothes communities, many of the farmers are already being third-party audited. In order to maximize credibility, we have a PSA Lead Trainer that is a member of the Amish community that we engage when conducting training with plain clothes growers.

We have had great success with our virtual delivery PSA Grower trainings. We had our first online training in May and have had eight online since. In order to give our growers time to register, and to maximize attendance, we plan our trainings 60 days out.



### Other information you would like to share?

In 2020, we became a fully staffed team now having all positions filled including: Produce Safety Program Manager, Compliance and Grant Coordinator, Education and Outreach Coordinator and two Inspectors (Field Representatives).

This year, a challenge we have faced is getting growers to file their Qualified Exemption Application and setting up inspections. We have tried to combat these by sending out verification letters and emails to our producers.

Our Commissioner of Agriculture Ryan Quarles was named NASDA President.



### *Produce team making history*

**Tyler Goodlett**, left, was the lead inspector for the KDA produce safety team's first regulatory inspection under state authority July 22 at a farm near Georgetown. He was joined by Produce Safety Program Manager Mark Reed, middle, and Dain Satterwhite, assistant manager.



## State Update Report – Louisiana

### Louisiana Department of Agriculture

#### Project/Initiative:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Ag Department	The Louisiana Department of Agriculture & Forestry (LDAF) is the grantee for our state with subawards for Louisiana State University Agricultural Center and Southern University Agricultural Research & Extension Center.
2.) PSA Grower Training	Extension	Louisiana has 4 lead trainers – two of these trainers are associated with the CAP grant (one at LSU and one at Southern University). The other two trainers are associated with NGOs in the state. Southern University and LSU take the lead on hosting trainings around the state. LDAF provides support for these trainings and LDAF staff also serve as trainers. We aim to host at a minimum of 3 to 4 trainings ever year around the state. The global pandemic caused in-person trainings to be cancelled and the team in Louisiana has pivoted to hosting remote PSA grower trainings for the foreseeable future.
3.) OFRR	Ag Department	LDAF takes the lead on coordinating OFRRs. OFRRs are conducted by a combination of staff from LDAF and the two universities depending on availability. LDAF also hosted an OFRR training attended by over 25 state regulators and educators in April 2019.
4.) Inspection	Ag Department	LDAF has 2 inspectors that conduct inspections in the state. The inspectors along with the Program Manager have attended mandatory training through FDA. LDAF also has a training curriculum established to ensure that inspectors are continuously educated.



5.) State Rule Making      Ag Department

The Louisiana legislature passed legislation in 2017 giving LDAF authority to conduct produce safety inspections in the state.

**What metrics of quantitative success can you provide?**

*Number of trainings provided?*

PSA Grower Training – 30  
OFRR – 1

*Number of growers reached?*

PSA Train the Trainer – 3  
An estimated 2500 people have been reached cumulatively through education and outreach events across the state. Outreach events include field days, vendor meetings at farmers markets, civic association meetings, the Louisiana Ag Expo, the Louisiana Farm Bureau Federation annual meeting, the Louisiana Farm to School Conference, the Louisiana Fruit and Vegetable Growers Association meeting, the Louisiana Small Farmers Conference and Louisiana Restaurant Association Expo.

*Development of materials*

LSU and Southern University have developed several fact sheets for stakeholders on various topics related to the Produce Safety Rule. Topics covered include wash water and produce safety, service animals and produce farms, a guide to food grade sanitizers, a comparison document on the Produce Safety Rule and Good Agricultural Practices, water sampling techniques, post-harvest sanitation, and handling and storage of produce. Most recently, fact sheets were developed to assist growers dealing with food safety issues during the COVID-19 pandemic.

*Publication*

Over 30 magazine or extension publications have resulted from the work done by the team in Louisiana. These publications have been on various topics related to produce safety and the work being done as a result of this grant program.



## State Update Report – Mississippi

### Mississippi Department of Agriculture

#### Project/Initiative Title:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Mississippi Department of Agriculture and Commerce	We are into year 3 of our CAP project in MS. With MS being one of the last states to receive CAP funding we hit the ground running in 2018. We were able to totally establish the Mississippi Department of Ag and Commerce's Produce Safety Division as well as complete the first and second year of inspections, outreach, OFRRs, and grower trainings.
2.) <i>PSA Grower Training</i>	The PSA Grower Trainings are hosted by our sub-awardees, Mississippi State University and Alcorn State University Extension	Currently we have two lead trainers both from MSU Extension. We are working towards having one lead trainer from ASU Extension.



3.) OFRR	Mississippi Department of Ag & Commerce	We have completed 7 OFRR's to date with a few farms choosing to waive their exemption and request OFRRs and inspections. Overall, the feedback from growers who have received OFRRs is that it was a fantastic experience that gave them peace of mind that they were headed in the right direction with regards to the FSMA requirements on their operation.
4.) Inspection	Mississippi Department of Agriculture and Commerce	As of 2020 we have completed 6 inspections on large farms and 4 inspection on small farms, with 2 follow ups to be done because of COVID and the stop order, some commodities were out of season.
5.) State Rule Making	Mississippi Department of Ag and Commerce	The produce safety rule was adopted by reference into MS state law back in March of 2018. No changes have been made to the law since March of 2018

**What metrics of quantitative success can you provide?**

<i>Number of trainings provided?</i>	There have been 8 PSA grower trainings conducted since July 1,2019.  There have been 122 participants trained through the PSA Training.
<i>Number of growers reached?</i>	280 growers total to date.  Our growers are reached in a multitude of ways, such as farm visits, farmers market meetings, reaching out through social media and many more.
<i>Number of packers reached?</i>	Due to the fact that the majority of our farms are small Mom & Pop operations, most of them pack their own produce.
<i>Development of materials</i>	6 promotional material. (Hats, Pens, notepad, seed packets, stickers, and farmer folders that are given to new farms with all the information on produce safety.
<i>Publication</i>	MDAC has created around 5 publications where our subawards have created around 7
<i>Presentations given at educational event</i>	At least 20 presentations given. The outreach coordinator along with our Sub-awardees give presentations on the basics of the FSMA Produce Safety Rule at a multitude of different events, field days, farmers market vendor meetings, etc.





## State Update Report – North Carolina



### Project/Initiative Titles:

#### Program Area

1.) CAP Project Designation

2.) *PSA Grower Training*

#### Responsible Party

The North Carolina Department of Agriculture and Consumer Services Produce Safety Program

NC State Extension with support from the NCDA&CS Produce Safety Program

#### Status Update

The NCDA&CS Produce Safety Program is a tier 4 state and is CAP A/B. Additionally, NC State Extension and the North Carolina Department of Health and Human Services are subawardees.

PSA Grower Training Courses are scheduled and led by one of two NC State Extension Area Specialized Agents in Food Safety. The NCDA&CS Produce Safety Program provides support and outreach materials, and also teach, at each of the trainings. Three of the Produce Safety Program's team members are PSA Trainer Certified with one of those being Lead Trainer Certified as well. County NC State Extension Agents may also be present for the trainings. Both the Produce Safety Program and NC State Extension advertise the PSA Grower Training



Courses offered in North Carolina. NC State Extension has decided not to offer virtual PSA Grower Training Courses during the pandemic, but is reevaluating that decision at this time. The Produce Safety Program has been sharing information regarding virtual PSA Grower Training Courses offered by the surrounding states.



- |                |   |   |
|----------------|---|---|
| 3.) OFRR       | NCDA&CS Produce Safety Program in collaboration with NC State Extension | OFRRs are scheduled by the NCDA&CS Produce Safety Program and conducted in collaboration with NC State Extension. The Produce Safety Program is currently offering OFRRs to all farms in North Carolina while prioritizing inspections for large and small farms. Large and small farms that had OFRRs prior to 2019 are now eligible for inspections. All OFRRs are confidential and no notes are taken. 33 OFRRs have been conducted in North Carolina to date. |
| 4.) Inspection | NCDA&CS Produce Safety Program  | The NCDA&CS Produce Safety Program is completing initial, educational inspections at large and small farms across the state. These inspections have been well-received, and no observations have been noted on the 4056 forms. Inspection summary reports are completed and submitted to the Produce Compliance Officer. 21 inspections have been completed to date.  |



5.) State Rule Making	NCDA&CS Produce Safety Program	North Carolina adopted the Produce Safety Rule as it was written into their Administrative Code on May 1, 2018.
6.) Other	NCDA&CS Produce Safety Program	Produce complaints and truck wrecks related to produce distribution are handled by the NCDA&CS Produce Safety Program. Outreach and education initiatives conducted by the Produce Safety Program are ongoing.

### **What metrics of quantitative success can you provide?**

<i>Number of trainings provided?</i>	46 PSA Grower Training Courses have been completed to date. Countless other trainings on specific topics within the Produce Safety Rule, such as cleaning and sanitation, water treatment, and more have also been provided to growers, stakeholders, and others.
<i>Number of growers reached?</i>	704 people have attended PSA Grower Training Courses in North Carolina to date. This includes growers, farm workers, food safety consultants, Extension agents, NCDA&CS employees, etc. It is approximated that 568 of those attendees were growers with 376 unique farms trained. 1,371 farms in North Carolina were sent a mass mailing packet about the Produce Safety Program and describing the Produce Safety Rule. Numerous other growers have been reached via in person, phone, and email outreach.
<i>Number of packers reached?</i>	Approximately 4 produce packinghouses were contacted in response to the mass mailing outreach initiative where the Produce Safety Rule and its regulations were discussed with the owners and operators.
<i>Development of materials</i>	Approximately 10 outreach and education flyers and documents have been updated that are distributed to growers alongside 6 new promotional items including produce shaped stress relievers, a fruit and vegetable peeler, and a magnet. Additionally, a mass mailing postcard was developed, and Farmer's Market baskets are in the process of being developed.
<i>Publication</i>	The NCDA&CS Produce Safety Program website was updated in early April of 2020 and weekly Produce Safety Sunday News social media updates are made weekly on the NCDA&CS Facebook, Twitter, and Instagram accounts that began on August 2, 2020.
<i>Presentations given at educational event</i>	The NCDA&CS Produce Safety Program has conducted approximately 40 presentations at a variety of educational events including but not limited to: conferences, commodity group meetings, commodity field days, Research Station field days, stakeholder meetings, Research Station events, University courses, community events, non-profit organization events, and Cooperative Extension workshops and meetings. Additional opportunities to speak with

growers about the Produce Safety Rule include impromptu educational farm verification visits.

**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

In response to an outreach initiative, a North Carolina produce farmer said, "Thank you for your continued interest and support in the safety of farms like ours, our food supply chain, and the health, safety, and well-being of consumers."

A small produce farmer in North Carolina shared their concerns regarding produce safety in response to an outreach initiative by stating, "Food safety is a huge concern for us and I hope through education and enforcement you can have a positive impact."

When requesting an OFRR, a North Carolina produce grower said, "I would appreciate your constructive criticism regarding food safety any time you see fit. Although we are qualified exempt due to the small scale of the operation and because we retail most of our crops directly to the consumer, I still want to be aware of any potential problems this operation might pose, and mitigate where possible within reason."

#### **Other information you would like to share?**

The NCDA&CS Produce Safety Program is extremely appreciative of the support and collaboration with their state counterparts, federal supporters, and the overarching produce community. The Produce Safety Program looks forward to continuing to ensure North Carolina produce farms are in compliance with the FDA's Produce Safety Rule for the health of consumers through continuous outreach and education before and while we regulate in years to come. Feel free to visit our website at:  
<https://www.ncagr.gov/fooddrug/food/ProduceSafetyProgram.htm>



## State Update Report – Oklahoma

### Oklahoma Department of Agriculture, Food and Forestry

#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Oklahoma Department of Agriculture, Food, and Forestry	Awarded competition A/B
2.) <i>PSA Grower Training</i>	Oklahoma State University	OSU takes the lead on PSA classes. ODAFF supports the classes with answering questions and explaining the rule exemptions.
3.) OFRR	Both ODAFF and OSU	
4.) Inspection	ODAFF	90% covered farms have had at least 1 inspection. COVID prevented that from being 100% by this point but hope to reach that soon.
5.) State Rule Making	ODAFF	Completed



## What metrics of quantitative success can you provide?

*Number of trainings provided?* 31

*Number of growers reached?* 409

*Number of packers reached?* 7

*Development of materials* Recordkeeping and SOP templates for FSMA, GAP, Harmonized GAP, Exemption Calculation Excel Workbook  
*Presentations given at educational event* 3 posters, 15 presentations

## Other information you would like to share?

About 99% of our covered produce farms are exempt or qualified exempt and sell at farmers markets, so we have focused on trying to do outreach to those farms by visiting farmers markets and presenting at the farmers market conference. This demographic is difficult to get inventory information from because they may be busy selling produce or not wanting to provide information to the government. The postcard size survey that Missouri developed helps in collecting information from those farms as it is not wordy and does not look intimidating.





## State Update Report – South Carolina

### South Carolina Department of Agriculture



#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	South Carolina Department of Agriculture	Our state is both competition A and B. We have two subawards in place to help with outreach, one with Clemson Extension and the other with Carolina Farm Stewardship Association.
2.) PSA Grower Training	South Carolina Department of Agriculture, Clemson Extension, and Carolina Farm Stewardship Association	We have completed a total of 30 grower trainings, 4 of which were remotely delivered. Going forward, we plan to schedule at least one remote training per month through the end of 2020. We will then offer Grower Trainings on a quarterly basis in 2021. The grower trainings are a joint effort between SCDA and our two subawards: Clemson Extension and Carolina Farm Stewardship Association.
3.) OFRR	SC Department of Agriculture with Assistance from Clemson Extension and Carolina Farm Stewardship Association	16 OFRRs have been completed on 13 large farms and 3 small farms. SCDA outreach personnel are always the lead assessor for the OFRR and either Clemson Extension or Carolina Farm Stewardship personnel are the secondary assessor. We have an online portal where farmers can sign up for an OFRR. We have OFRR sign-up sheets at all the grower trainings and outreach events. We also call farms directly to determine if they want to have an OFRR

		prior to an inspection. All of our OFRRs are confidential and all notes are left with the farmer.
4.) Inspection	South Carolina Department of Agriculture	We have completed a total of 31 inspections. 24 of those were large farms and 7 were small farms.
5.) State Rule Making	South Carolina Department of Agriculture	We have full state authority to do Produce Safety Rule inspections. Our legislation, the SC Produce Safety Act, was passed in May 2017.
6.) Other	South Carolina Department of Agriculture	SCDA has created an exemption application process where farmers are only considered exempt if they apply and are approved for an exemption. So far, we have had 230 farms apply for an exemption. When they are approved for an exemption, they receive a certificate that is good for one year and a packet of information about the records they need to keep and other requirements for the exemption they fall under. The exemption application includes both rule exclusions (rarely consumed raw, less than \$25K, personal consumption) and exemptions (qualified and processing). As of September 2020, our Exemption Application process has been digitalized by WINWAM so that the process is more efficient for the growers and our team. Growers can apply online or check the status of their farm at <a href="https://psrexemption.agriculture.sc.gov/">https://psrexemption.agriculture.sc.gov/</a>

### **What metrics of quantitative success can you provide?**

<i>Number of trainings provided?</i>	PSA Grower Training – 25 trainings, 301 trained Train-the-Trainer – 1 training, 20 trained Remote PSA Grower Training – 4 trainings, 67 trained
<i>Number of growers reached?</i>	Approximately 1,200 Growers have been reached through the following communication outlets: trainings, mass emails to farms in inventory, SC Market Bulletin, social media, mailings, and individual calls
<i>Number of packers reached?</i>	Approximately 20
<i>Development of materials</i>	Flash Drives – includes resources related to Ag Production Water, Postharvest Water, Postharvest Sanitation, Farm Food Safety Plan Templates, Soil Amendments, Wildlife, Worker Health and Hygiene and general PSR resources. These are handed out at grower trainings.  Exemption Applications/Certificates (online form) – required in SC to be exempt from undergoing inspections  Farm Food Safety Plan Template

*Publication*

Video of Grower Perspective on OFRR and Inspection,  
Produce Safety Rule Self-Assessment Brochure,  
Compliance Dates Flyer, Press Releases regarding  
Exemption Applications, and Articles Written in SCDA  
Market Bulletin.

*Presentations given at  
educational event*

42 Total Conferences Presented at or Set up Booth Space  
for Outreach Purposes:

GAP Workshops – Hosted by SCDA and CFSA  
Commodity Board Meetings – Strawberry, Peach,  
Watermelon, Upstate Fruit, Oconee County Ag Advisory  
Council

Commodity Specific Field Days – Watermelon, Coastal  
REC, Cooper Family Farm Field Day

Farmer Resource Rodeo

Farmers' Market Annual Conference

FDA & NASDA Webinars

Farm to School Conference

SC Farm Bureau Conference

Southeast Fruit and Vegetable Expo

SC Agribiz Expo

SC Ag Commission

Farm Bureau Newberry County Meeting

In House Employee Training

Young Farmers and Ranchers Meeting

Produce Safety Q&A Session

SC State Fair

South Carolina Food Safety Task Force Meetings

Television Interview with News Channel WACH FOX 57

**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

Quotes from growers that attended our PSA Grower Trainings:

"Good training. Having the written material beforehand was invaluable. Thank you for the resources on the thumbdrive. I am a new farmer and it will help me tremendously."

"Great course and I actually like doing it by zoom. Saves so much on travel time."

"The moderator, Chad Carter, did a great job! All of the instructors were knowledgeable, easy to understand and made this intensive course interesting and manageable. We learned a lot! The course book will come in very handy and we are also happy to get all the additional information on resources. Thanks for the great job and making us feel like you are all available to us as we continue to expand our farm. And thanks for the swag bag!"

**Other information you would like to share?**

SCDA Website: [www.scproucesafety.com](http://www.scproucesafety.com)

SCDA Online Exemption Application Website: <https://psrexemption.agriculture.sc.gov/>





## State Update Report – Tennessee

### Tennessee Department of Agriculture

#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Tennessee Department of Agriculture	TDA receives CAP funding for both Competitions A and B
2.) PSA Grower Training	University of Tennessee Institute of Agriculture (UTIA)	UTIA handles all of the PSA Grower Trainings as part of their collaboration with Competition A activities per our UTIA-TDA subaward.
3.) OFRR	TDA/UTIA	TDA leads OFRRs. Going forward UTIA will be invited to OFRRs within appropriate distance of university. During the past year TDA has prioritized midsized and small farms when conducting OFRR's in 19-20 year.
4.) Inspection	TDA	TDA conducts all inspections as required by receiving Competition B funding. In the 19-20 year, TDA has conducted 10 PSR inspections.
5.) State Rule Making	TDA Legal Staff	Effective February 12, 2020, TDA adopted the substantive provisions of the federal standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption, compiled at 21 C.F.R. part 112, as may be amended from time to time.

#### What metrics of quantitative success can you provide?

<i>Number of trainings provided?</i>	12 PSA Grower trainings, 1 Train-the-Trainer
<i>Number of growers reached?</i>	300 Growers reached through the PSA Grower Trainings; 25 Trainer reached through the Train-the-Trainer course. TDA has conducted outreach activities most notably at the annual Pick Tennessee Conference where we reach a sizeable number of growers each year.
<i>Number of packers reached?</i>	The number of packers reached is difficult to quantify. Packers have reached at outreach events. However, the number of packers reached is significantly smaller than the number of growers reached at these events.
<i>Development of materials</i>	TDA has developed promotional materials (flashlights, bags, stress relievers, pens) used to engage growers at outreach events such as the annual Pick Tennessee conference. TDA has also two farm information cards that have been sent out to growers and circulated to UTIA for distribution. One of these cards assists with farm inventory while the other allows a farm to request an OFRR.

*Publication*

TDA has not produced any publications at this time.

*Presentations given at educational event*

TDA representatives have given presentations to various stakeholders (the Tennessee Fruit and Vegetable Association for example) over the course of the CAP. On average, TDA will conduct 5 education presentations per year.

**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

Last fall, two of our inspectors attended an OFFR on a green bean farmer. The farmer was not sure what FSMA required him to do. He was especially nervous about the paperwork (record-keeping). Although the producer was apprehensive the OFFR, it went well. This past summer, one of our inspectors completed an inspection and found the paperwork to be impeccable. His record keeping was well organized and kept updated.

**Other information you would like to share?**

As of June 1st, 2020, our team is complete. We have 3 inspectors and a produce coordinator.



## State Update Report – Texas

### Texas Department of Agriculture

#### Project/Initiative Titles:

Program Area	Responsible Party	Status Update
1.) CAP Project Designation	Texas Department of Agriculture	The Texas Department of Agriculture is responsible for all aspects of the CAP project. Outreach, Education and Inspections
2.) <i>PSA Grower Training</i>	The Texas Department of Agriculture works very closely with both Texas AgriLife Extension and the University of Houston	Number of PSA Grower Trainings: 41 in person, 2 remote
3.) OFRR	Texas Department of Agriculture is responsible for conducting all On Farm Consultations	We have conducted 29 unique On Farm Consultations
4.) Inspection	Texas Department of Agriculture is responsible for conducting all inspections	We began inspections in October 2019 and to date have conducted 43 inspections
5.) State Rule Making		We completed the process in September 2019



**What metrics of quantitative success can you provide?**

*Number of trainings provided?*      Total PSA trainings: 41 since the program began

*Number of growers reached?*      Total participants 775

**Do you have any specific anecdotes/stories that you'd like to share? Please include quotes, if possible, from growers/producers since this is helpful in engaging others with your work.**

Texas growers have a history of providing safe produce and they all want to continue to do so. When we finish our outreach, On Farm Consultation or our inspection; growers tell often tell us "That was not hard at all", or "You guys have been such a great help" All have been willing to address all the findings without hesitation. Yes, like all states we do have a few that wait until the last minute or state they did not know what to do, but for the most part Texas growers have been very receptive to our inspections.



## State Reports – Virginia

### Virginia Department of Agriculture

**Program Areas:** Strategies to Enhance Produce Safety on Virginia Farms for Implementation of FDA's Produce Rule

<b>Program Area</b>	<b>Responsible Party</b>	<b>Status Update</b>
1.) CAP Project Designation	VDACS	Tier 4 state in Competition A/B
2.) PSA Grower Training	Virginia Cooperative Extension (VCE)	<p>Trainings are coordinated by Virginia Cooperative Extension through a grant sub-award and MOU. VDACS employees have completed the PSA train-the-trainer course and assist with teaching course modules. There are currently:</p> <ul style="list-style-type: none"> <li>-One PSA Trainer of Trainers (TOT) from Virginia Tech</li> <li>-Two PSA Lead Trainers (includes the TOT) from Virginia Tech</li> <li>-23 PSA Trainers from Virginia Tech/Virginia Cooperative Extension</li> <li>-Six PSA Trainers from VDACS</li> </ul> <p>Conducting courses throughout the state. This has been a successful collaboration for everyone involved.</p> <p>A total of 25 PSA Grower Trainings (685 participants) have been held to date. VCE is planning to conduct a PSA Grower Training course virtually in November 2020.</p>
3.) OFRR	VDACS and VCE	<p>A total of 48 OFRRs have been completed. Once regulatory inspections begin for very-small covered farms on May 1, 2021, VDACS will turn over the entire OFRR program to VCE. VDACS will end all OFRR activities. OFRRs for very small farms began on May 1, 2020 when compliance inspections started for small covered farms. While VDACS conducts regulatory inspections, Virginia Tech extension can conduct OFRRs on farms that have not yet been inspected or new farms that are now growing covered produce or considering growing covered produce.</p>
4.) Inspection	VDACS	<p>Regulatory inspections of large covered farms began May 1, 2019. Regulatory inspections of small covered farms were set to begin on May 1, 2020 but delayed by COVID19 and the federal stop work order. VDACS resumed inspection activities after the stop work order was lifted on June 5, 2020. We are also doing sprout inspections. A total of 83 inspections have been completed as of September 17, 2020 since the Program was created.</p>

5.) State Rule Making      VDACS

Legislation was introduced after a jurisdictional self-assessment revealed that our Program did not have clear regulatory authority on the state level to enforce the Produce Safety Rule through the current Virginia Food Laws. Senate Bill No. 1195 was introduced to the 2017 General Assembly and would amend the Code of Virginia by adding to Title 3.2 a chapter numbered 51.1, consisting of 6 sections numbered 3.2-5146 through 3.2-5156, relating to produce safety. Specifically, SB1195 prohibits certain farms from violating the federal regulations that set minimum standards for the safe growing, harvesting, packing, and holding of fruits and vegetables. The bill authorizes the Board of Agriculture and Consumer Services to adopt regulations to carry out the purposes of the law and gives the Commissioner of Agriculture and Consumer Services free access at reasonable hours to certain farms to inspect the farms and take samples. The Commissioner or his/her agents are also authorized to seize certain produce if determined to be grown, kept, or exposed for sale or held in violation of federal regulations or state law, and the bill provides a court process by which the seizure may be contested. The Bill was signed by the Governor on March 16, 2017 and became law effective July 1, 2017. Please see Code of Virginia, Title 3.2, Chapter 51.1 Produce Safety §3.2-5146 through §3.2-5156.



*Number of trainings provided?*      25 PSA courses

*Development of materials*      A total of 6 different types of brochures/promotional materials were developed and/or purchased using CAP

funds. They can be found at [www.VAProduceSafety.com](http://www.VAProduceSafety.com)

- Postcard handout - grabs attention of produce farmers and directs them to website.
- Produce Safety Program rack card - handout that informs farmers about the new produce safety program and directs them to website.
- Compliance Dates rack card - handout that informs farmers about PSR compliance dates, exemptions and directs them to website.
- Covered Farms rack card - handout that discusses covered produce and directs them to website.
- Education and Training rack card - handout that informs farmers of need to attend PSA course and directs them to website.
- Safe Water rack card - handout that touches on water requirements and directs them to website.
- Trade show pop-up display skeleton and fabric panels that grab attention of event attendees.
- Trade show pull-up banner of the coverage and exemption flow chart in color.

#### *Publication*

- Radio interview with Mr. Jeff Ishee from "On the Farm" radio regarding the FSMA Produce Safety Rule and implementation in Virginia (Fall 2017). Free of charge.
- TV interview WVPT Public Media (PBS and RFD channel) with Mr. Jeff Ishee from "Virginia Farming" regarding the FSMA Produce Safety Rule and implementation in Virginia. Aired on 11/20/2017 and recording is available here <http://video.wvpt.net/video/3006731097/>. Free of charge.
- An article regarding the FSMA Produce Safety Rule and implementation in Virginia in the 2018 fall edition of Farm Bureau News published by the Virginia Farm Bureau.
- An article regarding the FSMA Produce Safety Rule and implementation in Virginia in the May edition of Cooperative Living magazine. This magazine is published by the Association of Electric Cooperatives and reaches anyone who receives his or her electricity from a power co-op in the Delmarva region.
- An article about on-farm readiness reviews in the 2019 fall edition of Farm Bureau News published by the Virginia Farm Bureau. Free of charge.

#### *Presentations given at educational event*

Since the Program was created, we setup a display/exhibit and handed out informational materials at over 30 conferences/events such as:

- VSU Small Farm conference (10/24-25/19)
- Virginia Strawberry Association meeting (11/20/19)
- VA Farm Bureau Federation conference (12/3/19)
- VA Association of Biological Farming conference (1/11-13/20)
- Southeast Virginia Fruit and Vegetable conference (2/27/20)

We gave a PowerPoint presentation about the Produce Safety Program and inspections in VA and handed out informational materials at another 20 plus different conferences/events/meetings to include:

- Northern Neck Growers Association (12/13/19)
- Richmond area Vegetable Growers Association (2/26/20)
- Wegmans produce grower training/meeting (3/3/20)



# Poster Abstracts

*Listed in presentation order. PDF versions of  
posters are available at  
<https://sc.ifas.ufl.edu/resources/>*

**Title: Education and Outreach Activities Impacts on Florida Growers' Food Safety Knowledge and Preparedness for PSR Inspections**

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The University of Florida Institute of Food and Agricultural Sciences (UF IFAS) and the Florida Department of Agriculture and Consumer Services (FDACS) collaborate to provide education and outreach through Produce Safety Alliance (PSA) Grower Training Courses and On-Farm Readiness Reviews (OFRR) to assist growers in meeting the requirements of the Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR).

Despite challenges presented by the COVID-19 pandemic, education and outreach activities have been adapted to continue reaching Florida farmers in efforts to improve food safety knowledge and readiness for PSR inspections. The objectives of this evaluation are to determine if PSA trainings and OFRRs activities are successful in improving the Florida growers' level of knowledge of the PSR, foundational food safety principals, and determine Florida growers' readiness for PSR inspection.

Trainers and Assessors for PSA trainings and OFRRs, respectively, have been trained throughout the state to assist in education and serve as resource for Florida growers. Pre-and post-test scores out of 25 points were compared using a *t*-test to determine if there was an increase in knowledge before and after completion of the PSA grower training ( $n=1473$ ). The level of preparedness of Florida growers for a PSR inspection was measured through online anonymous surveys completed by the OFRR team and submitted to National Association of State Departments of Agriculture and Rutgers University.

Produce Safety Alliance trainers (108 trainers, 20 lead trainers) have been developed geographically across Florida and UF IFAS (5) and FDACS employees (3) are trained as OFRR Assessors. Post-tests means (21.58/25) were significantly higher than pre-test means (19.24/25), indicating an increase in knowledge after the training ( $t=-1.72$ ,  $P < 0.05$ ). Of OFRR assessed farms ( $n=43$ ), 46.51% met the requirements, 39.53% needed minor improvements, and 13.95% needed significant improvements to meet the FSMA PSR requirements; areas which required most improvement was preharvest water, sanitation, and worker training.

PSA Grower Training and OFRR program efforts continue to improve the knowledge and compliance levels of Florida farms regarding the FSMA PSR.

## **Title: Growers' Awareness of On-Farm Food Safety and Conservation Practices in the Southeastern United States**

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On-farm conservation practices are known to increase local biodiversity and promote agricultural sustainability, and they can also play an important role in reducing food safety risks. However, many growers are not aware on how these practices can be beneficial as a part of their farm food safety program. The objective of this survey was to estimate the level of awareness of growers and producers related to on-farm food safety, conservation practices, and programs to identify grower educational deficiencies and knowledge gaps. The survey was distributed among growers from the Southeastern U.S. Key questions included geographical location of the farm, type of business, on-farm food safety and conservation management practices, and grower's awareness of conservation programs. Most of the produce farms were located in Georgia (61.1%) followed by Alabama (12.5%) and Florida (5.5%); conventional farming (40.3%) was the most common agricultural practice described among the 111 growers who responded to the survey. Among management practices on the farm to address food safety concerns, the use of deterrents in the field (53.8%) was the most used method, followed by partial vegetation removal from ditches or farm ponds (30.8%), treatment of irrigation water (24.6%), and vegetation clearing to create bare ground buffers (21.5%). Regarding conservation practices, 63.1% of growers reported doing crop rotation, followed by cover cropping and integrated pest management (49.2% each), composting or manure treatment (30.8%), and direct planting (26.1%). Approximately 60% of respondents reported not being aware of any USDA programs, while 25% of growers were aware, 5% had previously applied, and 10% had been approved to one of these programs. Information obtained from this survey will be useful to understand the growers' perceptions of the relationship between food safety and conservation practices and to develop strategies to better address and incorporate both practices on the farm plan.

**Title: PSA Training and PSR Outreach Activities and Results since 2016 in MS**

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The Mississippi State University (MSU) team started training, outreach and assistance to farmers and others in 2016, initially partially funded by SCBG funds and later by CAP funds through the Mississippi Department of Agriculture and Commerce (MDAC). The plan was to hold at least 5 PSA grower and 1 TTT training each year in the state. As of September 2020, we have held three TTT trainings and about 30 grower trainings. About 30 MS people have been trained in the TTT courses and over 300 farmers have attended PSA grower trainings. In addition, the team held a course Records, Harvest and Post-harvest practices in 2020, combining both additional information and demonstrations for growers. This course was attended by 11 growers and two regulatory personnel. The state now has two PSA Lead Trainers and has a team of 10 active PSA trainers. These include specialists outside the university and the state. We also collaborate with Alcorn State University in support of their trainings and other activities. The Mississippi growers are provided the manual and the certificate as part of the effort. Supplemental material and information is provided in the courses and at any time. An effort has been underway the past two years to train extension agents in MS. Thus far we have trained more than 20 extension and MSU personnel, with a cadre of about 10 PSA Trainers. We provide them with information, assistance and periodic meetings to discuss needs and plans. The courses have been very well attended, growers have been very satisfied with them and have resulted in a 10-45% gain in knowledge by participants. The team has moved to virtual training since May, having trained more than 50 growers and extension agents and regulatory personnel. The team plans to conduct one PSA TTT course when permitted, continue grower and extension agents' trainings and focused courses on water, soil amendments, harvest and training and records. This effort is supported in part by the MDAC through a FDA CAP grant under agreement #14-SCBGP-MS-0028 and by NIFA, under award number 2015-70020-24397, and by MSU and the MSU Extension Service.



## **Title: Increasing Engagement and Learning during PSA Grower Training Courses**

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The one-day standardized PSA Grower Training has received mixed reviews from small-scale growers who would like additional support and technical assistance implementing Produce Safety Rule (PSR) requirements. The 2019 North Central Region Center for FSMA Training, Extension, and Technical Assistance report shows that special populations of growers (minority, plain cloths, and limited English proficiency) generally score lower on the standardized pre-test and show less improvement than growers who do not identify with a special population when confronted with the traditional lecture based PSA Grower Training (Bhullar et al, 2019). Training that incorporates simulation, demonstration, discussion, peer-to-peer, and experiential learning is likely to better meet the cultural needs of the given audience and is consistent with the *USDA Guide: Best Practices for Better Serving Socially Disadvantaged and Limited Resource Beginning Farmers and Ranchers*.

Several two-day PSA Grower Training Courses that incorporated experiential learning and other interactive elements have been conducted across the southern region. Growers who attended these courses report a high level of enjoyment and engagement. Analysis of the PSA evaluations shows that growers attending these courses believe they have improved their knowledge and have greater confidence implementing food safety practices.

Incorporating hands-on activities into PSA Grower Training increases engagement and it is theorized that the increased engagement offered by the interactive course elements will lead to greater long-term learning outcomes and improved on farm food safety practices. As a result of this analysis and to support the work of the Local Food Safety Collaborative, Woods and Brannon will develop a *How to Guide* to support trainers who wish to incorporate interactive elements for the development of effective produce safety training for small-scale growers and processors.

**Title:**       **Local, Regional and Safe Foods COVID-19 Resources**

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In response to the COVID-19 pandemic, the Local, Regional, and Safe Foods team at the University of Arkansas System Division of Agriculture Cooperative Extension Service shifted focus to provide produce growers with information on navigating new food safety challenges. Feedback from constituents was collected through an online survey consisting of open-ended questions for participants to describe resource needs, and new opportunities and challenges they faced. From this data, content and resources were developed to address their concerns. Information was disseminated through our website, social media, emails, and webinars. Our Cooperative Extension Service developed a COVID-19 resource webpage. Within this page, we wrote content on best practices for produce safety, worker health and hygiene, agritourism, shifting markets, selling safely at farmers markets, and community supported agriculture programs amidst COVID-19. Since in-person PSA Grower Trainings were canceled, we shifted to a remote delivery format to continue providing this service. Additionally, we hosted Zoom webinars called *Local Foods Open Space Discussions* where we invited guest speakers to present on local foods and COVID-19 related topics and then provided time for open discussion to hear directly from our farmers and the local foods community in Arkansas. With these efforts, we were able to provide information to thousands of people. Twenty people provided feedback through the survey, 16 of which requested additional technical assistance that we provided through phone and email. As of July 2<sup>nd</sup>, our web resources were accessed 1,644 times. Sixteen people completed the remote PSA Grower Training. Between March 30<sup>th</sup> and July 20<sup>th</sup>, 300 people participated in the *Local Food Open Space Discussions*, and 331 people viewed the webinar recordings archived online. Through social media campaigns and emails to our listserv, 22,003 people were reached. By providing information and technical assistance, we were able to help farmers to continue running their operations during these uncertain times.

**Title:** Factors Associated with the Implementation and Documentation of Risk Management Practices on Strawberry Farms in the Southeastern United States

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**Background:** Strawberries are one of several fresh produce commodities in the US linked to cases of food-borne illness; however, the industry is not well characterized. In the southeastern US (SEUS) there are approximately 2,091 strawberry farms varying widely in acreage, income, and production type.

**Objective:** To determine the association between SEUS strawberry farm characteristics and the use of RMP.

**Methods:** A 43-question survey was developed to collect information regarding farm location, business characteristics, farm characteristics, and RMPs. Questions were designed based on the Produce Safety Alliance training manual and feedback from expert reviews. The survey was distributed to individual growers and professional organizations.

**Results:** Farm size ranged from 1-10,000 acres; however, 71.8% of all growers harvested strawberries on <5 acres with 2-4.99 acres being most common (41.2%). The majority of growers (63%) reported strawberry production revenues of \$25,001 to \$250,000. Though only 25.6% of growers had undergone a third-party audit, 50.0% of growers indicated they had a food safety plan. We found significant differences ( $p < 0.05$ ) in the use and documentation of RMP between growers based on acreage, revenue, presence of a third-party audit, and presence of a food safety plan. For both acreage and revenue there was a general linear increase in reporting based on scale with responses ranging from 25 to 100%. For growers with a third-party audit or food safety plan, between 62.2 and 97.8% indicated the use and documentation of RMP, respectively; however, for those without responses, RMP use and documentation were as low as 13.3%.

**Significance:** Our results indicate that SEUS strawberry growers have significant differences in RMP based on farm characteristics. As such strawberry growers may benefit from context-specific education focused both scale-related capacity constraints and technical training to increase their familiarity with food safety RMP.

**Title:**           **On-Farm Environmental Assessment of Very Small to Small-Sized Strawberry Farms in the Southeastern United States**

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**Background:** Enhancing the safety of fresh produce through implementation of on-farm risk management practices (RMP) is a priority within the FSMA Produce Safety Rule. More specifically, fresh strawberries are vulnerable to on-farm contamination and have been associated with foodborne disease outbreaks. A variety of factors can impact implementation of RMP, particularly on very small to small-size strawberry farms, and on-farm environmental assessments can help identify these key factors.

**Objective:** We aimed to determine the physical attributes of very small strawberry farms in the southeastern U.S. (SEUS) for implementation of RMP.

**Methods:** Environmental assessments on strawberry farms, 2 acres or less, in the SEUS were conducted to collect data about farm characteristics and resources to implement seven RMP -- worker health and hygiene, agricultural water, animal control, biological soil amendments, harvesting and packing, storage and transportation, and post-harvest handling. A map of each farm layout was also sketched during the on-farm visits to better understand the farm environment. Descriptive statistics were performed to determine what physical resources are available to implement RMP.

**Results:** A total of 17 on-farm assessments were included in our analysis. All (100%) farms used plasticulture to grow strawberries, and 94% of farms grew other crops in addition to strawberries. The most common physical attributes were drip systems for irrigation (100%) and animal control fencing (100%). All except one farm had adequate toilet facilities that were conveniently located (94%). Nearly all (88%) did not have a bodily fluid spill kit. For on-farm water sources, 82% use groundwater or surface water with no subsequent water treatment (71%) or water testing to determine concentrations of *Escherichia coli* (50%).

**Key Outcome:** Our findings will be used to inform the development of training and education interventions aimed at increasing RMP adoption for very small to small-size strawberry farms.



**Title:** FSMA PSR Subpart D: Worker Training, Health and Hygiene Curriculum

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**Background and Project Importance:** The Food Safety Modernization Act (FSMA) Produce Safety Rule (PSR) establishes science-based minimum standards for the safe growing, harvesting, packing, and holding of produce on farms. Operations covered under the FSMA PSR must meet standards for worker training, health, and hygiene (subpart D). These standards establish qualification and training requirements for all personnel who handle covered produce or come into contact with food-contact surfaces. Documentation of this required training must be kept, which includes establishing hygienic practices and other measures needed to prevent persons from contaminating covered produce with microorganisms of public health significance. Produce operators (e.g., growers, packers) subject to the PSR will need to comply with the new worker training, health, and hygiene requirements.

**Objective:** To create a comprehensive training curriculum that satisfies the requirements of the PSR as it relates to subpart D.

**Methods:** In partnership with several produce safety specialists and the Virginia Department of Agriculture (VDACS), this curriculum was created using the framework of the PSR in the code of federal regulations and other PSR guidance and educational documents.

**Results:** The training curriculum incorporates visual representations, and in-depth explanations of personal health and hygiene standards established by the PSR; as well as content and resources which will support a farm or packinghouse to confidently train their workers. The training will take approximately one hour to complete and covers the following sections: worker health and hygiene; wild and domesticated animals; soil amendment use; post-harvest handling and sanitation; and worker training, health and hygiene record keeping. The training is available virtually through Virginia Tech's online learning portal (VT Canvas). In addition, VCE agents have been trained to present this curriculum around the Commonwealth.

**Significance:** To our knowledge, no known training curriculum existed that was specific to only the worker training requirements of the PSR. This curriculum provides produce operators with the necessary resource to comprehensively meet the requirements of the PSR as it relates to subpart D.

Registration for the curriculum can be accessed at <https://tinyurl.com/y35jdppm>



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