

# NORTH AMERICAN STRAWBERRY SYMPOSIUM



## March 7, 2023

- 9:00 NASGA Board Meeting
- 11:00 NASGA Research Foundation Meeting
- 11:30 Registration
- 12:00 Poster Set Up
- 12:00 Exhibitor Set Up

## Afternoon Workshops – 1:00-2:30 & 3:00-4:30

Time	Topic	Chair
1:00	<b>Strawberry Insect Pest Management</b>	Sarah Zukoff
3:00	<b>Strawberry Disease Management</b>	Gerald Holmes, Chris Greer
1:00	<b>Robotic Support in Production and Harvesting</b> A hands-on robotics workshop	John Lin
3:00	<b>Let's small talk sustainability and science: Workshop session for small-scale growers</b> Inviting all small-scale growers to participate in this discussion workshop to share their vision, needs and interests in the area of sustainable strawberry production. Fellow scientists and faculty will take notes and attempt to address these needs in future grant proposals. Let's learn from each other, network and grow together. Don't forget to bring your thinking cap! Snacks provided.	Amanda McWhirt, Jayesh Samtani
1:00	<b>Weed Management in Strawberry Production</b>	Oleg Daugovish, Steve Fennimore
3:00	<b>Substrate Production</b>	Shawn Mallen
1:00	<b>Strawberry Breeding</b> A breeder workshop focusing on selection protocols and strategies, experiences in breeder collaborations, brainstorming to solve each other's problems. The format will be an open discussion generated by a series of questions to breeder participants.	Kim Lewers
3:00	<b>Strawberry Genetics and Genomics</b> A workshop to share with the industry some results from a joint SCRI grant.	Steve Knapp, Vance Whittaker
7:00	<b>Reception and National Strawberry Pageant</b>	

## March 8 General Session

Time	Topic	Speaker	Origin of speaker
8:00	The California Strawberry Industry: current trends and future prospects	Gerald Holmes	Cal Poly
8:40	USDA-ARS investment in strawberry research	Kim Lewers	USDA-ARS, Beltsville
9:00	Update from the Agriculture Canada strawberry breeding program	Beatrice Amyotte	Agriculture Canada

9:20	Genetic Gains Underpinning the Strawberry Green Revolution: Where to Next?	Steve Knapp	University of California, Davis
9:40	DAF Research on Managing Strawberry Diseases in Australia	Apollo O. Gomez	Australia Department of Agriculture and Fisheries
10:00	40 Years of Strawberry Breeding– 40 Years of Hydroponic Strawberry Production	Johan Aelterman	Consorzio Italiano Vivaisti S.C. A R.L.
10:20	Break		
10:40	The Challenges and Opportunities of Growing Strawberries Throughout Sub-Saharan Africa"	Gavin Linsley-Noakes	Professional Horticultural Consulting (Pty) Ltd
11:00	Moving Past the Promo Videos: How our Robots Picked 100k Berries in One Day	Peter Ferguson	Advanced Farm
11:20	Biostimulant Application for Improving Organic Strawberry Production	Xin Zhao	University of Florida
11:40	Improving Phenological and Yield Traits of Strawberry by Inclusion of Phosphorus and Potassium	Nadia Bostan	University of California, Davis
12:00	Lunch and NASGA annual meeting		
2:00	One year into the USDA-SCRI Strawberry Propagation Project	Mark Hoffman	North Carolina State University
2:20	Recent Advances and Trends in the Soilless Production of Strawberries	Brandan Shur	North Carolina State University
2:40	The Role of SWD and Leak Rot Management in Late Season Fruit Quality.	Mark Bolda	University of California, Watsonville
3:00	Break		
3:20	Impact of a Soil-Applied Thyme Oil Containing Fungicide on Strawberry Yield and Disease Abundance.	Aaron J. Cato	University of Arkansas
3:40	Tracing latent <i>Colletotrichum spp.</i> Infections on Strawberry from Runner Tips to Fruiting Fields	Jayesh Samtani	Virginia Tech University
4:00	Controlling Soilborne Pathogens Through the Combination of Steam and Alternative Chemicals	Emma Volk	North Carolina State University
4:20	New Developments on Verticillium Wilt Management in the Central Coast of CA	Shashika S. Hewavitharana	Cal Poly
4:40	Assessing UV-C as a Potential Tool for Arthropod Control in CA Strawberry	Jose Alverado Rojas	Cal Poly

### March 9: Track 1

Time	Topic	Speaker	Origin of speaker
	<b>PEST MANAGEMENT</b>		
8:00	Effects of Plastic Mulch Color and Number of Drip Lines on Incidence of <i>Macrophomina root rot</i> .	K. A. Blauer	Cal Poly

8:20	Leaf Spots of Strawberry Caused by a Novel Species of <i>Pseudomonas</i>	Marin, Marcus Vinicius	University of Florida GCREC-IFAS
8:40	Sporodochia Formed by <i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> : Occurrence and Implications	Christine Jade Dilla-Ermita	University of California, Davis
9:00	Lygus Bug Detection Using Machine Learning for Pest Management	Abbas Atefi	California Strawberry Commission
9:20	Genomic Diversity in <i>Fusarium oxysporum</i> f. sp. <i>fragariae</i> ; Implications for Effective Development of Host Resistance	Peter Henry	USDA-ARS
9:40	Population Composition of <i>Neopestalotiopsis</i> Species in Ontario	Melanie L. Kalischuk	University of Guelph
10:00	BREAK		
	<b>PLANT BREEDING AND GENETICS</b>		
10:20	An Overview of UF Strawberry Cultivars and Breeding Methods	Vance Whitaker	University of Florida
10:40	How We Breed Strawberries at California Berry Cultivars, LLC	Kyle VandenLangenberg	California Berry Cultivars, LLC
11:00	Recent Advances in Breeding for Resistance to <i>Neopestalotiopsis</i> sp. and <i>Macrophomina phaseolina</i> in Strawberry	Elissar Alam	University of Florida
11:20	Breeding Strawberries for USDA Hardiness Zone 3b	Brian Smith	University of Wisconsin-River Falls
11:40	High-Throughput Field Phenotyping and its Application in the UF Strawberry Breeding Program	Cheryl Dalid	University of Florida
12:00	Lunch		
1:30	Molecular Breeding Tools and Applications to Improve Strawberry Varieties	Seonghee Lee	University of Florida
1:50	Haplotype-Phased Genomes Shed Light on Domestication-Associated Heterosis and Reshaping of Genetic Variation in Octoploid Strawberry	Mitchell J Feldmann	University of California, Davis
	<b>Production and Fruit Quality</b>		
2:10	Deep Learning Based Strawberry Runner Detection	Mojtaba Ahmadi	California Strawberry Commission – Cal Poly
2:30	BREAK		
3:00	Effect of Shade Levels and Pre Transplant Vernalization Duration on Production of Strawberry	Nadia Bostan	University of California, Davis
3:20	Influence of Shade Cloth on Two Strawberry ( <i>Fragaria xananassa</i> ) Cultivars Grown in Texas	Thayne Montague	Texas Tech University
3:40	Accelerating Microbiome for Sustainable Management Solutions for Strawberry	Tika Adhikari	North Carolina State University

4:00	Fumigation Practices to Eliminate <i>Neopestalotiopsis spp.</i> from Strawberry Fields in Georgia	David Shane Curry	University of Georgia
4:20	Strawberry Virus Update	Dimitre Mollov	USDA-ARS, Corvallis, OR

### March 9: Track 2

Time	Topic	Speaker	Origin of speaker
8:00	Blending Conventional and Bio-fungicides into Spray Programs for Disease Control, Reduced Residues, and Resistance Management	Eric Tedford	Summit Agro
8:30	How to Optimize Biological Pesticides in California Strawberry Production	Taylor Hoover	ProFarm Group
9:00	Strategic Disease Management Practices for Nursery Production	Natalia Peres	University of Florida
9:30	Influence of Different Nutrient Management Programs on Organic Strawberry Production.	Xin Zhao	University of Florida
10	Break		
10:30	Impacts of Fall Planting Date and Fall Row Cover Use on Southeastern Strawberry Production	Amanda L McWhirt	University of Arkansas
11:00	The Role of Successful Lygus Suppression in Maintaining Yield and Fruit Size	Mark Bolda	University of California, Watsonville
11:30	Demonstration and Implementation of Cost-Effective UV-C Technology for California Strawberry Pest Management	John Lin	Cal Poly
12:00	LUNCH		
1:30	Evaluation of Producing Strawberries on a Table Top Strawberry System in California	Scottie Nelson	Veritas Substrates
2:00	Using Field Data to Improve Labor Costs	Harrison Steed	PickTrace
2:30	Strawberry Transplant Steam Treatment to Control Cyclamen Mite	Erica Pate	University of Guelph
3:00	Break		
3:30	Effect of Soil Inoculum Density and Drought Stress on Fusarium Wilt and Charcoal Rot Disease Progress on Strawberry.	<u>Akif Eskalen</u>	University of California, Davis
3:50	Resistance status of <i>Tetranychus urticae</i> and <i>Lygus hesperus</i> in California Strawberries	Kiley Jensen	Cal Poly
4:10	Re-examining Strawberry Nutrition and its Impact on Fruit Yield and Quality	Rob Mikkelsen	Yara
4:30	Measuring Temperature Inversions to Optimize Response to Risk of Frost and Spray Drift	Mark Battany	University of California San Luis Obispo

### Farm Tour

#### Friday March 10 - 7:30 – 4:30

We Will be visiting 2-4 farms plus touring the Cal Poly Strawberry Center. More details to be listed on the NASGA website shortly.