

# 96<sup>th</sup> Cumberland – Shenandoah Fruit Workers Conference

*December 2<sup>nd</sup>-4<sup>th</sup>, 2020*

Via Zoom, Hosted by Virginia Tech, AHSAREC, Winchester, VA

## CONFERENCE AGENDA

### Wednesday, December 2:

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|---------------|--|
| 8:45 - 9:00   | Online Orientation   |
| 9:00 - 9:10   | Call to Order  |
| 9:10 - 10:10  | Call of the States   |
| 10:10 - 10:30 | Call of the Industry   |
| 10:30 - 11:00 | Plenary Session<br><b>Everyday's a learning day – Farm survival in the age of COVID.</b><br><i>Robert Black, Apple grower of the Year, Catoctin Mountain Orchard<br/>Thurmont, Maryland.</i> |
| 11:00 - 11:15 | BREAK  |
| 11:15 - 12:15 | Business Meeting   |
| 12:15 - 1:15  | <b>Lunch</b>   |
| 1:15 – 5:15   | Starting Sequential Sessions<br>Horticulture, Entomology, Plant Pathology  |
| 1:15 - 3:45   | Horticulture Session   |

### Thursday, December 3:

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| 8:30 - 2:30 | Entomology Session |
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### Friday, December 4:

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| 8:30 - 12:30 | Plant Pathology Session |
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**Sequential Sessions Agenda**  
**Wednesday, December 2 - Horticulture**

- 1:15 – 1:30      **Enhancing Apple Fruit Size with 6-BA**  
*Krittika Tonapi (University of Georgia), Tom Kon (North Carolina State University), Anish Malladi (University of Georgia)*
- 1:30 – 1:45      **Enhancing Apple Fruit Size with 6-BA**  
*Krittika Tonapi (University of Georgia), Tom Kon (North Carolina State University), Anish Malladi (University of Georgia)*
- 1:45 – 2:00      **Effects of NAA, AVG, and Ethephon on Xylem Function Preharvest Fruit Drop in 'Red Delicious' Apples.**  
*Jimmy Larson, Tom Kon, Chris Clavet (North Carolina State University)*
- 2:00 – 2:15      **You are Making me Blush: Comparison of Reflective Fabrics on Red Fruit Color Development of 'Fuji'**  
*Tom Kon, Chris Clavet (North Carolina State University)*
- 2:15 – 2:30      **Assessing the Effect of Reflective Groundcovers on Fruit Quality of High Value Apple Cultivars in the Mid-Atlantic**  
*Marcarena Farcuh (University of Maryland)*
- 2:30 – 2:45      **Using Ethephon for Bloom Delay in Peach and Sweet Cherry**  
*Sherif Sherif, Jianyang Liu, Tabibul Islam, Sangeeta Sapkota, (Virginia Tech AHSAREC), Timothy Artlip (ARS-USDA, AFRS)*
- 2:45 – 3:00      **Effect of Timing of Pneumatic Defoliation on Canopy Light Distribution and Red Fruit Color of Apple**  
*Jim Schupp, Melanie Schupp, Catherine Lara (Penn State Fruit Research and Extension Center)*
- 3:00 – 3:15      **Break**
- 3:15 – 3:30      **Effects of Hydrogen Cyanamide on Bud Break and Global Gene Expression in Low-Chill Peach**  
*Lisa Tang (USDA-ARS, AFRS), Shweta Chhajed, Thomas Colquhoun, Mercy Olmstead, James Olmstead, Vashisth Tripti (University of Florida)*
- 3:30 – 3:45      **A comparison of using the 'Ferri' version of the fruitlet growth rate model and the Malusim app to predict fruit set in 2020 of Gala, Honeycrisp, Empire and Pazazz apples at the UMass Cold Spring Orchard in Belchertown, MA.**  
*Jon Clements (University of Massachusetts Extension)*

**Sequential Sessions Agenda**  
**Thursday, December 3 – Entomology**

- 8:30 – 8:45      **Insecticide Mesh as a Border Control for Adult Spotted Lanternfly**  
*Katarzyna Madalinska, Anne Nielsen (Rutgers University)*
- 8:45 – 9:00      **What do Enhanced Pheromone Trap Lures Tell Us About Oriental Fruit Moth Populations in Mating Disruption and Non-Disrupted Orchards?**  
*Jim Walgenbach, Steve Schoof (North Carolina State University), Greg Krawczyk (Penn State University), Adriana Escudero (IRTA, Lleida, Spain), Delors Bosch*
- 9:00 – 9:15      **Potential Brown Marmorated Stink Bug Chemical Cues Used by the Samurai Wasp**  
*Hillary Peterson, Greg Krawczyk, Jared Ali (Penn State University), Elijah Talamas (FL Dept of Agriculture & Consumer Services)*
- 9:15 – 9:30      **Brown Marmorated Stink Bug Phenology in Two Ecoregions of North Carolina: Mountains vs Coastal Plain**  
*Emily Ogburn, Thomas Ohmen, Jim Walgenbach (North Carolina State University)*
- 9:30 – 9:45      **2020 Spotted Lanternfly Update: Spread & Management in Vineyards**  
*Heather Leach, Lauren Briggs, Michela Centinari (Penn State University)*
- 9:45 – 10:00     **Effects of Land Use on the Natural Enemies of Brown Marmorated Stink Bug (*Halyomorpha halys*)**  
*Robert McDougall (Rutgers University), Dalton Ludwick, Tracy Leskey (USDA-ARS, AFRS), Greg Krawczyk (Penn State University), Chris Bergh (Virginia Tech University, AHSAREC), Yong-Lak Park (West Virginia University), Anne Nielsen (Rutgers University)*
- 10:00 – 10:15     **Break**
- 10:15 – 10:30     **Are Captures of *Trissolcus japonicus* Correlated with Captures of its Host, *Halyomorpha halys*?**  
*Jared Dyer (Virginia Tech University, AHSAREC), Elijah Talamas (FL Dept of Agriculture & Consumer Services), Tracy Leskey (USDA-ARS, AFRS), Chris Bergh (Virginia Tech University, AHSAREC)*
- 10:30 – 10:45     **Changes in Brown Marmorated Stink Bug Populations in and Near Orchards Based on Pheromone-Baited Trap Counts**  
*John Cullum, Tracy Leskey (USDA-ARS, AFRS)*
- 10:45 – 11:00     **Deciphering the Seasonal Host Use Patterns of *Halyomorpha halys* on Select Deciduous Plants**  
*Whitney Hadden (Virginia Tech University, AHSAREC), Tracy Leskey (USDA-ARS), Chris Bergh (Virginia Tech University, AHSAREC)*

- 11:00 – 11:15      **Redistributing *Trissolcus japonicus* in Virginia: 2020 Update**  
*Chris Bergh (Virginia Tech University, AHSAREC), Ashley Edwards (Virginia Cooperative Extension), Cynthia MacCrae, Nate Brandt (Virginia Tech University, AHSAREC)*
- 11:15 – 11:30      **Developing a Degree Day Model of Spotted Lanternfly (*Lycorma delicatula*) Female Reproductive Development**  
*Julie Urban, Dennis Calvin, John Rost, Brian Walsh (Penn State University)*
- 11:30 – 11:45      **Assessing Deployment Strategies of Spotted Lanternfly Traps for Improved Detection and Effective Monitoring**  
*Caitlin Barnes, Laura Nixon (USDA-ARS, AFRS), Heather Leach, Julie Urban (Penn State University), Tracy Leskey (USDA-ARS, AFRS)*
- 11:45 – 12:00      **Spotted Lanternfly - 2020 Monitoring and Management Trials**  
*Edwin Winzeler, Henry Rice, Greg Krawczyk (Penn State University)*
- 12:00 – 1:00      **Lunch**
- 1:00 – 1:15      **Suitability of Host Plants for Nymphal and Adult *Lycorma delicatula*: Lab and Field Studies**  
*Laura Nixon, Sharon Jones, Tracy Leskey (USDA-ARS, AFRS)*
- 1:15 – 1:30      **Effects of Blueberry & Cranberry Pest Management Practices on Honeybee Hive Health**  
*Chelsea Abegg, Dean Polk, Cesar Rodriguez-Saona (Rutgers University)*
- 1:30 – 1:45      **Efficacy of Attract-and-Kill Strategies to Manage Blueberry Insect Pests**  
*Cesar Rodriguez-Saona, Pablo Urbaneja-Bernat (Rutgers University), Agenor Mafra-Neto (ISCA Inc.)*
- 1:45 – 2:00      **Update 2020-Oriental Beetle-Still A Hidden Issue**  
*Carrie Mansue, Dean Polk, Cesar Rodriguez-Saona (Rutgers University)*
- 2:00 – 2:15      **Recent Management Challenges with Codling Moth and Oriental Fruit Moth**  
*Greg Krawczyk, Henry Rice, Edwin Winzeler (Penn State University)*
- 2:25 – 2:30      **Recent Progress in Preventing *Xylosandrus germanus* Ambrosia Beetle Infestations in NY Apple Orchards**  
*Arthur Agnello, Dave Combs (Cornell University)*

**Sequential Sessions Agenda**  
**Friday, December 4 – Plant Pathology**

- 8:30 – 8:45      **Tracking Spatial Distribution of *Erwinia amylovora* During an Epidemic Through a Gala Orchard**  
*Suzanne Slack, George Sundin, (Michigan State University)*
- 8:45 – 9:00      **Summarizing Five Years of *Erwinia amylovora* Population Dynamics on Apple Flower Stigmas**  
*Suzanne Slack (Michigan State University), Kellie Walters (University of Tennessee), Cory Outwater, Emily Pochubay (Michigan State University)*
- 9:00 – 9:15      **An Update on Pesky Problems in Pennsylvania: Marssonina Blotch and Rapid Apple Decline**  
*Kari Peter (Penn State University)*
- 9:15 – 9:30      **Fungicide and Nutrient Field Tests Against Grape Diseases, Winchester, 2020**  
*Mizuho Nita, Abdullah Nahiyani, (Virginia Tech University, AHSAREC)*
- 9:30 – 9:45      **Predicting Apple Bitter Rot: Modeling the Impact of Wetness and Temperature, and Thoughts on the Effects of Fungicides**  
*Phillip Martin, Teresa Krawczyk, (Penn State University), Fatemeh Khodadadi, Srdjan Acimovic (Cornell University), Kari Peter (Penn State University)*
- 9:45 – 10:00      **A Comparison of Four On-Site Weather Stations and One Virtual Weather Service as Data Sources in 2020 for the Apple Scab Infection Period Model at the UMass Cold Spring Orchard in Belchertown, MA.**  
*Jon Clements (University of Massachusetts Extension), Daniel Cooley (University of Massachusetts Stockbridge School of Agriculture)*
- 10:00 – 10:15      **Break**
- 10:15 – 10:30      **Survey of Pathogenic Nematodes on Wine Grapes in Georgia**  
*Katherine Martin, Phillip Brannen, Paul Severns, Ted Holladay (University of Georgia)*
- 10:30 – 10:45      ***Rhizobium vitis* ARK-1 Inhibits Grapevine Crown Gall Formation Against Higher Cell Density of Tumorigenic Isolates and Over Wide Application Timings**  
*Abdullah Nahiyani (Virginia Tech, AHSAREC), Akira Kawaguchi (National Agricultural and Food Research Organization, Japan), Mizuho Nita (Virginia Tech University, AHSAREC)*
- 10:45 – 11:00      **Efficacy of Fungicides for Grape Powdery Mildew Control in the Presence of a Fungicide-Resistant *Erysiphe necator* Population in Georgia**  
*Brooke Warres, (University of Georgia), Tara Neill, Walt Mahaffee (USDA-ARS HCRL, Corvallis, OR), Marin Brewer, Phillip Brannen (University of Georgia)*
- 11:00 – 11:15      **Efficacy and Crop Safety of Minimal-, Moderate-, and High-Input Disease Management Systems for Pierce's Disease Resistant Hybrids**  
*Shane Breeden, Phillip Brannen (University of Georgia)*

- 11:15 – 11:30      **Survey of Incidence and Quick Detection of Phony Peach Disease in the Southeast**  
*Kendall Johnson, Phillip Brannen (University of Georgia), Clive Bock (USDA-ARS, Southeastern Fruit and Tree Nut Research Station)*
- 11:30 – 11:45      **Brown Rot Management and Incorporation of New Fungicides in Georgia Peach Spray Programs**  
*Phillip Brannen, Shane Breeden (University of Georgia)*
- 11:45 – 12:00      **Efficacy Trials From the Hudson Valley 2020: Apple Scab, Cedar Apple/Quince Rust, SB&FS, Bitter Rot, Fire Blight**  
*Srđan Aćimović, Christopher Meredith, Divya Raskonda, Katie Lam, Recardo Delgado Santander (Cornell University)*
- 12:00 – 12:15      **Same But Different: Colletotrichum Species Causing Apple Bitter Rot in New York, Pennsylvania & Virginia - Distribution, Habitat, Management**  
*Srđan Aćimović (Cornell University), Phillip Martin (Penn State University), Fatemeh Khodadadi (Cornell University), Teresa Krawczyk (Penn State University), Jonathan González (Cornell University), Emily Giroux, Guillaume Bilodeau (Pathogen Identification Laboratory, CFIA, Canada), Keith Yoder (Virginia Tech University), Kari Peter (Penn State University)*
- 12:15 – 12:30      **Efficacy of Mefentriflunazole Against DMI Sensitive and Resistant Isolates of Various Pathogens**  
*Guido Schnabel (Clemson University), Hideo Ishii (Japan)*
- 12:30                **Adjourn**