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


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=oddtdtcreator
**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**

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

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<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Day 2</th>
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<tbody>
<tr>
<td>8:00 am - 8:30 am</td>
<td><strong>Check-in – Continental Breakfast</strong></td>
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<tr>
<td>8:30 am - 10:15 am</td>
<td>Irrigation and Nutrient Management – Group 1</td>
<td>Bob, Dan, Tatiana</td>
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<tr>
<td>10:15 am - 10:30 am</td>
<td>Crops: Traditional &amp; Specialty – Group 2</td>
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<tr>
<td>10:30 am – Noon</td>
<td><strong>Break</strong></td>
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<tr>
<td>Noon – 1:00 pm</td>
<td>Crops: Traditional &amp; Specialty – Group 1</td>
<td>Wanda, Hannah</td>
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<tr>
<td></td>
<td>Irrigation and Nutrient Management – Group 2</td>
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<td></td>
<td><strong>Lunch/Evaluation</strong></td>
<td>Catered On-Site</td>
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**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

- **Soilless 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

**Wanda Laughlin**  
UF/IFAS NFREC - Suwannee Valley  
Protected Ag Program Manager

**Dan Fenneman**  
UF/IFAS Extension Madison County  
Extension Agent, Agriculture

**Tatiana Sanchez**  
UF/IFAS Extension Alachua County  
Commercial Horticulture Extension Agent

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

**Kristen Gibson, Ph.D.**  
University of Arkansas System Division of Agriculture  
Director, Center for Food Safety

**Kim Glasscock**  
UF/IFAS NFREC – Suwannee Valley  
Program Assistant

**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

Quality Inn Hotel
6819 US 129 N
Live Oak, FL 32060
386-362-6000/877-424-6423

Econo Lodge Live Oak
6811 N US 129 & I-10
Live Oak, FL 32060
386-362-7459/877-424-6423

Cerveny 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

**Comfort Suites**
3690 W US HWY 90,
Lake City, FL 32024
386-755-9028

**La Quinta Inn & Suites by Wyndham**
165 NW Cali Drive
Lake City, FL 32055
386-400-5752 / 888-312-2399

**Home 2 Suites by Hilton**
414 SW Florida Gateway Drive
Lake City, FL 32024
386-487-9890 / 877-646-6302

**Hampton Inn & Suites by Hilton**
450 SW Florida Gateway Dr
Lake City, FL 32024
386-487-0580 / 800-426-7866

**Fairfield Inn & Suites by Marriott**
538 SW Corporate Drive
Lake City, FL 32055
386-466-1014 / 888-249-3919

**Best Western Plus**
350 SW Florida Gateway Drive
Lake City, FL 32024
386-754-5944 / 800-780-7234
LAKE CITY, FL

Tru by Hilton
284 NW Centurion Ct
Lake City, FL 32055
386-259-6640/ 844-878-9688

Quality Inn
285 SW Commerce Dr
Lake City, FL 32025
386-758-8440

Econo Lodge Lake City
178 SW Florida Gateway Dr.
Lake City, FL 32024
386-752-7891/

WHITE SPRINGS, FL

Quality Inn Hotel
3119 County Road 136
White Springs, FL 32096
386-963-2501

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