



Presented By
North Carolina Vegetable Growers Association
North Carolina Agribusiness Council

2019 AgExpo Continuing Education & Certification Program Credits

Continuing education credits for Certified Crop Advisors and NC Pesticide License

- Session 5 Managing Auxin Drift with BMPs (NODX, 1hr); <u>also</u> Auxin 2020. Session 15 Pickling Cucumber (NODX, 1 hr)
- Session 16 Vegetable Diseases (NODX, 1.5 hr) Session 17 Cole Crops (NODX, .5 hr)
- Session 19 Top 10 Pesticide Violations (NODX, 1hr)
- Session 20 Respiratory Protection (NODX, 1hr)
- Session 21 Sweet Potato (NODX, 1.5 hr)
- Session 22 Vegetable Diseases (NODX, 1.5hr)
- Session 23 Tomato & Pepper (NODX, 1.5 hr)
- Session 35 Worker Protection Standard Compliance (NODX, 1hr)
- Session 38 Cucurbit Crops (NODX, 1 hr)
- Session 39 Alternative Crop Hemp Production (NODX, 1hr)
- Session 45 Pesticide Applicators & Bees, Living in Harmony (NODX, .5 hr)

NC Agribusiness Council's AgEmployer Certification Program

- Session 1 Farm Labor Requirements (1hr)
- Session 4 Grower & Supervisor Relations (1hr)
- Session 6 Workplace Behavior, Complaints & Investigations (1hr)
- Session 9 Agricultural Health & Safety (1hr)
- Session 12 Child Labor Prevention & Youth Employment Laws (1hr)
- Session 19 Top 10 Pesticide Violations (1hr)
- Session 24 Housing & Transportation (.5hr)
- Session 27 Workers' Compensation (.5hr)
- Session 30 Hiring, Complaints, Disciple & Firing (1hr)
- Session 33 Leadership Tools for Successful Supervisors (1hr)
- Session 35 Worker Protection Standard Compliance (1hr)
- Session 40 Wage & Hour Overview (1hr)
- Session 42 H2A Labor: Cost Calculator (1hr)

SC Pesticide Recertification Credits are being offer for the following session

- Session 5 Managing Auxin Drift with BMPs 1
- Session 15 Pickling Cucumber 0.5
- Session 16 Vegetable Diseases 1.5
- Session 17 Cole Crops 0.5
- Session 19 Top 10 Pesticide Violations 1
- Session 20 Respiratory Protection 1
- Session 21 Sweet Potato 1.5
- Session 22 Vegetable Diseases 1.5
- Session 23 Tomato & Pepper 1.5
- Session 35 Worker Protection Standard Compliance 1
- Session 45 Pesticide Applicators & Bees, Living in Harmony 0.5

THURSDAY, DECEMBER 5, 2019 LUNCH - 12:00 PM TO 1:30 PM CONCURRENT SESSIONS - 1:30 PM TO 5:00 PM

12:00 - 1:30 Lunch Ballroom DEF

Keynote Address:

North Carolina Agriculture Commissioner - Honorable Steve Troxler

THURSDAY AFTERNOON CONCURRENT SESSIONS - 1:30 PM TO 5:00 PM

Session 1 Farm Labor Requirements

Room 106

1:30-2:30

Amy Wolfe, AgSafe President, CEO

What is the difference between a farm labor supervisor, crew leader and contractor? Who needs to be a registered farm labor contractor and who doesn't? Are farm labor services more valuable if provided by a registered farm labor contractor? In this session, an overview of the federal and state requirements will be reviewed – including a discussion about proper registration and completion of appropriate forms to help ensure compliance with applicable rules and regulations – and why this is important to growers.

Session 2 Season Extension with High Tunnels

Room 107

1:30 – 2:30 Dr. Sanjun Gu, NC A&T State University, Extension Specialist, Horticulture

High tunnels are proven low-cost tools that help small farms make more profits by extending the growing and harvesting seasons. This workshop will cover high tunnel basics. Topics include high tunnel structure and construction, microclimate and its management, crop choices, economics, and key practices for vegetable production.

Session 3 Marketing - Kevin Hardison, NCDA&CS

Room 105

1:30 – 2:00 Where Do We Go From Here, Kevin Hardison, NCDA &CS

2:00 – 2:30 Business Sources for the Farm (Panel Discussion), Kevin Hardison, Moderating

2:30 – 3:00 NCDA&CS Resources You Might Not Know

Session 4 Grower and Supervisor Relations

Room 108

2:30 – 3:30 Angelina Ceja, AgSafe, Dir. of Education

What should a grower look for in a good supervisor? What should a supervisor expect from a good grower? Are contracts a good idea – and what should they include? And what are the responsibilities of both growers and supervisors when it comes to the workers? These are just a few of the topics that will be covered.

Session 5 Managing Auxin Drift with BMPs

Room 106

2:30 – 3:30 Katie Jennings, NCSU

Spray drift of Auxin herbicides away from the target is an

important and costly problem facing both commercial and private applicators. This session focuses mainly on conditions that cause drift and best management practices to reduce the potential of drift. This session will count for 2020 training requirement.

Session 5A Financial Workplace: Measuring Success

Room 107

2:30 – 3:30 Dave Morris and Scott Jackson, Farm Credit Associations of NC

A successful farming operation is dependent upon many factors including the ability to make sound financial decisions and understand the impact of those decisions. Financial records are often the most overlooked part of any small business, but without them it is impossible to tell where your business stands today or where it is headed. This workshop will help attendees better understand key financial statement components and understand the need for accurate and timely financial statements in order to become even more effective business managers.

3:00 – 4:00 Break Exhibitor Hall

Session 6 Workplace Behavior, Complaints and Investigations -

Room 106

4:00 – 5:00 Natalie Gupton, AgSafe, Director of Business Services and Industry

In this session, you will learn to identify signs of harassment, discrimination, retaliation and abusive conduct —as well as develop a workplace policy that includes an effective grievance/compliant program for your workers and other prevention strategies, including best practices for workplace investigations.

Session 7 4:00 – 5:00	Become GAP Ready Dr. Jimo Ibrahim, NC A&T State University, Farm Safety and Health Specialist This training will prepare farmers for basic USDA Good Agricultural Practices (GAP) certification. Farmers will learn about the Food Safety Modernization Act, (FSMA), a able to differentiate between Good Agricultural Practices (GAP) and the Food Safety Modernization Act, (FSMA).	and be
Session 8 4:00 – 4:30	Food Safety Resources Angelina Ceja, AgSafe, Director of Education The passage of the Food Safety Modernization Act (FSMA) has brought increased rec for fresh produce growers. Come learn about food safety resources available includin to train your employees and keep your produce safe.	
5:00	Exhibit Hall Opens	
5:00 – 5:30	NC Agribusiness Council Membership Meeting	Room 105
5:00 – 5:30	NC Vegetable Growers Association Membership Meeting	Room 107
5:30 – 7:30	Networking Reception/ DINNER ON YOUR OWN	
7:30	Exhibitor Hall Closes	
	FRIDAY, DECEMBER 6, 2019 BREAKFAST - 7:30 AM TO 8:30 AM FRIDAY MORNING CONCURRENT SESSIONS - 8:30 AM TO 12:00 PM LUNCH - 12:00 PM TO 1:30 PM	
7:00	Exhibit Hall Opens	
7:30 - 8:30	Breakfast Keynote Address: Today's AgLabor Challenge Andrew Jackson, Andrew Jackson Law, Legal Ag Workers	llroom DEF
Session 9 8:30 - 9:30	Agricultural Heath and Safety Natalie Gupton, AgSafe Director of Business Services and Industry Keeping workers safe and healthy is a top priority for any good supervisor. Learn how injury and illness prevention and safety programs - including heat illness prevention, pasfety, field sanitation, proper handheld tool use, ladder safety, machine guarding, loc electrical hazards, slip & fall prevention, personal protective equipment, and operation equipment.	pesticide kout/tag out,
Session 10 8:30 - 9:30	Heirloom Tomatoes & Baby Ginger/Customer Preference/Value-Added Room 107 Opportunities, <i>Dr. Janine Parker</i> , <i>NC A&T State University</i> , <i>Mkting & Agribusiness Specialist</i> This training will focus on heirloom varieties that have more customer and restaurant appeal; and it will focus on value-added opportunities for baby ginger.	
Session 11 8:30 - 9:30	African Swine Fever Update <i>Dr. Mike Neault, NCDA&CS, Veterinary Division</i> Since the introduction of ASF in China in August 2018, this disease of swine has spre checked across China and surrounding countries. Is North America next? What is the prepare for and respond to the introduction of this virus?	
Session 12 9:30 - 10:30	Child Labor Prevention & Youth Employment Laws Amy Wolfe, AgSafe, President, CEO The youth are the future – both for the family, the farm, the community and the nation session you will learn the difference between child labor and youth employment (lega covered will be a review of appropriate age/task that youth can legally perform on the well as additional restriction, safety precautions different than what is needed for adult	l). Also farm; as

Session 13 9:30 - 10:30	Working with Farmers with Disabilities, using Technology on Farms Dr. Crystal Kyle, AgrAbility Director/AgroMedicine Coordinator Room 106	
	Farmers who are ill or physically impaired can often keep farming, with help from Arability. NC is a leader in Agriculture which lends to the need for farmers to have access to resources on how to remain safe and productive on farms across NC. This workshop will cover critical areas every farmer will need in order to remain sustainable.	
Session 14	Post-Harvest Research: Developing Innovative Solutions Dr. Leonard Williams, NC A&T State University, Director of the Center for Excellence and Post-Harvest Technologies Room 107	
9:30 - 10:30	North Carolina Agriculture provides tremendous economic impact to our economy so ensuring food safety and quality helps to provide a competitive advantage. Researchers at North Carolina Agricultural and Technical State University are conducting food safety research that is adding value to NC agriculture commodities. In this session, a brief update of several food safety related research projects will be shared.	
10:30 - 11:00	Break Exhibitor Hall	
Sessions 15	Pickling Cucumber - Jonathan Schultheis, NCSU Room 108	
	NC Pickle Producers Association Meeting, <i>Bob Quinn, Mt. Olive Pickle</i> Recent Advances in Management of Cucurbit Downy Mildew in Picking Cucumber and Cucurbit Crops. <i>Kim D'Arcangelo, Mike Adams and Lina Quesada-Ocampo, NCSU</i>	
11:00 – 11:20 11:20 – 12:00	Potential Herbicide Injury Considerations, Katie Jennings, NCSU	
Sessions 16	Vegetable Diseases 1 Room 107	
10:30 – 10:50	Lina Quesada-Ocampo, Inga Meadows, Adrienne Gorny and Lisa Rayburn, NCSU Grafted Tomatoes with Late Blight Resistance for the Organic Market, Inga Meadows, Amanda Strayer-Scherer and Suzetter Sharpe, NCSU	
10:50 - 11:10 11:10 - 11:30		
11:30 – 11:50	Management of Guava Root Knot Nematode on Sweetpotato, Adrienne Gorny, Hunter Collins, and Lina Quesada-Ocampo, NCSU	
Sessions 17		
	Zach Snipes, Clemson University East Coast Broccoli Project Update (Variety Releases, Grower Trials, and Industry Outlook), Brian Ward, Clemson University	
11:00 – 11:30	Weed Management for Direct Seeded and Transplanted Cole Crops, <i>Matt Cutulle, Clemson University</i>	
11:30 – 12:00		
Session 18 -	Integrated Marketing: Building Your Market Room 105	
11:00 – 12:00	Dr. Janine Parker, NC A&T State University, Marketing and Agribusiness Specialist This training will focus on a multi-method marketing approach to increase market access and build customers.	
Session 19	Top 10 Pesticide Violations Ballroom A	
11:00 - 12:00	Natalie Gupton, AgSafe, Director of Business Services and Industry Relations Join the discussion about the top 10 pesticide violations in North Carolina. This session will help you navigate the regulation requirements while offering suggestions for compliance solutions.	
Session 20	Respiratory Protection Pohin Tutor Mayorm NC Agra Medicina Institute Ballroom B	
11:00 - 12:00	Robin Tutor Marcom, NC AgroMedicine Institute Respiratory exposures and prevention of respiratory illness is an important aspect of Agricultural Health and Safety. Lean more about medical clearance, respirator fit test; selection, use and care of respirators.	

12:00 - 1:30	Lunch Ballroom DE
	Presentation of Lifetime Service to Agriculture Award Larry Wooten, NC Farm Bureau
Session 21	Sweet Potato Ballroom A
1:30 – 2:00	Brandon Parker, NCSU Control Options for Sweet Potato Black Rot, Madison Stahr, Hunter Collins, Lina Quesada-Ocampo, NCSU
2:00 – 2:30 2:30 – 3:00	Insect Management in Sweet Potato - Now and In The Future, <i>Anders Huseth, NCSU</i> Guava Root Knot Nematode Concerns - How will this Pest Affect Your Farm or Packing Operation?, <i>Brandon Parker, NCSU</i>
Session 22	Vegetable Diseases 2 Ballroom I
1:30 – 1:50	Lina Quesada-Ocampo, Inga Meadows, Adrienne Gorny and Erin Eure, NCSU Which Fungicides Reduce Spread of Gummy Stem Blight on Watermelon?, Anthony Keinath, Clemson University
1:50 – 2:10	Management Strategies for Sclerotinia Drop of Lettuce, Kim D'Arcangelo, Mike Adams and Lina Quesada-Ocampo NCSU
2:10 – 2:30 2:30 – 2:50	New Options for Management of Powdery Mildew on Cucurbit Crops, Kim D'Arcangelo, NCSU Cultural and Chemical Control of Watermelon Fusarium Wilt, Hunter Collins, Mike Adams and Lina Quesada-Ocampo NCSU
Session 23	Tomato & Pepper Ballroom (
1:30 - 2:00 2:00 - 2:30	Tommy Batts, NCSU Management of Foliar and Bacterial Diseases of Tomato in NC, Inga Meadows, NCSU Insect Pest Management Recommendations for Fruiting Vegetables, Jim Walgenbach & Tom Bilbo, NCSU
2:30 – 3:00	Weed Management in Tomato and Pepper, Katie Jennings, NCSU
Session 24 1:30 – 2:00	Housing and Transportation Amy Wolfe, AgSafe, President, CEO Is it provided? What are the requirements to be in compliance? Who is required to provide housing & transportation? Who is responsible for following the rules and keeping appropriate records? These are just a few of the questions that will be covered in this session to ensure better compliance.
Session 25	Food Traceability with Blockchain Room 103
1:30 - 2:30	Nick Gaski, Kaleido Food Safety Experts are talking about blockchain and food traceability, and how it could transfort the entire food industry, by increasing efficiency, transparency and collaboration throughout the food system but how can this new technology help NC growers be more profitable?
Session 26 1:30 – 2:30	Diversification - Small Farmers Stay Relevant Ms. Alyssa McKim, NC A&T State University, Community Garden Coordinator Diversification of crops, growing techniques and markets are necessary for today's small farmers to compete in today's market. In this workshop we will discuss examples of small farm operations in N.C that are implementing diversification and thriving as a result.
Session 27 2:00 – 2:30	Workers' Compensation Angelina Ceja, AgSafe, Director of Education Is it required? What does it cover? Does the grower need to provide it? What if there is an injury or illness on the farm – what are the responsibilities of the worker, the supervisor, the grower? This session will discuss workers' compensation and related laws.

Session 28 Urban Agriculture

Room 108

2:45 – 3:45 Ms. Alyssa McKim, NC A&T State University, Community Garden Coordinator

Often Urban Agriculture is overlooked as a viable economic development tool. This workshop will introduce the key benefits and challenges that urban agricultural producers face.

Session 29 Managing Animal Mortality thru Composting

Room 106

2:45 – 3:45 Joe Hudyncia, Environmental Programs, NCDA&CS

Temporary surges in on-farm animal mortalities associated with disease or disaster events have always presented challenges for proper disposal of animal carcasses. Over the past 20 years, increasing focus on sound environmental management has driven the adoption of animal mortality composting as a viable disposal alternative at any scale.

Session 30 Hiring, Complaints, Discipline & Firing

Room 107

2:45 – 3:45

Natalie Gupton, AgSafe, Director of Business Services and Industry Relations

Who is the human resources department on the farm? In this session, the hiring process will be discussed to include effective processes for hiring the best workers as well as a review of all necessary paperwork that needs to be completed, filed and retained to be in compliance with laws. But hiring a good worker is just the first step. You don't want to waste the time and effort

laws. But hiring a good worker is just the first step. You don't want to waste the time and effort spent on hiring a good worker, just to have problems arise that require you to hire a replacement worker. Learn how a reliable complaint program can help solve problems. And what is a progressive discipline program – can it help turn a problem into a positive for the worker, supervisor and farmer?

Session 31 – Dealing with Farm Stress

Room 105

3:00 - 4:00 Robin Tutor Marcom, NC AgroMedicine Institute

There are many pressures in agriculture today which means that stress is a harsh reality. Recognizing signs/symptoms of depression, anxiety, suicide issues and how stress affects health and wellness is crucial. Come to this reason to learn about farm-related stresses and tools available to address it.

3:00 - 4:00 Break Exhibitor Hall

Session 32 Preparing for FSMA thru On-Farm Readiness Review

Room 106

4:00 - 5:00 Christopher Harris, Food & Drug Protection Division, NCDA&CS

An NCDA&CS, Produce Safety Program presentation on the Produce Safety Rule and how produce farmers can take advantage of the On-Farm Readiness Review program to prepare for Produce Safety Inspections.

Session 33 Leadership Tools for Successful Supervisors

Room 107

4:00 - 5:00 Angelina Ceja, AgSafe, Director of Education

Everybody wants to make more money! The leadership tools discussed in this session will help supervisors become more valuable to growers. Topics to be reviewed include identifying qualities of a successful supervisor, including improvement of communication skills; effective employee motivation skills; and progressive discipline strategies.

Session 34 Best Management Practices for Growing Industrial Hemp in NC

4:00 - 5:00 Dr. Arnab Bhowmik, NC A&T State University, Assistant Professor

Room 108

Industrial hemp is an emerging crop with multiple benefits including oilseeds, fiber and CBD oil. This session will provide the opportunity to exchange knowledge, experience, views and ideas on the management practices involved in industrial hemp production in a sustainable and profitable manner.

5:00 - 6:30 **Reception**

Exhibitor Hall

6:30 Exhibitor Hall Closes

6:30 - 9:00 **Presidents' Welcome**

Grand Ballroom DEF

Ag Leaders Dinner

Invited Elected Officials

NC Senator Brent Jackson and NC Representative David Lewis

Rural Broadband Panel Moderated By: Nelle Hotchkiss, Senior Vice-President of Association Services for the NC Electric Membership Cooperatives.

SATURDAY, DECEMBER 7, 2019 BREAKFAST - 7:30 AM TO 8:30 AM CONCURRENT SESSIONS - 8:30 AM TO 12:00 PM LUNCH - 12:00 PM TO 1:30 PM

7:00 **Exhibitor Hall Open**

7:30 - 8:30 Presidents' Welcome

Ballroom DEF

Breakfast

Keynote Address:

Mecchanization, Robotics & Artificial Intelligence for Labor Intensive Ag

Co-Moderated by Dr. Roy Beckford, Agriculture and Natural Resources Program Leader for Cooperative Extension and

Session 35 Worker Protection Standard Compliance

Room 106

8:30 - 9:30 Natalie Gupton, AgSafe, Director of Business Services and Industry Relations

Are you in compliance and correctly implementing all Worker Protection Standards (WPS)? This session will breakdown WPS requirements to help navigate WPS compliance.

Session 36 Ag Under Attack : Stand Up

Room 108

8:30 - 9:30 Jay Boyette, NC Farm Bureau, Andy Curliss, NC Pork Council, Genevieve O'Sullivan, CropLife America

Everyone gets their food from Ag, yet it seems like Ag is always under attack. Learn the latest update and what various organizations are doing to combat the misinformation and false perspectives in the public domain and how you can Stand Up for your industry.

Session 37 Livestock Breeding and Selection

Room 105

8:30 - 9:30 Dr. Emily Cope, NC A&T State University, Animal Science

During this workshop, producers will have the opportunity to learn strategies to utilize when making breeding and selection decisions for livestock. The primary focus of the workshop will be geared towards small ruminants; however, strategies discussed will be applicable to other live stock. Areas of focus will be breed selection, reproduction, selection criteria, and management decisions. Producers will be able to evaluate animals based on performance data and records. Additionally, producers will be encouraged to share their experiences with breeding and selecting their own livestock.

Session 38 Cucurbit Crops

Room 107

Allan Thornton, NCSU

9:00 - 9:30 Production and Irrigation Management of Watermelon in Georgia, *Tim Coolong, University of Georgia*

9:30 - 9:50 Review of the Newest Summer Squash Cultivars, *Jonathan Schultheis & Keith Starke, NCSU* 9:50 - 10:10 Shelf Life in Cantaloupe and Yellow Squash, *Tim Coolong, University of Georgia*

10:10 - 10:40 Postharvest Handling of Winter Squash and Pumpkins, Penny Perkins-Veazie, NCSU

Session 39 Alternative Crop - Hemp Production

Ballroom DEF

Nettie Baugher, NCSU

9:00 - 9:25 Variety Selection, Cultural Practices, and Production Systems in Industrial Hemp, *Angela Post*,

9:25 - 9:50 Hemp Diseases in North Carolina, *Lindsey Thiessen, NCSU*

10:00 - 10:30 Managing Fertility in Industrial Hemp, Michelle McGinnis, NCDA &CS

10:30 - 11:00 Contracts and Legal Issues in Hemp Production, Marne Coit, NCSU

Session 40 Wage and Hour Overview

Room 106

9:30 - 10:30 Angelina Ceja, AgSafe, Director of Education

Make sure you understand federal and state requirements – whether or not you directly pay workers, you need to understand wage & hour rules. This session will cover pay stub require ments; recordkeeping and retention rules; providing appropriate meal and rest breaks; wage rate, overtime and piece rate calculations; and workplace condition rules.

Session 41 Livestock Nutrition

Room 105

9:30 - 10:30 Dr. Emily Cope, NC A&T State University, Animal Science

During this workshop, producers will walk through a yearly production cycle. Basic nutrition as well as nutrition for stage of production will be discussed. Producers will have an opportunity to simulate ration formation for their livestock.

10:30 - 11:00 Break Exhibitor Hall

11:00 Exhibit Hall Closes

Session 42 H2A Labor: Cost Calculator

Room 106

11:00 - 12:00 Amy Wolfe, AgSafe, President, CEO

In previous sessions, we reviewed regulatory requirements associated with AgLabor - in this session you will learn how to estimate the costs associated with that labor - including not just wage calculations, but also costs associated with sanitation, housing, transportation, etc.

Session 43 Benefits of Plasticulture

Room 107

11:00 – 12:00 Randy Fulk, NC A&T State University, Extension Specialist, Horticulture

Discussion of the ways growing crops on plastic mulch has been proven to increase yield, reduce chemical weed control inputs, and increase profitability of small farms.

Session 44 Actions Speak Volumes: Advocacy Starts with You

Room 108

11:00 - 11:30 Linda Andrews, NC Farm Bureau, Genevieve O'Sullivan, CropLife America

This session will focus on the importance of Ag becoming involved and how you can become involved in the regulatory and lawmaking process...as the saying goes - if you aren't at the table, you are on the menu.

Session 45 Pesticide Applicators & Bees: Living in Harmony

Room 105

11:30 - 12:00 Patrick Jones, NCDA&CS, Deputy Director of Pesticide Programs

Join us to learn about easy-to-use, reliable, accurate and secure on-line mapping tools intended to enhance communications that promote awareness and stewardship activities between producers of specialty crops, beekeepers and pesticide applicators.

12:00 - 1:00 **Lunch** with Regulators

Ballroom DEF

Beth Rodman, NCDOL- Agricultural Safety & Health, Bureau Chief Patrick Jones, NCDA&CS – Structural Pest Control & Pesticide Division, Deputy Director Richard Blaylock, USDOL – Wage & Hour, District Director Benji Leggett, NCDOC – Workforce Solutions Div. Agricultural Services