STRONGER



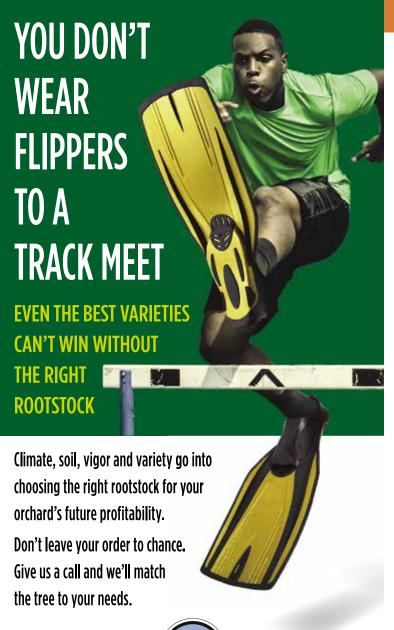
TOGETHER



Washington State
Tree Fruit Association

118th Annual Meeting & NW Hort Expo

WENATCHEE, WASHINGTON DECEMBER 5, 6 & 7, 2022



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t almost every turn, the tree fruit industry is facing unprecedented challenges. From extreme weather and overregulation to labor shortages and rising input costs, growers are struggling to stay afloat. Individually, any one of these pressures can threaten the viability of even the best grower.

When these challenges converge at the same time, the situation can be even more overwhelming. As the saying goes, "Quantity has a quality all its own." Fortunately, this principle works in both directions. When we work collectively, new solutions become possible, and our industry can beat the odds.

The Washington State Tree Fruit



Jared England 2022 WSTFA Annual Meeting Committee Chair

Association Annual Meeting and Northwest Hort Expo (Hort Show) is evidence of the value and energy that is built when growers, packers, marketers, researchers and suppliers come together each year. Ideas are shared and spawned. Partnerships are made and strengthened. Problems are explored and steps toward solutions are taken. This year's theme, "Stronger Together," emphasizes the importance of individuals from all parts of the industry coming together as a team to ensure that Washington remains the preeminent producer of tree fruit.

Building on our theme, this year's show will kick off with an overview of the dynamics of the broader agricultural sector from economist Damian Mason. Many of the challenges we are facing are shared by other farm commodities, and there are lessons to be learned from their successes and failures.

We will then hear from a keynote speaker who knows something about teamwork, Steve Largent. The Seahawks' Hall of Fame receiver will share how the National Football League — with its diverse and competitive players, teams and coaches that battle against each other week after week — comes together to create one of the world's most successful sports franchises. I believe there are many parallels with our own industry, in which fierce competition can actually result in a strong and unified brand and success for all. Largent will also share lessons in competition and cooperation from his time in Congress and as CEO of a technology industry trade association.

Our 2022 Batjer speaker is longtime tree fruit cooperative extension agent and leader Karen Lewis of Washington State University. It is in our research programs that our industry's collaborative efforts are most robust and long-standing, and Lewis will share her perspectives on past successes, current priorities and future opportunities.

And all of this is just during the morning of the first day!

Each session will address key topics of interest or concern that are shared across the industry. Moreover, these sessions are focused on ways to strengthen individual producers and our entire industry. This includes horticultural updates to understand problems, new research, products, technology and techniques to solve those problems, or hands-on training so that you and your team can properly implement these solutions.

Tuesday sessions are also packed with great content. The all-day Spanish-language session on Tuesday will cover everything from

Continued next page

WSTFA Annual Meeting & NW Hort Expo

horticultural topics to orchard management techniques. The always-popular Research News Flash, formerly known as the poster session, will cover updates from the latest studies by our research community. Wednesday sessions will expand on horticultural updates and training that qualify attendees for pesticide credits. We will also take a deeper dive into workplace standards and programs with the Washington State Department of Labor and Industries, looking at the impact of recent rule changes on ag operations.

Vendors in the trade show will also demonstrate the latest products, technology, equipment and services that support efficient and cutting-edge operations. Due to the overwhelming interest in participating in this year's show, vendor booths will occupy the first floor of the convention center as well as the Town Toyota Center. A free shuttle will provide transportation between the two locations.

During this year's show, I challenge each grower, each vendor and each packer to create at least one new connection. These personal relationships are not only the foundation of productive business collaborations and partnerships, they are also what ties us all closer together as an industry. It is this network of relationships, even among competitors, that makes collective action possible on the challenges that threaten us all.

When you consider how interconnected our industry really is, and how our influence is felt across many other industries (i.e. banking, health care, construction, etc.), it becomes apparent that agriculture — and the tree fruit industry in particular — is truly the backbone of our region's economy. As we seek to help our neighbors understand how our success is their success, this model of competition combined with teamwork can help those who may have been indifferent to our challenges become allies in overcoming them.

I invite and encourage you to join your peers in Wenatchee at this year's Hort Show. Come see how you can make yourself and this industry stronger.

Jared England

2022 WSTFA Annual Meeting Committee Chair

WSTFA Mission Statement

The WSTFA's mission is to add value to all segments of the tree fruit industry through educational programs and conferences, statistics to enable growers and packers to plan for market opportunities, and engagement in Washington State government affairs to help address the market uncertainty driven by government policy.

MEETING ETIQUETTE

- *Cell phones must be turned off or on silent mode in session rooms.
- *Please take conversations unrelated to the program outside the session rooms.
- *Arriving on time to sessions will avoid entering/leaving session rooms when a speaker is presenting.





Ag is constantly evolving. So are we.

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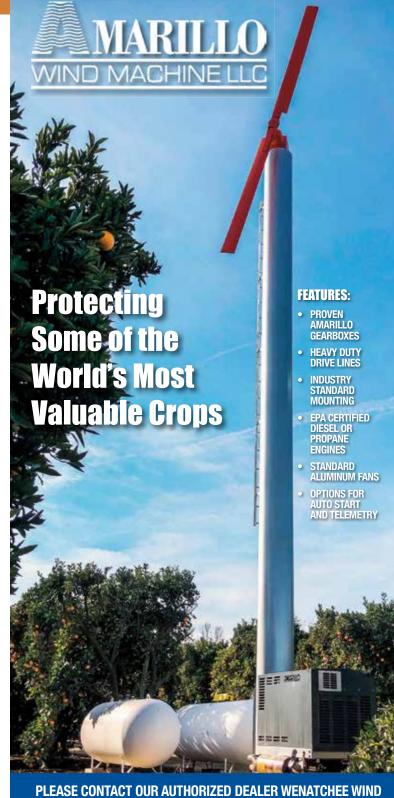
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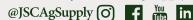
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WASHINGTON STATE TREE FRUIT ASSOCIATION (WSTFA) 118TH ANNUAL MEETING AND NW HORT EXPO

Wenatchee, Washington, December 5, 6 & 7, 2022
Wenatchee Convention Center & Town Toyota Center
Annual Meeting Sessions: Monday, Tuesday & Wednesday
NW Hort Expo/Trade Show: Monday, Tuesday & Wednesday
Spanish Language Session: Tuesday

EARLY PACKET PICK-UP HOURS

Sunday: 2:00 p.m. – 6:00 p.m. Lobby of the Wenatchee Convention Center

Annual Meeting Registration Hours

Sponsored by Banner Bank

Monday & Tuesday: 6:30 a.m. – 5:00 p.m. **Wednesday:** 7:30 a.m. – 12:00 p.m.

SPANISH SESSION REGISTRATION

Sponsored by G.S. Long Co.

Tuesday: 6:30 a.m. – 9:00 a.m.

SPANISH LANGUAGE SESSION 1 Tuesday 8:00 a.m. – 12:00 p.m. SPANISH LANGUAGE SESSION 2 Tuesday 1:30 p.m. – 5:00 p.m. Wenatchee Convention Center, Grand Apple Ballroom South

See Pages 28-30

MONDAY

9:00 	STRONGER TOGETHER 8:00 a.m. – 12:00 p.m. Wenatchee Convention Center, Grand Apple Ballroom South	
10:00	See Page 18	
Noon 1:00	WSTFA Leadership Luncheon, 12:00 p.m. – 1:00 p.m., Wenatchee Convention Center, Grand Apple Ballroom North	
2:00 3:00	WHAT TO MAKE OF THE WEATHER 1:30 p.m. – 5:00 p.m. Wenatchee Convention Center, Grand Apple Ballroom South	
4:00 5:00	See Page 20	

TUESDAY

UNDERGROUND

8:00

WAEF Alumni Breakfast, 7:00 a.m., Hilton Garden Inn Communicating Success, 9:30 a.m. – 11:30 a.m., Wenatchee Convention Center, Blossom Room (See Page 24)

THREE SESSIONS:

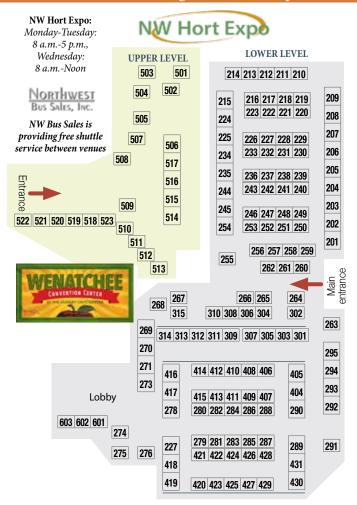
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11:00	See Page 24		•••		onvention Center, Ballroom South	
Noon					See Page 26	
1:00						
2.00	SET THE VISION	- From	••••	RESEARCH	News Flash	
2:00	HEALTHY SOILS	то тне		1:30 p.m 5	5:00 p.m.	
3:00	PERFECT FRUIT				Convention Center	;
	1:30 p.m. – 5:00 p		••••	Grand Apple	Ballroom North	
4:00	Numerica Perforn	ning Arts Center		. See	e Pages 34–38	
5:00		See Page 32			J	

WSTFA Banquet, 6:00 p.m. – 9:00 p.m. Wenatchee Convention Center Grand Apple Ballroom

WEDNESDAY

8:00					
	LCD/X UPDA	ГЕ		WORKPLACE	RULES
9:00	8:30 a.m 12:	00 p.m.		8:30 a.m 12	:00 р.т.
10:00	Wenatchee Cor	vention Center	,		nvention Center,
10:00	Grand Apple B	allroom South		Grand Apple B	Sallroom North
11:00		See Page 40			See Page 42
Noon					

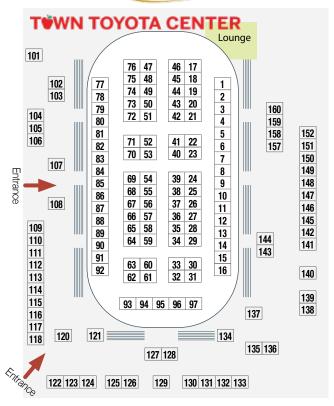
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NW Hort Expo



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STRONGER TOGETHER

8:00 A.M. - 12:00 P.M.

Session Sponsor: Northwest Farm Credit Services

Session Manager: Jared England, General Manager, Manson Growers,

Annual Meeting Chair

Location: Wenatchee Convention Center, Grand Apple Ballroom South

8:00 Welcome – Jared Engli	ıd, 2022 Annual Meeting C	hairman
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8:10	Adapting to a Changing Policy Climate - Jon DeVaney, President,
	Washington State Tree Fruit Association

9:00 U.S. Agricultural Economic Overview – Damian Mason

10:00 Remarks from Keynote Speaker Sponsor – The Northwest Seaport Alliance

10:05 Competitors Uniting for Common Goals – Steve Largent, Former Professional Athlete & Member of Congress

11:00 42nd Batjer Address – Karen Lewis, Program Unit Director, Washington State University Extension Agriculture and Natural Resources

WSTFA LEADERSHIP LUNCHEON

12:00 P.M. - 1:00 P.M.

Session Sponsor: KeyBank

Host: Jon DeVaney, President, Washington State Tree Fruit Association

Guest Speakers: Senator Kevin Van De Wege, D-24th and Representative Jacquelin Maycumber, R-7th

Location: Wenatchee Convention Center, Grand Apple Ballroom North

Separate ticket required

BOARD & COMMISSION NOMINATIONS

Location: Wenatchee Convention Center, Grand Apple Ballroom South

1:15 Board & Commission Nominations



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WHAT TO MAKE OF THE WEATHER

1:30 P.M. - 5:00 P.M.

Session Sponsor: AgroFresh

Session Manager: Marty Olsen, Olsen Brothers Ranches
Location: Wenatchee Convention Center, Grand Apple Ballroom South

- 1:30 Pacific Northwest Weather Cliff Mass, Professor, University of Washington Department of Atmospheric Sciences
- 2:30 Weather Modeling on Tree Fruit Kirti Rajagopalan, Assistant Professor, Washington State University
- 3:15 Weather and DAS (Decision Aid System) Chad Kruger, Wenatchee Research Center Director, WSU; Lav Khot, AgWeatherNet Director, WSU; and David Crowder; Decision Aid System Director, WSU
- 4:00 Abiotic/Biotic Stress Management Panel: Grower and Research

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WAEF ALUMNI BREAKFAST

7:00 A.M.

Sponsor: Washington Apple Education Foundation

Host: Faviola Barbosa, Washington Apple Education Foundation

Location: Hilton Garden Inn

By Invitation Only, Contact Faviola Barbosa

PESTICIDE CREDITS SESSION

10:00 A.M. - 11:00 A.M.

Location: Town Toyota Center

10:00 Apple and Cherry Mildew: Fungicide Portfolio Updates and Product Usage – English/Spanish translations, Dean Kutschkau, BASF; Nathan Blake, Bayer

COMMUNICATING SUCCESS

10:30 A.M. - 11:00 A.M.

Location: Wenatchee Convention Center, Blossom Room

10:30 Vestaron - The Power of Synthetics. The Safety and Sustainability of Biologicals. - Curious about new insecticides? Vestaron is using the Power of Peptides to provide bio-similar solutions on the conventional pome and stone fruit acre. Spear-Lep and Spear-T offer a 0-Day PHI, are safe to pollinators and beneficial insects, is MRL exempt AND is a brand new MOA - Group 32. We call ourselves a bio-similar insecticide because our efficacy is similar to traditional synthetic insecticides, with the safety profile of a biological

11:30 Semios - Get Your Connection Flowing – Learn how to make the most of your water management data to get better crop from each drop - Ben Smith, Semios Lead Irrigation Technical Support

Underground

8:00 A.M. - 12:00 P.M.

Session Sponsor: Valent

Session Managers: Bernardita Sallato, Tree Fruit Extension Specialist, WSU & Molly McIlquham, Extension Coordinator, WSU SHI

Location: Numerica Performing Arts Center

- 8:00 Introduction Bernardita Sallato, Tree Fruit Extension Specialist, WSU
- 8:05 Soil Health Molly McIlquham, Extension Coordinator, WSU SHI
- 8:20 Nutrient Availability and Uptake Bernardita Sallato, Tree Fruit Extension Specialist, WSU
- 8:40 Rootstock ... Lee Kalcsits, Assistant Professor, WSU
- 9:00 Irrigation Methods and Impact on Tree Fruit Victor Blanco, Postdoctoral Research Associate, WSU
- 9:20 Break
- 9:30 Microbiome Mediated Apple Tree Adaptation to Replant Disease in Well-Established Orchards Ajeethan Nivethika, PhD Candidate, Dalhousie University





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Tuesday, December 6

10:00 Nitrogen Dynamics and Nutrient Budgets in Four Orchard Groundcover Management Systems – Amaya Atucha, Associate Professor, University of Wisconsin, Madison

10:30 Understanding How Biochar Impacts the Growth and Development of Horticultural Crops – Amit Dhingra Texas A&M University, Texas (30 min)

11:00 Research Panel

MAKING SENSE OF THE RECENT FEDERAL REGULATORY CHANGES

8:00 A.M. - 9:30 A.M.

Session Sponsor: Larson Gross

Session Managers: Kate Tynan, Senior Vice-President, Northwest Horticultural Council

Location: Wenatchee Convention Center, Grand Apple Ballroom South

8:00 Costs of the H-2A Program: Potential for Ag Labor Reform – Kristi Boswell, Counsel, Alston & Bird, and Kate Tynan, Senior Vice President, NHC

8:45 No More Water Testing? The Evolution of of FDA Regulation of Water- Donna Pahl Clements, Produce Safety Alliance Coordinator, and Kate Tynan, NHC

HERE WE GO AGAIN, OUTSIDE INVESTMENT INTO TREE FRUIT

9:30 A.M. - 10:30 A.M.

Session Sponsor: Larson Gross

Session Managers: Jared England, General Manager, Manson Growers Location: Wenatchee Convention Center, Grand Apple Ballroom South

9:30 Panel – Moderator: Jared England, General Manager, Manson Growers:

LEADERSHIP AND MENTAL HEALTH 10:30 A.M. - 12:00 P.M.

Session Sponsor: Larson Gross

Session Managers: Jacqui Gordon Nuñez, Director of Training, Education & Member Services, Washington State Tree Fruit Association

Location: Wenatchee Convention Center, Grand Apple Ballroom South

- 10:30 Session Introduction Jacqui Gordon Nuñez, Director of Training, Education & Member Services, Washington State Tree Fruit Association
- 10:35 Five Ways your Leadership is Costing you Money Layci Nelson, CEO/Founder, Transcend Leadership Collective
- 11:20 Addressing Agricultural Stress and Cultivating Resilience Julie
 Jesmer, Farm Stress and Suicide Prevention Specialist; Emily Whittier,
 Farm Stress and AgrAbility Coordinator, Washington State University



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A lot changes from year to year in our industry, but one thing remains the same - our commitment to you, our Grower Customers.

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SPANISH LANGUAGE SESSION I

8:00 A.M. - 12:00 P.M.

Session Sponsor: FirstFruits

Session Managers: Jeff Robison, Education & Technical Assistance Supervisor, WSDA; Maria Hernandez, Foreman, Washington Fruit & Produce; Jacqui Gordon Nuñez, Director of Training, Education & Member Services, WSTFA

Location: Wenatchee Convention Center, Grand Apple Ballroom South

- 8:00 Bienvenida e introducción / Welcome and Introduction Jeff Robison, Education & Technical Assistance Supervisor, Washington State Department of Agriculture, Maria Hernandez, Foreman, Washington Fruit & Produce
- 8:15 Cómo hacer una calibración y configuración efectiva / Effective
 Calibration and Configuration Flor Servin, Education & Outreach
 Services Supervisor, Washington State Department of Agriculture
- 9:05 El rol de las mujeres en la agricultura (Panel de discusión) / The Role of Women in Agriculture (Panel Discussion) Moderator:
 Ofelio Borges, WSDA. Panelists: Ana Navarro, McDougall & Sons,
 Maria Hernandez, Washington Fruit & Produce, Rosa Perez, Stemilt
 Growers, Shanna Lee Wright, Washington Fruit & Produce
- 9:55 Receso/ Break
- 10:05 Trata de personas en la agricultura/ Human Trafficking in Agriculture
 Violeta Vega, Program Coordinator, Businesses Ending Slavery &
 Trafficking (BEST)
- 10:55 Ley de horas extras para trabajadores agrícolas/ Overtime Rule for Agricultural Workers
- 11:25 El cambio climático y su efecto en la agricultura / Climate Change and Its Effect on Agriculture Sonia Hall, Research Associate, Washington State University
- 11:55 Almuerzo / Lunch

-IMPACTING-LIVES

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Washington Apple Education Foundation

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SPANISH LANGUAGE SESSION II

1:30 P.M. - 5:00 P.M.

Session Sponsor: Stemilt Growers

Session Managers: Jeff Robison, Education & Technical Assistance Supervisor, Washington State Department of Agriculture; Maria Hernandez, Foreman, Washington Fruit & Produce; Jacqui Gordon Nuñez, Director of Training, Education & Member Services, WSTFA

Location: Wenatchee Convention Center, Grand Apple Ballroom South

2:00 Liderazgo: La Clave del Éxito en Agricultura / Leadership skills: the Key to Success in Agriculture - Gabriel Muñoz, Empowered Communication

3:00 Receso/ Break

3:15 Hablemos del estrés en agricultura y cultivemos resiliencia/ Addressing Agricultural Stress and Cultivating Resilience -Esmeralda Mandujano, Western Regional Agricultural Stress Assistance Program (WRASAP), Washington State University

4:10 Respiradores Usados en Agricultura / Respirators Used in Agriculture - Angel Sanchez, Washington State Department of Agriculture

PESTICIDE CREDITS SESSIONS

1:00 P.M. - 3:00 P.M.

Location: Town Toyota Center

- 1:00 Codling Moth Management: Pesticide Portfolio Updates, Mating **Disruption and Lure Baited Traps** – English/Spanish translations, Dr Rob Curtiss Postdoc, Apple and Pear Entomology; Dan Snipes, Corteva
- 2:00 Applications for Psylla Managing Resistance and Identifying Mode of Action: Pesticide Portfolio Updates and IPM on Pears - English/ Spanish translations, Aaron Gale, Nichino America; Robert Orpet, WSU Tree Fruit Research Professor Pear IPM; John Aigner, Ph.D.,

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FROM HEALTHY SOILS TO THE PERFECT FRUIT

1:30 P.M. - 5:00 P.M.

Session Managers: Drew Zabrocki, General Manager, Semios & Kevin Grass, Semios

Location: Numerica Performing Arts Center

1:30 Shared Industry Problems & What The Heck We Can Do About It – 5-min Lightning Rounds:

- · If Soil Could Talk
- · Orchard Automation to Stave Off Labor Costs
- · Frost: The Cold-Hearted Killer
- · So Many Spreadsheets, So Little Time

Snowball	Fight! Battle	e For What	Matters Most
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Grower Panel Discussion: The Good, the Bad & the Ugly

3:00 Break

- 3:15 Collaboration Drives Optimal Results Keynote: Soil to Supply Chain Delivering Insights, Not Just More Data
 - Grower Case Study How AgTech Saved an 80-acre Grower Thousands
 - Packer/Grower Case Study From Rough Starts to Proven Value to Growers
 - · Supply Chain Case Study Insights to Drive Better Returns

4:00 Connecting Consumers to the Farm

4:15 Bringing It All Together & A Roadmap for Our Future – A Candid Fireside Chat with Industry Experts

Q&A

Key Takeaways & Next Steps



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- Obliquebanded Leafroller
- Oriental Fruit Moth



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RESEARCH NEWS FLASH

1:30 P.M. - 5:00 P.M.

Session Manager: Frank Zhao, Professor, WSU & Marcella Galeni, Scientific Assistant, WSU

Location: Wenatchee Convention Center, Grand Apple Ballroom North

1:30 Introduction and Housekeeping

EXTENSION

- Washington Tree Fruit Research Commission 2022 Highlights Paige Beuhler, Washington Tree Fruit Research Commission
- 1:40 2022 Update: Additional WA 38 Harvest and Storage Considerations -Manoella Mendoza, Washington Tree Fruit Research Commission
- 1:45 Pesticide Residue Studies on Washington Apples and Cherries -Gerardo Garcia, Washington Tree Fruit Research Commission

PEST MANAGEMENT

- How Well is Codling Moth MD Working? Alan L. Knight, Instar Biologicals
- 1:55 Investigating the Use of Herbicides and Oviposition Hosts of C. M. Reductus to Manage X-Disease - Abigail Clarke, Washington State University - TFREC
- 2:00 Questions

NEW AG TECHNOLOGY

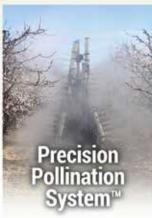
- 2:05 **Technology Collaborations to Catalyze Automation of Washington** Tree Fruit Systems - Ines Hanrahan, Washington Tree Fruit Research Commission
- 2:10 Transition of Ozone Applications From Lab to Field: Does It Work? - M. Jacob Schrader, Washington State University - Department of Biological Systems Engineering - Center for Precision and Automated Agricultural Systems
- 2:15 **Crop Load Estimation With Mobile Phone Technology –** *Stuart* Goatley, Washington Tree Fruit Research Commission
- 2:20 **Effectiveness of Heat Stress Mitigation Practices in Apple Orchards** on Microclimate, Fruit Surface Temperature and Fruit Quality -Basavaraj Amogi, Washington State University
- 2:25 Little Cherry Disease Detection Using Volatile Headspace Sampling Techniques - Gajanan S. Kothawade, Washington State University -Department of Biological Systems Engineering
- 2:30 A New Sorting Tool for Sun-Stressed Apples Using Hyperspectral Imagers - Rene Mogollon, Washington State University - TFREC



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RESEARCH NEWS FLASH SCHEDULE

- 2:35 Quantification of Modern Apple Orchard Effects on Meteorological Variables Karisma Yumnam, Washington State University Department of Biological Systems Engineering Center for Precision and Automated Agricultural Systems
- 2:40 Evaluation of Various Sensors for Field-Specific Weather-Driven Frost Mitigation System Srikanth Gorthi, Washington State University Department of Biological Systems Engineering Center for Precision and Automated Agricultural Systems
- 2:45 Questions

TREE FRUIT BREEDING

- 2:50 Utilizing a Non-Destructive Approach to Improve Consistency of Phase 2 Fruit Samples in the Washington State University Apple Breeding Program India Cain, Washington State University TFREC WSU Apple Breeding program
- 2:55 Improving Cherry Fruit Set With PGRs Rainier Peters, Washington State University IAREC

POLLEN AND POLLINATION

- 3:00 Promoting Pollinators in Pears Chris McCullough, Washington State University - TFREC
- 3:05 Strategies to Improve Fruit Set in WA 38 Orchards Bernardita Sallato, Washington State University IAREC
- 3:10 Assessing the Role of Intra-Cluster Floral Position on Apple Fruit Quality – Sarah Gruntmeir, Washington State University - IAREC
- 3:15 Ouestions
- 3:20 5 minute break

TREE FRUIT PHYSIOLOGY

- 3:25 New Thinning Chemistries for Washington Apples Tory Schmidt, Washington Tree Fruit Research Commission
- 3:30 Conversion of Tall Spindle 'Brak Fuji' Apple Trees to a Narrow Tree
 Wall with Hedging and Root Pruning Thiago De Botton Campbell,
 Washington State University TFREC
- 3:35 Impact Of Leaf Removal on Spur and Tree Health Orlando Howe, Washington State University - TFREC
- 3:40 Assessing Fruitlet Nutrient Test as a Tool for Managing Sweet Cherry Post Storage Quality Mehdi Sharifi, Agriculture and Agri-Food Canada
- 3:45 Mitigating Calcium-Related Disorders in Apples: The Role of Plant Growth Regulators – Juan Munguia, Washington State University -IAREC
- 3:50 Questions



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RESEARCH NEWS FLASH SCHEDULE

ENVIRONMENTAL STRESS PHYSIOLOGY

- 3:55 Netting Retraction to Improve Red Color in Apple Noah Willsea, Washington State University - TFREC
- 4:00 Machine Learning-Based, Station-Specific 10-day Weather Forecasting for Improved Grower Decision Support – Matthew D Cann, Washington State University - IAREC - AgWeatherNet
- 4:05 A Multi-Trait Approach to Understanding Genotypic Variation in Sweet Cherry Cold Tolerance and Dormancy – Jonathan Magby, Washington State University - IAREC

POSTHARVEST

- 4:10 Machine Learning Applications in Postharvest Research Heidi Hargarten, USDA-ARS Tree Fruit Research Lab
- 4:15 Early Prediction of Sunscald on "Granny Smith" Apples Using
 Hyperspectral Images Rene Mogollon, Washington State University
 TFREC
- 4:20 Questions

PLANT PATHOLOGY AND SAFETY

- 4:25 Update on Efficacy of Numerous Organic Materials for Postharvest Rots Control Achour Amiri, Washington State University TFREC
- 4:30 Evaluation of Biopesticides for the Control of Erwinia amylovora in Apple and Pear Aina Baró, Washington State University TFREC
- 4:35 Characterization of Nectriaceae sp. of Pome Fruit in the PNW Joseph Mellow, Washington State University TFREC
- 4:40 Early Detection of Major Quarantine Postharvest Pathogens of Apple and Pear in the U.S. Pacific Northwest Arild Arifin, Washington State University TFREC
- 4:45 Fate of Listeria innocua on Fuji Apples With Commercial Wax
 Coatings Franklin Gordon Nuñez, Washington Tree Fruit Research
 Commission
- 4:50 Research to Address Patulin Contaminations in Processed Apples in Washington State Mustafa O. Jibrin, Washington State University TFREC
- 4:55 Questions

WSTFA BANQUET

6:00 P.M. - 9:00 P.M.

Master of Ceremonies: Doug England Banquet Sponsor: Good Fruit Grower Hors d'Oeuvres Sponsor: Wilbur Ellis

Location: Wenatchee Convention Center Grand Apple Ballroom

Separate ticket required

6:00 Reception

7:00 Dinner & Awards



LCD/X UPDATE

8:30 A.M. - 12:00 P.M.

Session Sponsor: CORTEVA Agriscience

Location: Wenatchee Convention Center, Grand Apple Ballroom South

- X-Disease Strains and Alternate Hosts Scott Harper, Plant Pathology, Clean Plant Center Northwest
- 9:00 Weedy Hosts of X-Disease Vectors – Rodney Cooper, Research Leader/ Research Entomologist, USDA-ARS
- X-disease Vector Identification, Distribution, and Management -Adrian Marshall, Postdoctoral Researcher, WSU
- 10:00 Grower Panel

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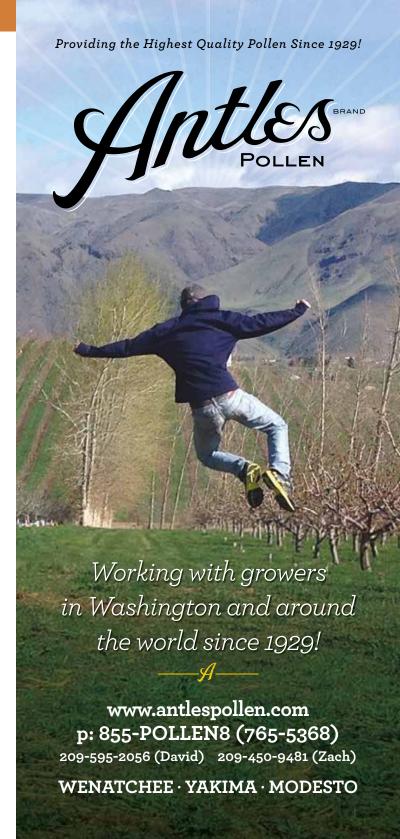
WORKPLACE RULES: WHAT'S NEW, WHAT'S COMING, AND HOW TO ADAPT 8:30 A.M. - 12:00 P.M.

Session Sponsor: PGIM

Session Manager: Ranie Haas, Director of Regulatory & Industry Affairs, WSTFA; Bre Elsey, Principal, B.E. Strategic

Location: Wenatchee Convention Center, Grand Apple Ballroom North

- 8:30 Welcome and Introductions - Ranie Haas, Director of Regulatory & Industry Affairs, WSTFA
- 8:40 Taking Leave - LNI Staff
 - · Sick Leave
 - · HELSA and Workers Comp
- Ag Overtime and Break Calculations LNI Staff
- 10:15 Smoke Rule LNI Staff
 - · Emergency Rule and What is in the Draft Permanent Rule
 - · Thresholds and PPE
- 10:30 Heat Rule LNI Staff
 - · Emergency Rule and What is in the Draft Permanent Rule
 - · Thresholds, Training Industry, Acclimation, and Breaks
- 11:00 Industry Panel: Caution Flags and Hacks Moderator: Ranie Haas, Director of Regulatory & Industry Affairs, WSTFA, Panelists: Sarah Wixson, Attorney, Stokes Lawrence; Corwyn Fischer, Assistant Safety & Claims Director, Washington Farm Bureau; Chafeka Abdellatif, Director of Human Resources, Kershaw Companies



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