

Understanding Production Systems: Greenhouse & Controlled Environment Agriculture

*For Food Safety Professionals including:
Extension Agents, Consultants, Auditors &
Researchers*

March 6-7, 2024

Day 1 - 9:00 AM to 5:00 PM

Day 2 - 8:30AM to 1:00PM

NFREC - SUWANNEE VALLEY
8202 CR 417, LIVE OAK, FL 32060

Topics include: Structures, Transplant
Production, Soilless Media Systems,
Solution Systems (no Media), Water &
Nutrient Management, Traditional
Crops, Specialty Crops.

Cost:

\$325 Early Bird Registration by 2/15/24

\$350 Registration after 2/15/2024

Register on Eventbrite:

[https://www.eventbrite.com/e/685041737277/
preview/?aff=oddtcreator](https://www.eventbrite.com/e/685041737277/preview/?aff=oddtcreator)



**Understanding Production Systems:
Greenhouse & Controlled Environment Agriculture**
For Food Safety Professionals, Auditors, Extension Agents, & Consultants

North Florida Research & Education Center - Suwannee Valley
(Program will be conducted at the farm location • 8202 CR 417, Live Oak, FL 32060)

March 6-7, 2024

Time	Description	Day 1
9:00 am - 9:30 am	Check-in	
9:30 am - 10:00 am	Welcome and Introductions	Elena Rogers
10:00 am - 11:00 am	Structures including: Greenhouses, High Tunnels, Open Shade & Indoor Containers – Group 1	Bob Hochmuth Dan Fenneman
	Transplant Production – Group 2	
11:00 am – Noon	Transplant Production – Group 1	Wanda Laughlin Tatiana Sanchez-Jones
	Structures including: Greenhouses, High Tunnels, Open Shade & Indoor Containers – Group 2	
Noon – 1:00 pm	Lunch	Catered On-Site
1:00 pm – 2:30 pm	Soilless Media Systems – Group 1	Bob, Dan
	Solution Systems (no media) – Group 2	
2:30 pm – 3:00 pm	Break	
3:00 pm - 4:30 pm	Solution Systems (no media) -Group 1	Wanda, Hannah
	Soilless Media Systems – Group 2	
4:30 pm – 5:00 pm	Greater Initiatives on Food Safety with Hydroponics: <i>Kristen Gibson, University of Arkansas</i>	
5:00 pm - 6:00 pm	Dinner	Catered On-Site

Time	Description	Day 2
8:00 am - 8:30 am	Check-in – Continental Breakfast	
8:30 am - 10:15 am	Irrigation and Nutrient Management – Group 1	Bob, Dan, Tatiana
	Crops: Traditional & Specialty – Group 2	
10:15 am - 10:30 am	Break	
10:30 am – Noon	Crops: Traditional & Specialty – Group 1	Wanda, Hannah
	Irrigation and Nutrient Management – Group 2	
Noon – 1:00 pm	Lunch/Evaluation	Catered On-Site

Topic Details

- **Structures for Protected Culture:** Fan and pad greenhouses, passively ventilated greenhouses, indoor container, high tunnels, shade structures, outside production, and row covers for season extension
- **Transplant Production:** Tray selection, seeding media, fertilizer programs, irrigation, and germinating and growing tips, importance of cultivar selection, and sourcing seed
- **Soiless Media Systems:** Selecting a media, lay-flat and upright bags, nursery pots, vertical media systems, Bato buckets, Earth boxes, in-ground modified trough systems, and open above ground troughs
- **Solution Systems (no media):** Floating systems, Nutrient Film Technique (NFT), and vertical solution systems
- **Irrigation and Nutrient Management:** Irrigation system designs, emitter selection, using dosing equipment, mixing fertilizers, nutrient deficiencies, and nutrient solution monitoring, and petiole sap testing
- **Traditional Crops:** Tomato, cucumber, and pepper
- **Specialty Crops:** Lettuces, crucifer crops, micro-greens, cut flowers, edible flowers, herbs, ethnic vegetables, and specialty greens

Course Organization Team:

Bob Hochmuth

UF/IFAS NFREC- Suwannee Valley
Regional Specialized Extension Agent
Vegetables

Dan Fenneman

UF/IFAS Extension Madison County
Extension Agent, Agriculture

Elena Rogers

NC State University
Area Specialized Extension Agent
Food Safety - Fresh Produce

Kim Glasscock

UF/IFAS NFREC – Suwannee Valley
Program Assistant

Wanda Laughlin

UF/IFAS NFREC- Suwannee Valley
Protected Ag Program Manager

Tatiana Sanchez

UF/IFAS Extension Alachua County
Commercial Horticulture Extension
Agent

Kristen Gibson, Ph.D.

University of Arkansas System Division
of Agriculture
Director, Center for Food Safety

Hannah Wooten

UF/IFAS Extension Orange County
Commercial Horticulture

Dress should be casual and comfortable for inside greenhouses and walking between greenhouses.

In the case of an emergency or if you need to reach someone other than at the office, call Bob Hochmuth's cell at 386-288-6301.

Lodging & Camping Information

LIVE OAK, FL

Holiday Inn Express

6694 US 129 N

Live Oak, FL 32060

386-362-2600/800-465-4329

<http://www.ihg.com/holidayinnexpress/hotels/us/en/live-oak/lokfl/hoteldetail>

Quality Inn Hotel

6819 US 129 N

Live Oak, FL 32060

386-362-6000/877-424-6423

<https://www.choicehotels.com/florida/live-oak/quality-inn-hotels/>

Econo Lodge Live Oak

6811 N US 129 & I-10

Live Oak, FL 32060

386-362-7459/877-424-6423

<https://www.choicehotels.com/florida/live-oak/econo-lodge-hotels/fl380>

Cervený Conference Center (Camp Weed)

11057 Camp Weed Place

Live Oak, FL 32060

386-364-5250

<http://www.campweed.org/meetings/lodging.aspx>

Camping

Spirit of the Suwannee Music Park

3076 95th Drive

Live Oak, FL 32060

386-364-1683/800-224-5656

<https://www.musicliveshere.com/camping/>

LAKE CITY, FL

Holiday Inn Express

213 SW Commerce Drive

Lake City, FL 32025

386-754-1411 / 1-888-465-4329

<http://www.ihg.com/holidayinn/hotels/us/en/lake-city/lkelc/hoteldetail>

Comfort Suites

3690 W US HWY 90,

Lake City, FL 32024

386-755-9028

<https://www.choicehotels.com/florida/lake-city/comfort-suites-hotels/fl990>

La Quinta Inn & Suites by Wyndham

165 NW Cali Drive

Lake City, FL 32055

386-400-5752/ 888-312-2399

<https://www.wyndhamhotels.com/laquinta/lake-city-florida/la-quinta-inn-and-suite-lake-city/overview?CID=LC:LQ::GGL:RIO:National:53738&iata=00093796>

Home 2 Suites by Hilton

414 SW Florida Gateway Drive

Lake City, FL 32024

386-487-9890/ 877-646-6302

<http://home2suites3.hilton.com/en/hotels/florida/home2-suites-by-hilton-lake-city-LCOFGHT/index.html>

Hampton Inn & Suites by Hilton

450 SW Florida Gateway Dr

Lake City, FL 32024

386-487-0580/ 800-426-7866

<https://hamptoninn3.hilton.com/en/hotels/florida/hampton-inn-and-suites-lake-city-LKCFLHX/index.html>

Fairfield Inn & Suites by Marriott

538 SW Corporate Drive

Lake City, FL 32055

386-466-1014/ 888-249-3919

<https://www.marriott.com/hotels/travel/gnvlc-fairfield-inn-and-suites-lake-city/>

Best Western Plus

350 SW Florida Gateway Drive

Lake City, FL 32024

386-754-5944/ 800-780-7234

https://www.bestwestern.com/en_US/book/hotels-in-lake-city/best-western-plus-lake-city/propertyCode.10414.html

LAKE CITY, FL

Tru by Hilton

284 NW Centurion Ct

Lake City, FL 32055

386-259-6640/ 844-878-9688

<https://tru3.hilton.com/en/hotels/florida/tru-by-hilton-lake-city-GVNLCRU/index.html>

Quality Inn

285 SW Commerce Dr

Lake City, FL 32025

386-758-8440

<https://www.choicehotels.com/florida/lake-city/quality-inn-hotels>

Econo Lodge Lake City

178 SW Florida Gateway Dr.

Lake City, FL 32024

386-752-7891/

<https://www.choicehotels.com/florida/live-oak/econo-lodge-hotels/fl380>

WHITE SPRINGS, FL

Quality Inn Hotel

3119 County Road 136

White Springs, FL 32096

386-963-2501

<https://www.choicehotels.com/florida/live-oak/quality-inn-hotels/>

Camping

Stephen Foster Folk Culture Center State Park

11016 Lillian Saunders Dr./US Highway 41

White Springs, FL 32096

386-397-1667/800-326-3521

<https://www.floridastateparks.org/parks-and-trails/stephen-foster-folk-culture-center-state-park>