

Conference Agenda

100th Cumberland Shenandoah Fruit Workers Conference

December 5 & 6, 2024

Hilton Garden Inn, Martinsburg, WV

Thursday, December 5:

8:00 -9:00 AM: Registration

9:00 - 9:10 AM: Call to Order

9:10 – 10:10 AM: Call of the States

10:10 – 10:30 AM: Call of the Industry

10:30 – 10:45 AM: AM Break

10:45 – 11:00 AM: ***‘One Hundred Years of Digital Proceedings’***

Phillip L. Martin, Research Scientist

11:00 – 12:00 PM: Plenary Session:

“Perspectives on the Fruit Industry: Looking back and forward at the industry and its’ many changes over the years and where it looks to be going today”.

Panel Discussion with Dave Rosenberger, Cornell (retired), and Tracy C. Leskey, Research Leader / Station Director, USDA-ARS, Appalachian Fruit Research Station, Kearneysville, WV.

Audience Q & A and Discussion

12:00 PM – 1:15 PM: Lunch

1:15 PM: Student Presentations. Karly Regan, Moderator

Entomology:

1:15 – 1:30 PM: **Quantifying Increased Levels of Plum Curculio, *Conotrachelus nenuphar*, in Pennsylvania Apple Orchards.**

Kevin Peters, Heather Sahli (Shippensburg State University of PA), and David Biddinger (PSU FREC)

1:30 – 1:45 PM: **Multispecies Lepidopteran Trapping: Altered Trap Capture and Exploration of Uses in IPM.**

Kelly McIntyre, Alejandro Del Pozo, Aresh Rashed (VA Tech), Erin Hodgson, and Ashley Dean (Iowa State)

1:45 – 2:00 PM: **SLF Population Density Differences Based on Invasion Year.**

Katarzyna Madalinska and Anne L. Nielsen (Rutgers)

2:00 – 2:15 PM: Effects of Release Habitat and Time on *Trissolcus japonicus* parasitism and Dispersal in an Augmented Release Experiment.

Emma Waltman, Ann Rucker, and Anne Nielsen (Rutgers)

Horticulture:

2:15 – 2:30 PM: Unlocking Premium Color and Early Harvest in ‘Evercrisp’ Apples via Reflective Groundcovers.

Md Shipon Miah and James Schupp (PSU)

2:30 – 2:45 PM: Synergistic PGR Application Strategic Balancing of Red Color Enhancement and Fruit Drop Control in Apples.

Mohammed Monirul Hasan Tipu, Khalil Jahed, and Sherif Sherif (VA Tech)

2:45 – 3:00 PM: The Effect of plant growth regulator treatment on ‘Honeycrisp’ fruit drop, maturity, quality and related transcript accumulation.

Emily Johnson and Macarena Farcuh (UMD)

3:00 – 3:15 PM: Afternoon Break

3:15 – 3:30 PM: Rootstock Driven Frost Tolerance and Bud Mortality in Apple: Gene Identification for future germplasm development.

Amolpreet kaur Saini, Khalil Jahed, Deisiany Ferrerira Neres, Clay Wright, and Sherif M. Sherif (VA Tech)

3:30 – 3:45 PM: Digital Analysis as an Indirect Method of Assessing Apple Canopy.

Annette Martenot (USDA)

3:45 – 4:00 PM: Improving Red Color and Inactivation of *Listeria monocytogenes* on Apple Fruit Skin in Postharvest through Ultraviolet Irradiation.

Leyu Kalkidan, Xueying Jiang, Yixin Cai (Dept of Plant Science and Landscape Architecture, UMD), Rohan Tikekar (Dept of Nutrition and Food Science UMD), Joseph Sullivan (Dept of Plant Science and Landscape Architecture, UMD), and Maracena Farcuh (Dept of Plant Science and Landscape Architecture, UMD).

Pathology:

4:00 – 4:15 PM: Evaluation of Biorational and Biocontrol Agents for Apple Bitter Rot and Glomerella Leaf Spot.

Nathanial Boeckman (VA Tech)

4:15 – 4:30 PM: **Understanding the Impact of Canopy Management Practices on Microclimate and Late-Season Rot Development.**

Shannon Rotella, and Mengjun Hu (UMD)

4:30 – 4:45 PM: **Phenotyping Pear Germplasm (*Pyrus spp.*) for Resistance to Post-harvest Decay caused by *Penicillium expansum* and, *Colletotrichum fioriniae*.**

Kathryn Pevarnik (ORISE Researcher @ USDA ARS AFRS), Breyn Evans (USDA ARS AFRS), John Bennett (USDA ARS AFRS), Lauri Reinhold (USDA ARS NCGR), Christopher Gottschalk (USDA ARS AFRS), and Tamara Collum (USDA ARS AFRS).

4:45 – 5:00 PM: **Biopesticide Product Trials Against Grape Downey Mildew, Winchester, VA in 2024.**

Jonathan Ames, Ian McLellan, and Mizuho Nita (VA Tech)

5:00 – 5:15 PM: **Profiles and a Novel Mechanism of Fungicide Resistance in *Botrytis* species from Strawberry Fields.**

Hongjin Lu, and Mengjun Hu (UMD)

5:15 - 5:30 PM: Group Photo(s)

5:30 – 7:00 PM: Student Awards and Mixer

7:00 PM: Adjourn

Friday, December 6:

9:00 AM: Concurrent Sessions: Entomology begins at 8:30 AM, Horticulture at 9:30 AM, and Pathology at 9:30 AM.

Horticulture: Moderator: Khalil Jahed

9:30 – 9:45 AM: **The Maryland Tree Architecture Project: Selection and Patenting New, Grower-Friendly Apple Trees.**

Chris Walsh, Julia Harshman, and Kathy Hunt, (UMD)

9:45 - 10:00 AM: **Is there a relationship between Accede® spray application and apple chemical thinner responses?**

Tom Kon and Chris Clavet (NC State)

10:00 – 10:15 AM: **Economics of Top Working versus Replanting an Apple Orchard**

Jayson Harper (PSU)

10:15 – 10:30 AM: **AM Break**

10:30 – 10:45 AM: **Robotic Technologies for Tree Fruit Crop Production**

Long He (PSU)

10:45 - 11:00 AM: **Strategies for Frost Mitigation in Apple: The Role of Cryoprotective Agents**

Khalil Jahed and Sherif Sherif (VA Tech)

11:15 AM: Horticulture Adjourn to Business Meeting

Entomology: Moderator: Greg Krawczyk

8:30 – 8:45 AM: **Integrating mating disruption and threshold sprays for managing key lepidopteran pests: Protocol and farm study.**

Laura Nixon (Rutgers and USDA-ARS), and Tracy Leskey (USDA-ARS)

8:45 – 9:00 AM: **Codling Moth Control in Pennsylvania Apple Orchards and Possible Impacts on the Biological Control of Secondary Pests.**

David Biddinger (PSU)

9:00 – 9:15 AM: **Widening the toolbox: Chemical Control for the New Invasive Tree Moth in the U.S.**

Jason Bielski (VA Tech), Alejandro Del Pozo (VA Tech), and Greg Simmons (USDA-APHIS,PPQ)

9:15 – 9:30 AM: **Continuous Challenges with Codling Moth, *Cydia pomonella* Management in Pennsylvania.**

Greg Krawczyk, Laura Mellot, Tyler Seutter, and Joshua Gery (PSU FREC)

9:30 – 9:45 AM: **Current Status and Abundance of Spotted Lanternfly in Eastern New York.**

Carlos Antolinez (Cornell Hudson Valley Research Laboratory)

9:45-10:00 AM: **Chemical Control trial for Spotted Lanternfly, *Lycorma delicatula*, Adults**

Ben McManaway, Ryan Mays, Shaumik Dev, and Doug Pfeiffer (VA Tech)

10:00 – 10:15 AM: **The Use of Attract and Kill Technology to Manage *Drosophila suzukii* in berry crops.**

Janine Spies (Rutgers), Oscar Liburd (University of FL), Gabrielle LaTora (UGA Extension), and Elena Rhodes (University of FL).

10:15 – 10:30 AM: **AM Break**

10:30 – 10:45 AM: **Another Look at Drape Net for Protecting Apples Against BMSB damage.**

Jim Walgenbach, and Steve Schoof (NC State University)

10:45 – 11:00 AM: **Monitoring Ambrosia Beetles in New Jersey Orchards.**

Kaitlin Quinn (Rutgers)

11:00- 11:15 AM: **A Meta Analysis of Attract and Kill Efficacy in Agriculture.**

Kyle Bekelja (VA Tech), Kelsey Benthall (Ridge Quest Inc.), Kevin Cloonan (USDA-ARS), Alyssa Lucas (FL Dept of Ag and Consumer Services), Elizabeth Rowen (UC Riverside), & Emily Althoff (U of Minn), Layne Leake (U of Missouri), William R. Morrison III (USDA-ARS), Tracy Leskey (USDA-ARS), and Kevin B. Rice (VA Tech)

11:15 AM: Entomology Adjourn to Business Meeting

Pathology: Moderator: Kari Peter

9:15-9:30 AM: **Fear the FOM: Update on *Fusarium* Wilt of Blackberry in NC.**

Jamie Lanzalotto, Aaron Weber, Melissa Munoz, and Sara Villani (NCSU)

9:30- 9:45 PM: **How Do I Make an Agricultural Water Risk Assessment?**

Carol Allen (UMD)

9:45 – 10:00 AM: **Weeds as Hosts to *Colletotrichum* Species Affecting Strawberry.**

Leah Fronk (PSU Extension)

10:00 – 10:15 AM: **Harvest Bins Harbor Viable Inoculum that can be Reduced using Novel Sanitation Methods to Manage Blue Mold Decay of Apples.**

Dianiris Luciano-Rosario (Oak Ridge Inst. for Science and Education, USDA-ARS), Johanny Castro (PSU), Kari Peter (PSU FREC), Jorge Fonseca (USDA-ARS), Verneta L. Gaskins (USDA-ARS), and Wayne M. Jurick (USDA-ARS).

10:15 – 10:30 AM: **AM Break**

10:15 -10:30 AM: **Southern Blight: A New Threat to Pennsylvania Apple Growers.**

Cameron Mehalek, and Kari Peter (PSU)

10:30-10:45 AM: **Plant Defense-Related Gene Induction by *Methylobacteria* Towards Biocontrol of Fire Blight in Apples.**

John Bennett (USDA-ARS Appalachian Fruit Research Station), Gage Shepherd (USDA-ARS Appalachian Fruit Research Station), Breyn Evans (USDA-ARS Appalachian Fruit Research Station), Kari Peter (PSU FREC), and Tamara Collum (USDA-ARS Appalachian Fruit Research Station).

10:45 -11:00 AM: Alternative Management Strategies for Fire Blight in Apple using Biopesticides.

Aaron Weber, Aleksander Tako, and Sara Villani (NCSU)

11:15 AM: Plant Pathology Adjourn to Business Meeting

12:15 PM: Lunch

1:30 PM: Adjourn