

Food Safety Outreach Program Project Roundtable

June 9, 2021
2:00-3:30 PM ET

LRCC
Lead Regional
Coordination Center



NECAFS
The Northeast Center to
Advance Food Safety

SC
Southern Center
For Food Safety Training, Outreach and Technical Assistance



North Central Region
Center for FSMA Training, Extension
and Technical Assistance

WRC
Western Regional Center to
Enhance Food Safety



United States
Department of
Agriculture

National Institute
of Food and
Agriculture

Thank you for joining us for the FSOP Project Roundtable

Information for today's program:

- We are using the Zoom webinar format. Attendees are muted and your video is off.
- The chat box has been disabled, please use the Q&A function to submit your questions for presenters.
- Slides with presenter permission will be posted to the Southern Center website and linked to the Food Safety Resource Clearinghouse.
- We are not recording this webinar.
- Evaluation will be sent to the email you registered with after the program.

Questions? Contact Katelynn Stull at k.stull@ufl.edu



Improving the Development of Food Safety Plans through the Advanced Preventive Controls School Initiative

Byron D. Chaves, PhD.
University of Nebraska-Lincoln
byron.chaves-elizondo@unl.edu

USDA-NIFA-FSOP 2019-70020-30340
Accession Number: 1020747

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Problem Statement / Issue Definition:

- The FSMA PCHF rule requires certain FDA-inspected facilities to have a food safety plan that includes an analysis of hazards and adequate risk-based preventive controls to minimize or prevent the identified hazards.
- Under the rule, certain individuals, known as PCQI, are responsible for identifying relevant food safety hazards, preparing or overseeing the preparation of the food safety plan, validating the effectiveness of preventive controls, reviewing records, and reanalyzing the food safety plan when needed.
- Lack of comprehensive advanced course to support small and very small companies dig deeper into the details of developing a food safety plan.
 - English and Spanish
- The **long-term goal** of this project is to help increase FSMA regulatory compliance of small and very small facilities by building their capacity to develop and implement adequate food safety plans.



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Approach / Methods:

MODULE 1: Hazard Analysis and Risk Assessment [Wang/Chaves]

- Hazard identification and evaluation
- Software demonstration and uses for food safety decision making

MODULE 2: Process Controls [Chaves]

- Use, selection, and interpretation of microbiological results - pathogen, surrogate, and indicator data
- Experimental design for in-plant validations

MODULE 3: Food Allergen Management [Baumert/Downs]

- Food allergen identification, labelling requirements, prevention of allergen cross contact, and validation and verification of food allergen controls

MODULE 4: Environmental Monitoring [Chaves]

- *Salmonella*/*Listeria* EMP
- Seek-and-Destroy approach
- Sampling and testing for a robust EMP



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Results / Outcomes:

- No-cost extension until summer 2022
- Delays in program delivery due to the COVID-19 pandemic
 - Nebraska, Guam, and Puerto Rico
- Curriculum still under development and refinement
- Modules to be piloted in Nebraska in late fall 2021
- Information being digitalized as webinars and recorded lectures for virtual delivery
- Interns from PR and Guam arriving in Nebraska in fall 2021, spring 2022, and summer 2022
- Expected delivery in insular areas in summer 2022 including Spanish version in PR.
- Advanced vs. Basic training?





Sanitization and Cleaning Resources for Your Business

Vern Grubinger, Hans Estrin, Chris Callahan,
Andrew Chamberlin (UVM Extension)

Ava DeBovis, Billy Mitchel, Tricia Wanko (National
Farmers Union)

Robert Hadad, Caitlin Tucker (Cornell Cooperative
Extension of Western NY)

Phillip Tocco, (Michigan State University
Extension)

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National
Farmers
Union

MICHIGAN STATE
UNIVERSITY

Extension

Cornell Cooperative Extension
Cornell Vegetable Program

Grant number 2020-70020-33003 from the USDA National Institute of Food and Agriculture. It is offered without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other category legally protected by federal or state law.

SCRUB Highlights

- Three year project, multi-state SCRUB team is...
- Developing versatile hybrid resources based on grower-identified needs, and
- Deploying workshops (with resources and TA follow-up) to help growers meet identified needs
- Aiming for 375 produce growers to plan and implement projects/practices to reduce food safety risk

SCRUB
power-packs
resources,
workshops
and TA to
ensure
positive
impact



RESOURCES



WORKSHOPS



DIRECT TECHNICAL
ASSISTANCE



PARTNER



PARTICIPANT



ADVISOR

Why is the integrated “power-pack” approach needed?

- Power-pack of Resources, Workshops, and TA
- Aiming for pragmatic planning, action, adoption of new practices...and IMPACT!
- Survey Says:
 - Growers have confidence and know what they need to do, but ...
 - they often lack the time and resources to plan, organize and follow-through

SCRUB Approach Strategy?

Smooth and Clean Production Flow

- Meet Growers where they are 1:1
- Track production flow from fields to transport
- Focus on bottlenecks that increase risk
- Plan and implement solution



SCRUB ... How and When ?

2021 SCRUB Pilot

- Work with 10 **SCRUB partner farms** to develop case studies and resources from their own projects
- Deliver five **“Twilight Highlight” workshops** based on the partner farm projects and resources above
- TA Follow-up and **document project completion** with 65 Twilight Highlight participants

2022/2023 SCRUB Project (honed from SCRUB Pilot)

- Deploy powerpack (hybrid workshops, resources, TA) to **support 300 growers in planning and implementing recommended practices**
- Develop and disseminate a **“self serve” bundle of SCRUB resources** (online fact sheets, video, podcasts, etc) for unlimited access and use



SCRUB

Overviews, Trainings, SOPs and more...

SCRUB Resources?

A Guide to Cleaning, Sanitizing, and Disinfecting | [Web Page](#), [PDF](#)
Improving Hand washing Stations | [Web Page](#), [PDF](#)
Planning an Efficient and Safe Wash/Pack Area | [Web Page](#), [PDF](#)

Hygienic & Sanitary Design

Hygienic and Sanitary Design for Produce Farms | [Web Page](#), [PDF](#)
Drains for Produce Farms | [Web Page](#), [PDF](#)
Finish Surfaces for Produce and Food Areas | [Web Page](#), [PDF](#)
Floor Design for Vegetable Wash, Pack, and Storage Areas | [Web Page](#), [PDF](#)
Backflow Prevention on Produce Farms | [Web Page](#), [PDF](#)
Rats & Rodents | [Web Page](#), [PDF](#)
Spray Tables for Produce Farms | [Web Page](#), [Podcast](#)
Vegetable Wash Sinks | [Web Page](#), [PDF](#)

Culture & Case Studies ([Web Page](#))

Giving a Dairy Barn New Life at New Leaf Organics | [Web Page](#), [Video](#), [PDF](#)
The BarnHouse: Optimized for Modern Day Vegetable Farming at Footprint Farm | [Web Page](#), [Video](#), [PDF](#)
Mighty Clean and Comfortable – A New Wash and Pack Shed at Mighty Food Farm | [Web Page](#), [Video](#), [PDF](#)
Last Resort Farm Not Stalled by Dairy Barn Conversion | [Web Page](#), [Video](#), [PDF](#)



What SCRUB Workshops?

“Twilight Highlight” Virtual Workshop Series

SCRUB PILOT Sep 1-Oct 8, 2021

1. Bins (lean and clean management)
2. Floors (concrete repair)
3. Bubblers (hygienic design and clean)
4. Wash water management
5. Employee Management and Empowerment
6. Doing more and spending less--small scale wonder!

What is SCRUB Technical Assistance/ follow up?

- Participant registers and attend SCRUB workshop based on their needs/ motivation
- Participants submit simple SCRUB project plan and timeline
- SCRUB advisor check-in/ follow-up as needed...(with supporting resources/ equipment/ practices) and then ...
- SCRUB Advisor ensures documentation of project completion, and dissemination of relevant lessons learned.



Sanitization and Cleaning Resources for Your Business

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Immersive Food Safety Training to Support Technical Assistance Efforts for Small and Mid-sized Operations

Ellen Shumaker and Juliana Ruzante, RTI International
eshumaker@rti.org
USDA, NIFA



Immersive Food Safety Training

Ellen Shumaker, RTI International, eshumaker@rti.org
USDA, NIFA



Problem Statement / Issue Definition:

Owners/operators of small & mid-sized farms, beginning farmers, socially disadvantaged farmers, small processors, and small produce merchant wholesalers face numerous challenges in obtaining food safety training and technical assistance that meet their needs



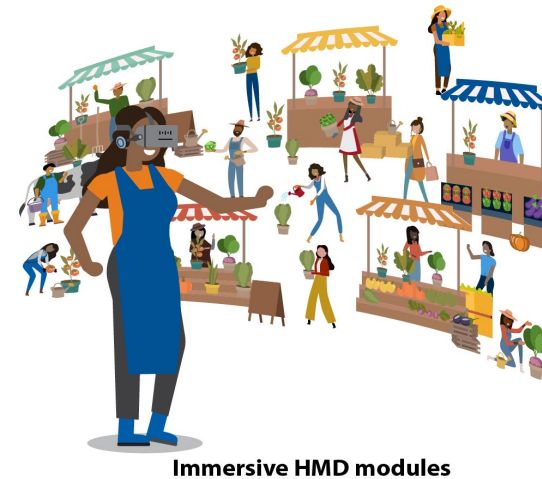
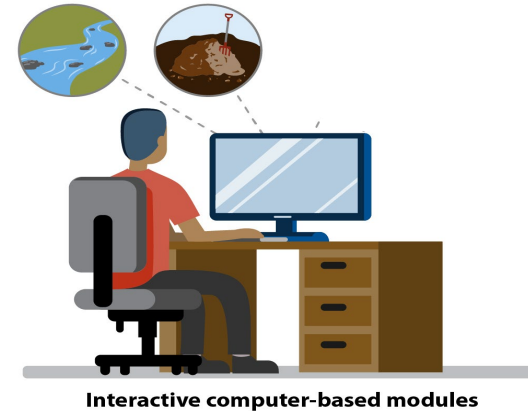
Immersive Food Safety Training

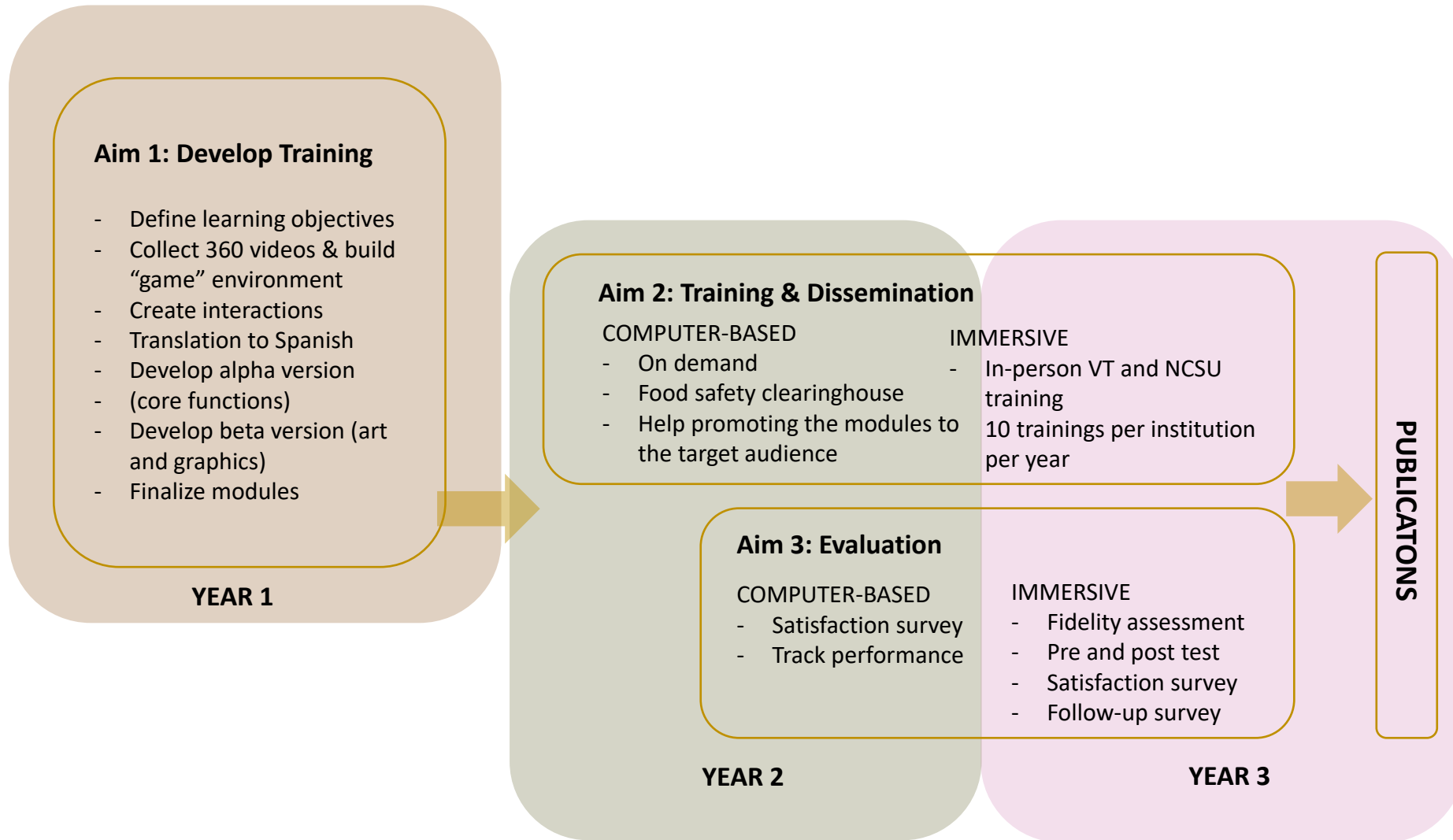
Ellen Shumaker, RTI International, eshumaker@rti.org
USDA, NIFA



Approach / Methods:

- Online learning modules using a game-like approach:
 - Pre- and post-harvest water testing and sampling principles and practices
 - Soil amendments management procedures
- 360-degree immersive virtual tours
 - Farmers' market
 - Small diversified produce operation





Target audience: beginning farmers, socially disadvantaged farmers, small processors, and small produce merchant wholesalers
 Team: Ellen Shumaker (RTI), Juliana Ruzante (RTI), Renee Boyer (VT), and Benjamin Chapman (NCSU)

Rules To Reality: Practical Implementation of the Produce Safety Rule

Stasia Greenewalt, Local Food Hub
stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Rules To Reality: Practical Implementation of the Produce Safety Rule

USDA NIFA Food Safety Outreach Program



Dr. Tiffany Drape



Sarah Sharpe



Stasia Greenewalt



Amber Vallotton



Rules To Reality: Practical Implementation of the Produce Safety Rule

Stasia Greenewalt, Local Food Hub
stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Problem Statement / Issue Definition:

The goal for this Community Outreach FSOP project is to increase competitiveness and opportunity for small to midsize growers in the wholesale marketplace and ensure that growers adhere to the highest possible level of food safety and compliance with FSMA's Produce Safety Rule.

Rules To Reality: Practical Implementation of the Produce Safety Rule

Stasia Greenewalt, Local Food Hub
stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Background research: Surveying Virginia Universities

Interviews with 6 Virginia university dining teams

- Food Safety requirements
- Local purchasing habits
- Barriers to purchasing local

Findings:

Primary barriers

- Food Safety
- Distributor
- Price
- Contract terms

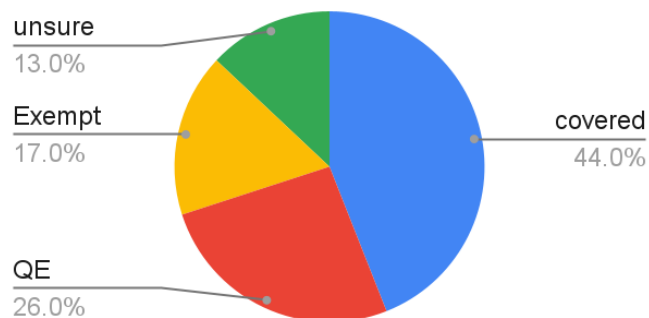
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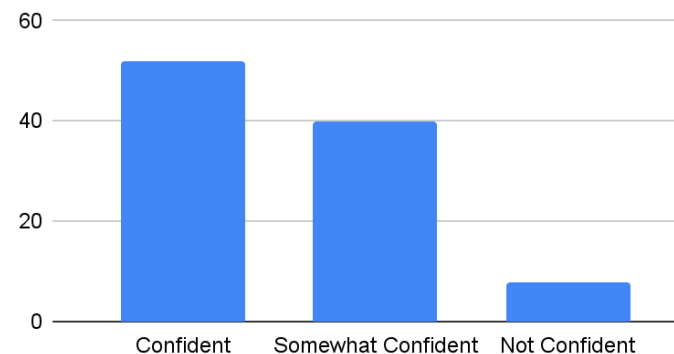


Background research: LFH Partner Grower survey to assess PSR understanding and implementation

PSR Status of Growers



Confidence in FSMA PSR status



Top 3 aspects of the PSR which were challenging to growers:

Recordkeeping

How my PSR Status affects my farm

Wildlife monitoring

Rules To Reality: Practical Implementation of the Produce Safety Rule

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stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Approach/Methods

- Online, Canvas based, self-paced class with pre and post assessments
 - Module Topics:
 - Worker Training
 - Animal Risk Management
 - Cleaning and Sanitizing
 - Post-Harvest Handling
 - Required Records
 - Qualified Exemption
 - OFRR and Inspections
- Online Farm Food Safety Recordkeeping tool for
 - GAP
 - Harmonized GAP
 - FSMA PSR required records

Rules To Reality: Practical Implementation of the Produce Safety Rule

Stasia Greenewalt, Local Food Hub
stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Expected Results / Outcomes:

- Statewide food safety training for growers that meets both shifting regulatory requirements and is tailored for Virginia small to midsize Growers
 - Development and execution of 8 module class, Rules to Reality, with associated resources
 - Retrospective Pre-Post Test for Trainings: 90% of growers demonstrate increased understanding of integrating food safety practices onto their farms
 - Initial group of 15 small to midsize local food growers take the online Canvas course Rules to Reality
 - 6 initial farms integrate online recordkeeping tool into on farm food safety practices

Rules To Reality: Practical Implementation of the Produce Safety Rule

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stasia@localfoodhub.org
USDA NIFA Food Safety Outreach Program



Expected Results / Outcomes:

- Improved alignment between on farm practices and sector-specific market expectations for food safety assurance
 - At least 15 institutional buyers and other food system stakeholders increase their involvement in enhancing market access and a food safety culture in Virginia through focus group participation
 - Aim for a 10% increase in sales of local food to existing institutions, and add three new institutions
 - Increased transparency between institutional buyers and farms through dissemination of findings to respective groups

Water Quality And The FSMA PSR: Developing Risk Assessment And Educational Tools For Farmers And Laboratories In The Upper Midwest (9/1/20 – 8/31/23)

Annalisa Hultberg, University of Minnesota Extension, hultb006@umn.edu

Phil Tocco, Michigan State University, tocco@msu.edu

Don Stoeckel, Don Stoeckel Environmental, don@dsh2o.com



Problem Statement/ Issue Definition

- Water analysis labs lack guidance and understanding on allowable methods, testing requirements and up-to-date information about agricultural water requirements in the FSMA PSR
- Producers lack understanding of how to identify and mitigate on-farm water risks beyond development of MWQP
 - Produce safety rule requires water is “safe and of adequate sanitary quality“
 - Curriculum does not provide guidance on identifying risks in real time
- Educators need tools that are updated to reflect final subpart E requirements
- Collaboration between MSU and UMN to address these issues in Upper Midwest, with project outcomes shared nationally



Approach / Methods: Agricultural Water Risk-Prioritization tool

Goal is to create a tool for producers to help them identify and take immediate action to mitigate on-farm water risks

- Step one: Draft on-farm risk ranking criteria based on published research.
- Step two: Gather samples of ground and surface water and run pathogen tests as well as assessing other risks that might be present on-farm.
- Step three: Correlate the outcomes of the tests with the presence of the other risks.
- Step four: Finalize RPT as a semi-quantitative risk ranking tool for farmers related to agricultural water
 - Allow producers to better determine if water is of “safe and adequate sanitary quality”
 - Allow producers to take more immediate action to reduce risks to water quality

Approach / Methods: Lab Education Tool

Goal is to create information to help water analysis labs understand FSMA PSR Subpart E and to properly route and process tests for compliance with rule

- Step one: Conduct touch-point needs assessment to understand current needs of labs in Upper Midwest related to FSMA PSR
- Step two: Draft, assess and update a Lab Education Tool for water analysis laboratories to help them route farmers to correct testing protocols for PSR
 - Tool will include and internal decision tree format guide for labs to route and supplemental information
- Step three: Finalize and release Lab Education Tool. Assess and update as needed.
- Create additional materials for labs: short videos, host annual updates to explain the Tool and Subpart E water testing requirements to labs

Results/Outcomes

Agricultural Water Risk-Prioritization tool

- Risk ranking tool
- Short videos to describe tool



Lab Education Tool

- SOPs to guide intake staff at labs
- Annual updates to labs and lab organizations regarding Subpart E provisions
- Short videos to explain the tool and the water testing requirements to labs

Table-top demonstration tools for educators about pre- and post-harvest water

- SOPs for short training activities on sanitizer use, water testing, turbidity, internalization, other water – related topics during trainings

FSOP Project Roundtable June 9, 2021



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FARM FOOD SAFETY TRAINING FOR LOCAL AND IMMIGRANT CROP PRODUCERS IN HAWAII

Sharon Wages, Assistant Extension Agent
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College of Tropical Agriculture and Human Resources
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NIFA-FSOP

PROBLEM STATEMENT:

- The most prevalent first language among Hawai‘i’s agricultural workers is Ilocano.
- A large group of agricultural workers whose first language is Ilocano work in the papaya industry (Table 1).
- Papayas are of Hawai‘i’s most valuable commodities and are covered under the FSMA-PSR (Figure 1).
- Training curricula needs to be accessible in more languages including Ilocano to support growers in successful on-farm implementation of food safety practices and fulfill the FSMA-PSR training requirement.

Table 1. Language Skills of Hawaii Agricultural Workers, 2005

Language	Number of Workers					
	Total Workers by First Language	First Language Comprehension		English Comprehension		
		Verbal Instructions	Written Instructions	Verbal Instructions	Written Instructions	Math ¹
Chinese	30	30	30	30	20	10
English	2,280	2,280	2,270	2,280	2,270	2,020
Ilocano	2,560	2,560	2,040	2,270	1,520	930
Spanish	210	210	150	190	130	100
Tagalog	250	250	200	130	110	110
Other ²	1,080	1,080	950	890	520	200
Total	6,410	6,410	5,640	5,790	4,570	3,370

¹ Math skills to perform tasks on pesticide labels written in English
² Includes Hawaiian, Other Pacific Islander, Samoan, Other Asian not listed above, Other European not listed above, and Other Filipino languages not listed above



Papaya fields on the Big Island of Hawaii

APPROACH:

This projects' main goal is to develop the necessary resources to conduct the Produce Safety Alliance (PSA) Grower Training in Ilocano.

This will be achieved by translation and re-formatting of the following items:

- The PSA Grower Training Manual & Modules Slides (.ppt)
- The PSA Grower Training Course Evaluation
- The PSA Pre and Post Training Exams



EXPECTED OUTCOMES/PROGRESS:

- Delayed start due to COVID-19
- Currently soliciting translation companies that are able perform the translation work.



PSA Grower Training for Papaya Producers in Hawai'i

- *To support this project we are also in the process of building trainer capacity in-state. Training individuals who speak Ilocano and English to help perform grower trainings once the materials are approved by PSA and ready for use.*

FARM FOOD SAFETY TRAINING FOR LOCAL AND IMMIGRANT CROP PRODUCERS IN HAWAI'I
SHARON WAGES
ASSISTANT EXTENSION AGENT
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NIFA-FSOP



Enhancing food safety capacity of western elderberry producers: best practices for harvest and processing

Erin DiCaprio, UC Davis
eldicaprio@ucdavis.edu
USDA-NIFA, Food Safety Outreach Program

Project team members:
Gail Feenstra
Gwenael Engelskirchen
Thais Ramos



University of California
Agriculture and Natural Resources

UC DAVIS
FOOD SCIENCE AND TECHNOLOGY



Enhancing food safety capacity of western elderberry producers: best practices for harvest and processing

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TECHNOLOGY

Problem Statement / Issue Definition:

- Elderberry (*Sambucus nigra*) is an emerging commercial crop in California and other parts of the US
- Elderberry and elderflower have commercial value
 - Sold “whole” dried or frozen
 - Incorporated into syrups, cordials, jellies, vinegar, supplements, other products
- Food safety issues:
 - Toxicity (hydrocyanic acid) in elderberry stems
 - pH variable in different varieties of elderberry
 - Sanitation in freezing operations
 - Validation of drying process
 - General need for food safety information for harvesting and value added processing
 - Food safety regulatory compliance



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Approach / Methods:

- Literature review
- Site visits and survey
- Webinar
- Four workshops
- Four factsheet
- PSA training
- PCQI training



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Results / Outcomes:

- Literature review and attendance to elderberry grower and processor meetings
- Visits to two farms growing elderberry in hedgerows
- Development and dissemination of survey for elderberry growers and processors



To be completed:

- Webinar (Fall 2021)
- Workshops (Winter 2022)
- PSA and PCQI Training (Spring/Summer 2022)
- Factsheets (Spring/Summer 2022)



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Questions? Contact Katelynn Stull at k.stull@ufl.edu

