

2022 Mid-Atlantic Fruit and Vegetable Convention Educational Program

Updated as of January 26, 2022

In some cases, the speaker will be making the presentation live but virtually rather than in-person.

* denotes topics that are expected to qualify for category pesticide applicator update training credits

** denotes topics that are expected to qualify for core pesticide applicator update training credits

PLEASE NOTE: By attending the Mid-Atlantic Fruit and Vegetable Convention, including the bus tour and workshops, you voluntarily assume ALL risks related to the exposure to COVID-19.

Face masks are highly recommended and will be available at all registration desks. The Hershey Lodge has portable hand sanitizer stations throughout the property, and we would like to remind you to stay home if you are feeling sick.

Monday, January 31, 2022

Basic Floriculture Greenhouse - \$65.00 includes lunch and handout materials

- 8:00 **Marketing and the Business of Floriculture** - Steven Bogash, Marrone Bio, Thomas Ford and Krystal Snyder, Penn State Extension
- 8:30 **Crop Scheduling** - Thomas Ford, Penn State Extension
- 9:30 **Water Quality and Managing pH** - Thomas Ford, Penn State Extension
- 10:30 **Tips on Improving Growing Media Performance** - Troy Buechel, Pro Mix
- 12:30 **Fertility** - Krystal Snyder, Penn State Extension
- 1:15 ***Disease Prevention and Management** - Steven Bogash, Marrone Bio
- 2:15 ***Insect and Mite Management - Getting Started With the "Big" Beneficials (Insects, Mites and Nematodes)** – Dr. Carol Glenister, IPM Laboratories
- *Biopesticide Programs for Clean Plants**, Steven Bogash, Marrone Bio
- 3:00 **Plant Selection; The Best of the Best of the PSU Flower Trials and Why They Are the Best** - Sinclair Adam, Penn State Extension

Hemp Production

This workshop has been cancelled.

The Practical Side of Farm, Business, and Estate Transition - \$50.00 includes lunch and PA FarmLink Transition Workbook

9:00 a.m. - 3:00 p.m.

Join several Penn State Extension Educators from the Ag/Farm Transition Team for this day-long farm business transition workshop series. The sessions are for farm/ag business owners and operators of all levels. Anticipated audiences are folks ranging from pre-retirement, thinking about transitioning, or ready to transfer the estate and exit the agricultural industry and retire (or semi retire) all the way to people who are just getting into the industry in general. Educators will be discussing various farm transition and succession topics and strategies throughout the sessions, from Extension and partner organizational research.

9:00 **Welcome**

9:15 **“What’s Your Exit Strategy? Early Transition and Succession Items to Consider for All Audiences”** - Christi Powell, Penn State

10:15 **Getting Started on a Business Transition Plan** - Lynn Kime and Christi Powell, Penn State Extension

11:00 **Tax Update, Retirement, Financial Planning** - Annie Miller and Paula Ledney, Penn State Extension

1:00 **Business Valuation Tools for the Farmer, Contributing Factors of Net Farm Income, and Market Cap, and Future Cash Flow** - John Wodehouse and Samantha Gehrett, Penn State Extension

2:15 **General One-on-One Discussions with the Experts from PA FarmLink and Penn State Extension**

Conducting and Analyzing On-Farm Research - \$20 no lunch

2:00 – 5:00 p.m.

Please join the Young Grower Alliance for their preconference workshop with speakers Dr. Rich Marini and Mr. Lynn Kime. Rich and Lynn will be highlighting how to design and analyze on-farm research by growers, for growers. If your operation has ever used one or more of their fields to trial new fertilizers, pesticides or crop management methods, this workshop will allow you to better determine the success of those trials in the future. You will learn good trial design practices and some of the ways to compare the results between trial blocks, examining the economic impacts of those results.

FSMA Grower Training - \$35 includes lunch and manuals

9:00 a.m. - 5:15 p.m.

This training is for fruit and vegetable growers and others interested in learning about: produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety. This PSA course is one way to satisfy the grower training requirement of the FSMA Produce Safety Rule as outlined in Section 112.22(c). Participants in the course will learn about:

- Microorganisms relevant to produce safety and where they may be found on the farm;
- How to identify microbial risks, practices that reduce risks, and how to implement produce safety practices on the farm;
- Requirements in the FSMA Produce Safety Rule and how to meet them.

After attending the entire course, participants will be eligible to receive a certificate from the Association of Food and Drug Officials (AFDO) that verifies they have completed the training course. The Pennsylvania Food Safety Resource Center is providing funds to cover AFDO certification fees and course material costs for this workshop.

Pesticide Applicators License Training - \$65 includes lunch and manual

9:00 a.m. – 4:00 p.m.

If you intend to purchase and/or apply restricted use pesticides for the purpose of producing an agricultural commodity on land which is owned or rented by you, then you need a Pennsylvania Department of Agriculture Pesticide License. To become a certified private applicator, testing is required. This full day session on January 31 will cover the basics and prepare you for the pesticide applicator's exam which will take place the next morning at the Hershey Lodge, February 1, from 8:30 a.m. – 11:30 a.m.

Bringing the Farm to School: A Training Program for Agricultural Producers

This workshop has been canceled.

Farm Market Tour - \$70 includes lunch

The Farm Market Tour is FULL

8:00 a.m. - 5:30 p.m. Bus departs from and returns to the Hershey Lodge. This year's tour will include five stops.

Butcher's Farm Market - Newport, PA

This farm was started with an acre of pumpkins in 1990, and has since expanded to 100 acres with a wide range of vegetable, tree fruit, and berry crops being grown. The operation now includes a farm market with a kitchen and bakery, and starting in 2012 began offering a range of agritainment activities and events for their customers. They also offer school tours and fundraising options, grow 500 acres of row crops and raise turkeys also.

<http://www.butchersfarmmarket.com/>

Whispering Pines Fruit Farm and Country Market - Mt. Pleasant Mills, PA

Besides growing tree fruit and berries, this family farm operation includes a recently constructed modern market facility that carries produce, groceries, bulk foods, spices, and general merchandise. A deli and bakery are also a part of the operation. <https://wpfruitfarm.net/>

Rusty Rail Brewing Company – Mifflinburg, PA

We'll have lunch at Rusty Rail Brewing Co., a regional brewery, brewpub, and event venue that was started in 2013 and opened to the public in 2015. This business is located in a massive building built in 1911 that had been used for producing Model T car bodies and now has been restored in detail and called "probably the most beautiful brewery in Pennsylvania". The business has expanded rapidly, and their craft beers are now available across most of PA and in seven other states. <https://www.rustyrailbrewing.com/>

Pik Rite, Inc. - Lewisburg, PA

Pik Rite is a manufacturer of tomato, cucumber, melon, pepper, and carrot harvesters, manure spreaders, and municipal equipment. This 30-year-old company now has over 80 employees, and has provided equipment for customers across the U.S. and in 27 other countries. They also do custom fabrication. We'll tour their 67,000 square foot manufacturing facility, so tour attendees are asked to wear closed boots or shoes and to bring their own safety glasses if possible; if not, glasses will be provided. <https://www.pikrite.com/>

Davy's Fresh Market - Lewisburg, PA

Davy's is a new market, only established in 2019, but has been growing since the market opened its doors. The operation now consists of a market that sells produce grown on many local farms, plus a greenhouse, bakery, and deli.

<https://www.davysfreshmarket.com/>

Tuesday Morning, February 1, 2022

Vine Crops – Trinidad Room

- 9:00 ***Downy Mildew Management on Cucumber and Cantaloupe** - Dr. Margaret McGrath, Cornell Univ.
- 9:30 **Industry Show and Tell**
- 9:45 **Update on Vine Crops Varieties** – Jay Ruwet, Gowan Seed Company
- 10:30 **Adjourn to the Keynote Session**

Peppers/Eggplant - Magnolia Room ABC

- 9:00 **Common Challenges in Producing Specialty Peppers** - Leonard Burger III, Burger's Farm
- 9:30 **Industry Show and Tell**
- 9:45 **Panel Discussion on Cultivars** - Thomas Pagels, Stokes Seed; and Marie Bourguignon, Seminis
- 10:30 **Adjourn to the Keynote Session**

Asparagus - Crystal Room

- 9:00 **Asparagus Varieties for Commercial Production** - Scott Walker, Walker Brothers Asparagus
- 9:30 **Industry Show and Tell**
- 9:45 **Asparagus CHO Management and High Tunnel Production Strategies for High Yields** – Dr. Daniel Drost, Utah State Univ.
- 10:30 **Adjourn to the Keynote Session**

Snap Beans - Empire Room AB

- 9:00 ***Impact of Herbicide Timing for Postemergence Weed Control in Snap Beans** - Dr. Mark VanGessel, Univ. of Delaware
- 9:30 **Industry Show and Tell**
- 9:45 **Snap Bean Panel- How to Grow Profitable Snap Beans** - Arthur King, Harvest Valley Farms; Ronald Copenhaver, Copenhaver Farms
- 10:30 **Adjourn to the Keynote Session**

Alliums - Empire Room CD

- 9:00 ***Insecticide Programs for Management of Onion Thrips** - Dr. Karly Regan, Penn State Extension
- 9:30 **Industry Show and Tell**
- 9:45 ***Identification and Management of Common Foliar Diseases of Onion** - Dr. Beth Gugino, Penn State
- 10:30 **Adjourn to the Keynote Session**

Food Banking - Wild Rose Room

- 9:00 **Working With Your Local Food Bank** - Panel: Food Souncers from PA Food Bank, Moderator: Robert Amsterdam, Feeding America
- 9:30 **Industry Show and Tell**
- 9:45 **PASS & Other Gov't Programs Supporting Farm to Food Banks** - Panel: Thomas Mainzer, Feeding PA; Brian Campbell, Brian Campbell Farms; Moderator: Robert Amsterdam, Feeding America
- 10:30 **Adjourn to the Keynote Session**

What is the Return on Your Marketing Dollars? - Cocoa Terrace/Cocoa 1

- 9:00 **Do You Know the Return On Your Marketing Investments?** - John Wodehouse, Penn State Extension
- 9:30 **Industry Show and Tell**
- 9:45 **Farm Marketing in a Changing Marketplace; Dealing with Supply Chain Disruptions:** Dr. Robin Brumfield, Rutgers Univ.
- 10:30 **Adjourn to the Keynote Session**

Tree Fruit - Nigerian Room

- 9:00 **Invocation** – Ed Weaver
- 9:05 **President's Address** – Ben Keim
- 9:15 ****Making Effective Comments to EPA/USDA that Have Impact** - Dr. Clayton Myers, USDA Office of Pest Management
- 10:00 ***The Latest on Spotted Lanternfly** – Dr. Julie Urban and Dr. David Biddinger, Penn State
- 10:30 **Adjourn to the Keynote Session**

Keynote Speaker – Nigerian/Trinidad Room – *sponsored by the American Fruit Grower and American Vegetable Grower magazines.*

11:00 **Roller Coaster Economics and the Management Mindset** - Dr. David Kohl, Virginia Tech
The economic environment is surrounded by uncertainty, but also opportunities for those with a high business IQ and financial management mindset. Join Dr. Kohl as he discusses macroeconomic variables ranging from global economic trends to inflation, interest rates, supply chain disruptions, and consumer trends that will impact the financial bottom line. Given these trends, what are time-tested business and financial practices that will place the odds of success in your favor? Practical tips, techniques, and tools will be presented that can be used in your business, family and personal life based upon his decades of engagement with agricultural businesses, research and even business ownership.

Tuesday Afternoon, February 1, 2022

Respirator Fit Testing – Tower Room 1

12:00 to 5:00 p.m.

Mid-State Health will be providing free respirator fit tests that are required by WPS and OSHA regulations for pesticide applicators applying pesticides that require respirators. Walk-ins are welcome but growers can sign up ahead of time for a 15-minute time slot to have their respirator fit test and secure a spot/time. The test is free but Convention registration is required. Due to COVID-19, growers will be required to bring their own respirator for the test and should be clean shaven for a proper seal. To sign up for a time slot for your fit test, go to <https://tinyurl.com/mafvc2022-respirator-fit-test>. If you have any questions, Shane Williams at stw5035@psu.edu or 814-863-9606.

Pumpkins/Winter Squash - Trinidad Room - *sponsored by the American Vegetable Grower magazine*

- 1:30 ***Can Dual Magnum Be Applied Over Pumpkin Vines?** - Dwight Lingenfelter, Penn State
- 2:00 ***Managing Powdery Mildew and Bacterial Diseases on Pumpkin** - Dr. Margaret McGrath, Cornell Univ.
- 2:30 ****Pesticide Formulations and Adjuvant Demonstration** - Genevieve Christ, Penn State
- 3:00 **Industry Show and Tell**
- 3:15 **Pumpkin Variety Showcase** – Jeff Hess, Rupp Seeds; Thomas Pagels, Stokes Seeds
- 4:00 ****The Health and Status of Squash Bees** - Laura Jones, Penn State
- 4:30 **Adjourn**

General Vegetables I - Magnolia Room ABC

- 1:30 **Tarping to Reduce Tillage in Small-Scale Organic Vegetables** - Ryan Maher, Cornell Univ.
- 2:00 **Breeding for Year-Round Lettuce Production and its Multiple Challenges** - Dr. Germán Sandoya, Univ. of Florida
- 2:30 ***Vegetable Seed Treatment and Coating Technologies** - Dr. Alan Taylor, Cornell Univ.
- 3:00 **Industry Show and Tell**
- 3:15 ****Herbicide Activity, Symptomatology, and Off-Target Movement in Specialty Crops** - Dr. Lynn Sosnoskie, Cornell Univ.
- 4:00 ****Understanding and Mitigating Pesticide Resistance** - Dr. Karly Regan, Penn State Extension
- 4:30 **Adjourn**

Soil Health/Cover Crops - Crystal Room

- 1:30 **Cover Crops, A Big Part of Successful Vegetable Crops** - Arthur King, Harvest Valley Farms
- 2:00 **Winter/Summer Cover Cropping Options Influences Vegetable Productivity in Irrigated Systems** - Dr. Daniel Drost, Utah State Univ.
- 2:30 **Improving Soil Health and Crop Performance in Vegetable Rotations With a Focus on Cover Crops** - Dr. Gordon Johnson, Univ. of Delaware
- 3:00 **Industry Show and Tell**
- 3:15 **Cashing in on Your Soil Health Story** - Steve Groff, ICover Crop Coaching
- 4:00 **Assistance Available to Producers to Promote Soil Health and Guidance for Navigating Conservation Programs** - Scott Heckman, USDA-NRCS
- 4:30 **Adjourn**

General Vegetables II - Empire Room AB

- 1:30 **Diversified Vegetable Financial Benchmark Study** – Sarah Bay Nawa, Pasa Sustainable Agriculture
- 2:00 **Evaluating Carbon Sources for ASD in High Tunnel Production in PA** – Raymond Balaguer, Penn State
- 2:30 **Cabbage Variety Trial: The Results Are In!** - Dr. Elsa Sánchez, Thomas Butzler, Robert Pollock, and Dr. Timothy Elkner; Penn State
- 3:00 **Industry Show and Tell**
- 3:15 **Saffron: How to Grow the Most Expensive Herb in the World** – Dr. Margaret Skinner; Univ. of Vermont
- 4:00 **Plant Mediated Systems in High Tunnels** – Dr. Margaret Skinner; Univ. of Vermont
- 4:30 **Adjourn**

Controlled Environment Ag (Soiless) - Empire Room CD

- 1:30 **Basil Yield, Quality, and Resource use Efficiency using Alternative Soiless Systems** - Andy Blunk, Trevor Johnson, Raymond Barbosa, Dr. Francesco Di Gioia, Penn State
- 2:00 **Greenhouse Management of Temperature and Light in the Production of Leafy Greens and Vegetable Transplants** - Dr. Roberto Lopez, Michigan State Univ.
- 2:30 ***Managing IPM with CEA Strawberries: Common Pest, Disease, and Abiotic Disorders** - Christopher Levine, Cornell Univ.
- 3:00 **Industry Show and Tell**
- 3:15 **Smart Lighting Strategies for CEA** - Dr. Mark W. van Iersel, Univ. of Georgia / Candidus Inc.
- 4:00 **LED Lighting for Indoor Production of Leafy Greens** - Dr. Qingwu (William) Meng, Univ. of Delaware
- 4:30 **Adjourn**

Wholesale Marketing - Wild Rose Room

- 1:30 **Keynote Speaker: Focus on Sustainability from a Retail Perspective** – Jessica Printy, Groves, The GIANT Company
- 2:30 **Indoor Farms: One Solution for Year-Round Sustainable Produce** – Abby Prior, Bright Farms
- 3:00 **Sustainability from a Distributor Perspective** - Mikey Azzara, Zone 7
- 3:30 **Industry Show and Tell**
- 3:45 **Produce Auction Strategy and Success** – Becky Clawson and Jeff Stoltzfus, Penn State Extension
- 4:15 **Adjourn**

POS and Reservation Systems - Cocoa Terrace/Cocoa 1

- 1:30 **Considerations for Evaluating POS Systems** - Sarah Cornelisse, Penn State Extension
- 2:00 **POS and Inventory Management Systems Overview** - John Wodehouse, Penn State Extension
- 2:30 **POS Panel** - John Fendrick, Keith Zimmerman, Plumb Creek Farm
- 3:00 **Industry Show and Tell**
- 3:15 **Reservation Systems Options and Comparisons** - John Fendrick, Keith Zimmerman, Plumb Creek Farm
- 4:00 **Farm Stay Online Reservation Systems** - Angela Tweedy, Univ. of Vermont
- 4:30 **Adjourn**

Pome Fruit - Nigerian Room - sponsored by the American Fruit Grower magazine

- 1:30 ****Respirator Fit Testing Made Easy** - James Harvey, Penn State
- 2:00 **Grower Evaluation of New Apple Rootstocks (Grower Panel)** - Matt Harsh, MD, Blake Slaybaugh, PA, Jason Mattson, VA, Gary Mount, NJ
- 2:45 **Industry Show and Tell**
- 3:00 ***Update on Rapid Apple Decline** - Dr. Kari Peter, Penn State
- 3:30 ***Goodling Lecture: The Future Development of Plant Growth Regulators & Biorational Products** - Dr. Steve McArtney, Valent Biosciences
- 4:15 **Adjourn**
- 4:30 **SHAP Business Meeting**

Wednesday Morning, February 2, 2022

Respirator Fit Testing – Tower Room 4

8:00 a.m. to 12:00 p.m.

Mid-State Health will be providing free respirator fit tests that are required by WPS and OSHA regulations for pesticide applicators applying pesticides that require respirators. Walk-ins are welcome but growers can sign up ahead of time for a 15-minute time slot to have their respirator fit test and secure a spot/time. The test is free but Convention registration is required. Due to COVID-19, growers will be required to bring their own respirator for the test and should be clean shaven for a proper seal. To sign up for a time slot for your fit test, go to <https://tinyurl.com/mafvc2022-respirator-fit-test>. If you have any questions, Shane Williams at stw5035@psu.edu or 814-863-9606.

Tomatoes - Magnolia Room ABCD - sponsored by the American Vegetable Grower magazine

- 9:00 **Tomato Breeding Update** - Jonathan Bonfiglio, Penn State
- 9:30 ****Protecting Water Resources During Mixing and Loading** - Megan Chawner, Penn State Extension
- 10:00 **Industry Show and Tell**
- 10:15 ***Tomato Spotted Wilt Virus** - Dr. Anna Whitfield, North Carolina State Univ.
- 11:00 **Transplant Panel** – Greg Baitinger, grower; David Miller, Miller Plant Farm;
- 11:30 **PVGA Annual Meeting** - Crystal Room - All members are urged to attend.
- 12:30 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

General Vegetables - Crystal Room

- 9:00 ***Pigweed Identification, Herbicide Resistance Screening, and Effective Management Strategies** - Dr. Lynn Sosnoskie, Cornell Univ.
- 9:30 **High Heat and Vegetable Production** - Dr. Gordon Johnson, Univ. of Delaware
- 10:00 **Industry Show and Tell**
- 10:15 **Managing Weather and Climate Risk in F&V Production Systems with a Focus in Subtropical Climates** - Dr. Clyde Fraisse, Univ. of Florida
- 11:00 **How I Manage Poorly Drained Fields** - Todd Wilson, Tiny Seed Farm
- 11:30 **PVGA Annual Meeting** - All members are urged to attend.
- 12:30 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Greenhouse Ornamentals - Empire Room AB - *sponsored by Marrone Bio Innovations*

- 9:00 ****Surfactants and Adjuvants** - Krystal Snyder, Penn State Extension
- 9:30 **Best of the Penn State Flower Trials I** - Sinclair Adam, Penn State Extension
- 10:00 **Industry Show and Tell**
- 10:15 ***Herbaceous Perennials: Sorting out the Good and Bad Bugs?** - Dr. Stanton Gill, Univ of Maryland Extension
- 11:00 ***Root Out Root Diseases-Managing Hidden Diseases in the Greenhouse** - Margery Daughtrey, Cornell Univ.
- 11:30 **Best of the Penn State Flower Trials II** - Sinclair Adam, Penn State Extension
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Organic Vegetable Production - Empire Room CD

- 9:00 **Soil Steaming for High Tunnels** - Becky Maden, Univ. of Vermont Extension
- 9:30 ***Aphid Control for High Tunnels During Cold Temperatures** - Dr. Laura Ingwell, Purdue Univ.
- 10:00 **Industry Show and Tell**
- 10:15 **Anaerobic Soil Disinfestation (ASD) for Organic High Tunnels** - Dr. Francesco Di Gioia, Penn State
- 11:00 **Winter Squash Trials at the Rodale Institute** – Dr. Gladis Zinati, Rodale Institute
- 11:30 **PVGA Annual Meeting** - Crystal Room - All members are urged to attend.
- 12:30 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Marketing 101 - Trinidad Room

- 9:00 **Customer Retention by Solving Customer Problems** – Brian Moyer and Miranda Harple, Penn State Extension
- 10:00 **Industry Show and Tell**
- 10:15 **Post COVID Marketing Data & Consumer Trends** - Miranda Harple, Brian Moyer and Dr. Claudia Schmidt, Penn State Extension
- 11:00 **Resilience through Diversification: Intro to Restaurant Sales** - Becky Clawson, Penn State Extension
- 11:30 **Storytelling for Your Business** - Miranda Harple, Penn State Extension
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Small Fruit – Wild Rose Room

- 9:00 ***Fungicide Resistance in Major Pathogens Attacking Strawberries** - Dr. Mengjun Hu, Univ. of Maryland
- 9:30 **New Strawberry Varieties from NCSU and Other Breeding Programs** - Dr. Gina Fernandez, North Carolina State Univ.
- 10:00 **Industry Show and Tell**
- 10:15 **Containerized Day-Neutral Strawberry Production – What We’re Learning** - Dr. Timothy Elkner and Kathy Demchak, Penn State Extension
- 11:00 ***Current Issues in Strawberry Diseases and Management** - Dr. Natalia Peres, Univ. of Florida
- 11:30 ***Microclimate and Disease Risk under Row Covers for Strawberries** - Dr. Mengjun Hu, Univ. of Maryland
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Labor/Farm Management – Cocoa 1

- 9:00 **Managing Your Farm Finances** - Dr. Jayson Harper, Penn State
- 10:00 **Industry Show and Tell**
- 10:15 **General Risk - What is it and How to Manage It.** - Dr. Jayson Harper, Penn State
- 11:00 **Legal Liability Risks from Business Invitees on the Farm** – Jackie Schweichler, Penn State Law
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Pome Fruit - Nigerian Room - *sponsored by the American Fruit Grower magazine*

- 9:00 ***Codling Moth and Oriental Fruit Challenges Revisited – What's Next?** - Dr. Greg Krawczyk, Penn State
9:30 **Making More Effective Use of the NEWA System** - Mr. Jon Clements, Univ. of Massachusetts
10:00 **Industry Show and Tell**
10:15 **Utilizing Soil & Leaf Analysis to Determine Fertilizer Needs** - Dr. Megan Muehlbauer, Rutgers Univ
10:45 ***Survival of *Erwinia amylovora* in Fire Blight Cankers in Apples & Pears Trees** - Dr. Srdjan Acimovic, Virginia Tech
11:15 **Update from US Apple** – Chris Gerlach, US Apple
11:30 ***Use of ProTone in Apples** - Dr. Steve McArtney, Valent BioSciences
12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Spanish – Cocoa Terrace

- 9:00 **Welcome and Ice Breaker**
9:30 **Hands-on Grafting** – Don Seifrit and Maria Gorgo, Penn State Extension.
10:30 **Breeding for Year-Round Lettuce Production and its Multiple Challenges** - German Sandoya, Univ. of Florida
11:30 **Economic Opportunities for New Beekeepers** - Margarita Lopez-Urbe, Penn State
11:45 **Farm Food Safety** – Maria Gorgo, Penn State Extension and Beth Sastre, Virginia Cooperative Extension
12:15 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Wednesday Afternoon, February 2, 2022

Sweet Corn - Magnolia Room ABCD

- 1:30 ***Weed Management and 20 Years of No-Till Sweet Corn** - Andrew Frankenfield, Penn State Extension
2:00 **High Heat and Sweet Corn Quality** - Dr. Gordon Johnson, Univ. of Delaware
2:30 ***History and Projections of Insect Populations, Insecticides, and PestWatch Monitoring** - Dr. Shelby Fleischer, Penn State
3:00 **Industry Show and Tell**
3:15 ***Ear Insect Protection in Sweet Corn** - Dr. David Owens, Univ. of Delaware
4:00 ****Communicating Pesticide Risk to the Public** - Leah Fronk, Penn State Extension
4:30 **Adjourn**

Stone Fruit - Crystal Room

- 1:30 ****Private Applicator Recordkeeping** - Ryan Selking, Penn State
2:00 ***Accede Use for Thinning Peaches and Nectarines** - Dr. Jim Schupp, Penn State
2:30 **Industry Show and Tell**
2:45 ***Value of Using Clean Plants and Rootstocks** - Dr. Libby Cieniewicz, Clemson Univ.
3:15 **Ernie Christ Lecture: Ernie's Influence on a Pomological Career** - Dr. Rich Marini, Penn State
4:00 ***Epidemiology & Control of Peach Rusty Spot** - Dr. Norm Lalancette Rutgers Univ.
4:30 **Adjourn**

Greenhouse Ornamentals - Empire Room AB - *sponsored by Marrone Bio Innovations*

- 1:30 **The \$64 Question: What Will Spring Bring?** - Chris Beytes, Ball Publishing
2:00 ***Going Down Under: A Close Up Look at Insects That Damage Root Systems** - Dr. Stanton Gill, Univ. of Maryland Extension
2:30 ****Chemsweep** - Krystal Snyder, Penn State Extension
3:00 **Industry Show and Tell**
3:15 ***Leave Those Leaves Alone-- Managing Foliar Diseases in the Greenhouse** - Margery Daughtrey, Cornell Univ.
4:00 **Greenhouse Toolkit: Monitoring Equipment & Environment** - Sinclair Adam and Krystal Snyder, Penn State Extension
4:30 **Adjourn**

Organic Vegetable Production - Empire Room CD

- 1:30 **Soil Health Indicators at the Rodale Institute** – Dr. Gladis Zinati, Rodale Institute
2:00 ***Dealing with Broad Mites in Organic Production Systems** – Dr. Raymond Cloyd, Kansas State Univ.
2:30 **Deploying Ecological Pest Management Tactics to Manage Pests in Organic Vegetables** - Dr. Cerruti Hooks, Univ. of Maryland
3:00 **Industry Show and Tell**
3:15 **Food Safety Considerations for Organic Vegetable Farms** – Jeffrey Stoltzfus, Penn State Extension
4:00 **Spiral Path Farms – How We Manage Weeds** – Will Brownback, Spiral Path Farms
4:30 **Adjourn**

Agritourism - Trinidad Room

- 1:30 **Taking the Ag-Venture to the Next Level - Agritourism Collaborations** - Dr. Claudia Schmidt, Penn State; Christi Powell, Penn State Extension
- 2:00 **Agritourism: What to Do When the Novelty Wears Off** - Hugh McPherson, Maize Quest Fun Park
- 2:30 **Legal Considerations for Agritourism** - Jackie Schweichler, Penn State Law
- 3:00 **Industry Show and Tell**
- 3:15 **Managing Agritourism Seasonality** – Panel: Deb Colitas, Valley Fruits and Veggies, Hugh McPherson, Maize Quest Fun Park, and Victoria Baker, Maple Bottom Farm
- 4:00 **Communicating with the Media and Consumers During a Crisis** - William Hlubik, Rutgers Cooperative Extension
- 4:30 **Adjourn**

Small Fruit – Wild Rose Room

- 1:30 **An Introduction to Long Cane Raspberry Production**- Lisa Rayburn, North Carolina State Univ.
- 2:00 **Setting Berry Prices: What Works for Our Farms** - Jonathan Strite, Strite Orchards; Arthur King, Harvest Valley Farms, John Shenk, Shenk Berry Farm; Jeffrey Stoltzfus, Penn State Extension/Glen Run Valley View Farm
- 3:00 **Industry Show and Tell**
- 3:15 **Virtual Farm Tour: Catoctin Mountain Orchard** - Robert Black, Catoctin Mountain Orchard
- 4:00 **Let the Sunshine In: An Assessment of Reflective Ground Covers in Blackberry Production** - Dr. Tom Kon, North Carolina State Univ.
- 4:30 **Adjourn**

Labor/Farm Management – Cocoa 1

- 1:30 **Focus on the H-2A Program** – Luis Nieves, US Dept. of Labor Wage and Hour
- 3:00 **Industry Show and Tell**
- 3:15 **Retaining and Motivating Good Workers** – Linda Falcone, Penn State
- 4:30 **Adjourn**

Pome Fruit - Nigerian Room

Advanced Orchard Technology

- 1:30 **Orchard Apps for Smart Phones & Utilization of Orchard Weather Stations** - Jon Clements, Univ. of Massachusetts Extension
- 2:00 **FruitScout® Optical Scanning Use in 2022** - Mark Boyer, Ridgetop Orchards and Dr. Rich Marini, Penn State
- 3:00 **Industry Show and Tell**
- 2:45 ****Retrofitting Intelligent Spray System of Airblast Sprayers for Sustainable Horticultural Crop Production** - Dr. Heping Zhu, USDA-ARS Application Technology Research Unit, Wooster, OH
- 3:15 **Precision Crop Load Management for Apples – from Pruning to Fruitlet Thinning** - Dr. Long He, Penn State

Precision Agriculture Lightning Talks

- 3:45 **Unmanned Aerial Vehicle Based Fire Blight Disease Detection of Apple Trees** - Md Sultan Mahmud, Penn State
- 3:55 **Green Fruit Detection & Orientation for Robotic Thinning in Apples** - Magni Hussain, Penn State
- 4:05 **Deep Learning Based King Flower Identification for Precision Apple Pollination** - Xinyang Mu, Penn State
- 4:15 **Heat Transfer in an Open Orchard Equipped with Mobile Heaters During Frost** - Weiyun Hua, Penn State
- 4:30 **Adjourn**

Spanish – Cocoa Terrace

- 1:30 **Sweet Cherry Pruning Practicum** - Justin Weaver, Weaver's Orchard
- 2:30 **Apple Maturity Testing** - Macarena Faruh, Univ. of Maryland
- 3:30 **Evaluation**
- 4:00 **Adjourn**

Thursday Morning, February 3, 2022

High Tunnels - Trinidad Room - *sponsored by the American Vegetable Grower magazine*

- 9:00 **Keeping your Soil in Good Shape and Improving Drainage** - Dr. Matthew Kleinhenz, Ohio State Univ.
- 9:30 **A Survey of Soilborne Pathogens in PA High Tunnel Tomatoes** - Elisa Lauritzen, Penn State
- 10:00 **Industry Show and Tell**
- 10:15 **Rootstock Selection and Rootstock-Scion Interaction for PA Fresh-Market Tomato Production in High Tunnel** - Dr. Timothy Elkner*, Andrew Blunk, Dr. Francesco Di Gioia, Penn State Extension
- 10:45 **Soil and Tissue Testing and their Interpretation for In-Season Nutrient Program Adjustments in High Tunnel** - Dr. Francesco Di Gioia and Andrew Blunk, Penn State
- 11:30 **Grafted and Non-grafted Tomato Response to Nitrogen Inputs in High Tunnel Production Systems** - Andrew Blunk and Dr. Francesco Di Gioia, Penn State
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Winter Storage Vegetables - Magnolia ABCD

- 9:00 ***Weed Control in Beets: Current Herbicides and Novel Technology** - Dr. Lynn Sosnoskie, Cornell Univ.
- 9:30 **Winter Spinach Production and Pest Management** - Susan Scheufele, Univ. of Mass. Extension
- 10:00 **Industry Show and Tell**
- 10:15 **Tips and Tricks to Grow Storage Crops** – Dr. Stephen Reiners, Cornell Univ.
- 11:00 **Growing Brussels Sprouts for Fall and Winter Harvest** - Jan van der Heide, Bejo Seeds
- 11:30 ***Disease Management on Table Beets and Carrots** - Eric Branch, Cornell Univ.
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Cut Flowers - Empire Room AB

- 9:00 **Terra Farms, a Growers' Perspective on Producing and Marketing Naturally Grown Fresh Cut Flowers** – Andy and Loni Snyder, Terra Farms
- 9:30 ***Pests of Dahlias and BioControl** - Heather Zindash, IPM Consultant
- 10:00 **Industry Show and Tell**
- 10:15 **Woody Ornamentals for the Florist Trade** – Rick Hartelieb, Castanea Farms
- 11:00 ***Weed Management in Specialty Cut Flowers** – Dr. Andy Senesac, Cornell Cooperative Extension
- 11:30 ****Understanding and Recognizing Pesticide Drift** – Thomas Ford, Penn State Extension
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Potatoes - Empire Room CD

- 9:00 **PotatoesUSA; Marketing Potatoes**- Bryan Bender, PotatoesUSA and Bender Potatoes and Kayla Dome, PotatoesUSA
- 9:30 **Standing Up for Potatoes on Capitol Hill - Federal and International Advocacy Affecting Your Businesses**- Kam Quarles, National Potato Council
- 10:00 **Industry Show and Tell**
- 10:15 **New Tactics and Tools for Controlling Potato Beetles and Wireworms in Potatoes** – Dr. Thomas Kuhar, Virginia Tech
- 11:00 **Growing Organic Potatoes**- Orin Moyer, OriGin Farm
- 11:30 **Moving from Conventional to Organic Potato Production**- Nolan Masser, Red Hill Farm
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Direct Marketing - Cocoa Terrace/Cocoa 1

- 9:00 **Grants and Loan Programs for Farms with Retail Markets** - Michelle Infante-Casella, Rutgers Cooperative Extension
- 9:30 **Northeast ERME Grant for Agritourism During the Pandemic** - Dr. Claudia Schmidt, Penn State
- 10:00 **Industry Show and Tell**
- 10:15 **Stop Things from Going Wrong; Avoiding a Crisis Before it Happens** - William Bamka, Rutgers Cooperative Extension
- 11:00 **From Food Safety to COVID Safety: Responding to Retail Marketers Needs** - Meredith Melendez, Rutgers Cooperative Extension
- 11:30 **Impacts of Supply Chains and Regulations on Direct Marketing** - Stephen Komar, Rutgers Cooperative Extension
- 12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Small Fruit - Crystal Room

- 9:00 **Would My Blueberries Benefit from More Nitrogen?** - Emmalea Ernest, Univ. of Delaware
9:30 **Who is Pollinating Our Blueberries?** - Dr. Margarita López-Urbe, Penn State
10:00 **Industry Show and Tell**
10:15 **Comparing the Production Potential and Nutritional Quality of Container vs Field Grown Blueberry in Central Virginia** - Dr. Reza Rafie and Dr. Rafat Siddiqui, Virginia State Univ.
11:00 **What Are Blueberry Trees, and Why Might They Be in Your Future?** - Dr. Wei Yang, Oregon State Univ.
11:30 **Strawberry Flower Mapping: The Nitty-Gritty of Predicting Your Yields** - Dr. Edward Durner, Rutgers Univ. (Dr. Durner will be offering a 60-minute hands-on workshop on flower mapping at 12:30 p.m. A limited number of free tickets to the workshop will be distributed at the session.)
12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Stone Fruit - Wild Rose Room - sponsored by the American Fruit Grower magazine

- 9:00 ****Pollinators & Pesticides** - Jamie Kopco, Penn State
9:30 ***Advances on Spotted-Wing Drosophila Monitoring and Management** - Dr. Cesar Rodriguez, Rutgers Univ.
10:00 **Industry Show and Tell**
10:15 **Update Your Peach Harvest Windows** - Hemant Gohil, Rutgers Cooperative Extension
10:45 **National Peach Council Update** - Kay Rentzel, NPC
11:00 ***Viruses Affecting Stone Fruits** - Dr. Libby Cieniewicz, Clemson Univ.
11:30 ****Herbicide Drift Considerations for Growers of Sensitive Perennial Fruit Crops** - Dr. Cain Hickey, Penn State
12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Pome Fruit- Nigerian Room

- 9:00 ***Postharvest Apple Rot: What We've Learned in the Orchard & Packing House** - Johanny Castro, Penn State
9:30 **Culture & Management of Solitary Bees for Pollination** - Dr. Natalie Boyle, Penn State
10:00 **Industry Show and Tell**
10:15 ***Prevent Apples from Rotting: Optimizing Bitter Rot Management** - Dr. Kari Peter, Penn State
11:00 ****Pesticide Container Labeling** - Genny Christ, Penn State
11:30 ***ReTain & Harvista for Preharvest Drop Control of Gala Apples** - Dr. Sherif Sherif, Virginia Tech
12:00 **Luncheon Buffet** - Great Lobby and Chocolate Lobby (cash)

Thursday Afternoon, February 3, 2022

Year-Round High Tunnel Production - Trinidad Room

- 1:30 **Root Zone Heating for High Tunnel Growers** - Dr. Matthew Kleinhenz, Ohio State Univ.
2:00 **High Tunnel Crop Rotation** - Nathan Burkholder, Short Lane Vegetable Farm
2:45 **Improving Tomato and Pepper Fruit Quality** - Steven Bogash, Marrone Bio
3:15 **Using Beneficial Insects and Mites to Manage Aphids, Spider Mites, and Thrips** – Dr. Carol Glenister, IPM Laboratories Inc.
3:45 **Adjourn**

General Vegetables - Magnolia Room ABCD

- 1:30 **New FSMA Proposal Regarding Water** - Dr. Emily Griep, United Fresh Produce Association
2:00 **Floods, Neighbors, and Food Safety Issues Beyond Our Control** - Jeffrey Stoltzfus, Penn State Extension
2:45 **Our Experience with Biodegradable Mulch** - Arthur King, Harvest Valley Farms
3:15 ****Avoiding Pesticide Drift** - Glen Bupp, Penn State Extension
3:45 **Adjourn**

Innovative Crops for Small Farms - Empire Room AB

- 1:30 **Alternative Fruit Crops for the Mid-Atlantic Region** – Dr. Andrew Ristvey, Univ. of Maryland Cooperative Extension
2:00 **Oyster and Shiitake Mushroom Production for Small Farms** – Dr. John Pecchia, Penn State
2:45 **Growing Hops as a Farm Alternative** – Bryan Butler, Univ. of Maryland Cooperative Extension
3:15 *** Blooms, Bugs & Birds: An Eco-System Encouraging Predators and Parasitoids in Outdoor Production by Combining IPM, Insectary Plants and Nesting Boxes** - Heather Zindash, IPM Consultant
3:45 **Hydroponic Crops and Production Techniques for Small Farms** – Thomas Ford, Penn State Extension
4:30 **Adjourn**

Potatoes - Empire Room CD

- 1:30 **Can We Grow Russet Potatoes in PA** - Robert Leiby, PA Cooperative Potato Growers
- 2:00 **Potato Research in PA and Penn State** - Michael Peck and Dr. Xinshun Qu, Penn State, and Robert Leiby PA Cooperative Potato Growers
- 2:45 ***Managing Diseases In Potato Storage** - Todd Forbush, Techmark, Inc.
- 3:15 ***Scouting Your Potato Fields - What to Look For & When** - Jonathan Price, Sterman Masser, Inc
- 3:45 **Services and Opportunities for Mid Atlantic Potato Growers** - Nathan Tallman, PA Cooperative Potato Growers
- 4:30 **Adjourn**

Digital/Social Media - Cocoa Terrace/Cocoa 1

- 1:30 **Social Media Tools that Make Marketing Easier & Save You Time** – Danielle Gaebel, Superfine Social
- 2:00 **What Prevents Customers from Completing Online Purchases** – Sarah Cornelisse, Penn State
- 2:45 **Advocating for Your Farm Online** – Jennie Schmidt, CommonGround
- 3:30 **What's New in Social Media** – Facilitated audience discussion
- 4:00 **Adjourn**

Small Fruit - Crystal Room

- 1:30 **What We're Learning about Soil Management for Blueberries** - Dr. Gary Pavlis, Rutgers Univ.
- 2:00 ****What We Know About In-Bloom Pesticide Effects on Honey Bees** - Dean Polk, Rutgers Univ.
- 2:45 ***New Tools for Monitoring for SWD** - Dr. Cesar Rodriguez-Saona, Rutgers Univ.
- 3:15 ****Tip Talk: Everything to Know about Spray Nozzles** - Kara Pittman, Penn State
- 3:45 **Adjourn**

Pome Fruit – Nigerian Room

- 1:30 ***Multi-Life Stage Management of Plum Curculio** - Dr. Anne Nielsen, Rutgers Univ.
- Improving Fruit Color Symposium**
- 2:00 **Factors Affecting the Formation of Fruit Color & Strategies to Improve Color** - Dr. Macarena Farcuh, Univ. of Maryland
 - 2:40 **Struggling to Blush: Efforts to Enhance Apple Fruit Color Development in the Southeast** - Dr. Tom Kon, North Carolina State Univ.
 - 3:20 **Use of Pneumatic Defoliators in Apples to Improve Color** - Dr. Jim Schupp, Penn State
 - 4:00 ****Pesticide Spill Protocol** - Kara Pittman, Penn State
 - 4:30 **Adjourn**