



November 17 – 21, 2019 Tentative Program

Day 1

11/17/2019 6:00 – 8:00 p.m. **Welcome reception**

Day 2

11/18/2019	8:00 a.m.	Coffee-Pastries
	8:30 a.m.	Welcome - Sam Hutton and Gary Vallad
	8:45 a.m.	Rob Gilbert/Nick Place (IFAS Reps Invited)
	9:00 a.m.	Michael Schadler - Tomato Trade and Tariffs
	9:30 a.m.	Keynote: Greg Martin, Using Natural Variation and CRISPR to Understand and Improve Tomato Disease Resistance
	10:10 a.m.	Break
	10:40 a.m.	Manipulation of Tomato Architecture to Allow for Mechanically Harvested Fresh-market tomatoes - Tong Geon Lee, University of Florida/IFAS Gulf Coast REC
	11:00 a.m.	A Comparison of Whole-Genome Sequence Data Analysis Platforms to Study Solanaceae Genomes - Gurleen Kaur, University of Florida/IFAS Gulf Coast REC
	11:20 a.m.	Modifying Wild Tomato Introgressions to Improve the Horticultural Type of Tomatoes with Genetic Control of Insects and Transmitted Virus - Martha Mutchler-Chu, Cornell University
	11:40 a.m.	Challenges in Improving Vintage Tomato Varieties using Marker Assisted Selection and Background Genome Selection - Barbara Liedl, West Virginia State University
	12:00 noon	Lunch
	1:00 p.m.	Keynote: Discovery, Introgression, and Pyramiding of Disease Resistance in Tomato - David Francis, The Ohio State University
	1:30 p.m.	Genetic Mapping and Multi-Environment Characterization of Early Blight Resistance Genotypic Selection in Cultivated Tomato - Taylor Anderson, Cornell University
	1:50 p.m.	Development of Co-Dominant SCAR Markers for Detection of the <i>Pto</i> , <i>Tm-2²</i> , <i>I-3</i> , and <i>Sw5</i> Genes in Tomato - Jianbo Zhang, North Carolina State University
	2:10 p.m.	Tomato Doubled Haploid Plant Production? Yes, We Can. Wessel Holtman,

- 2:30 p.m. A Calcium Binding Protein in Xanthomonads is Involved in Elicitation of Hypersensitive Response - Shaheen Bibi, University of Florida/IFAS Dept. of Plant Pathology
- 2:50 p.m. Evaluating Associations Between *Xanthomonas perforans* Genetic Variations and Tomato Production Chain - Jeannie Klein-Gordon, University of Florida/IFAS Dept. of Plant Pathology
- 3:10 p.m. Molecular Phylogenetic Analysis of Three *Alternaria* spp. Collected from Tomato and Potato - Tika Adhikari, North Carolina State University
- 3:30 p.m. Association of Pathogenic Races and Fungal Effectors with Vascular Wilt of Tomato caused by *Fusarium oxysporum* f. sp. *lycopersici* in Greenhouse - Tika Adhikari, North Carolina State University
- 3:50 p.m. Characterization of *Corynespora cassiicola* Isolates from Tomato Reveals a Genetically Diverse Pathogen Population across Florida - Katia Xavier, University of Florida/IFAS Gulf Coast REC
- 4:10 p.m. Poster Session
- Behavioral Assays of Seven ORMI Approved Insecticides on the Biocontrol Generalist Predator, Green Lacewing, *Chrysoperia rufilabris* - Shyann Stewart, West Virginia State University
 - Fruit Morphology and SNP Diversity of Three Vintage Tomato Varieties from Different Seed Companies - Sandhya Gautam, West Virginia State University
 - Screening RIL populations for resistance to bacterial wilt - John Smeda, University of Florida/IFAS Gulf Coast REC
 - TBD
Jessica Chitwood-Brown, University of Florida/IFAS Gulf Coast REC
 - Tomato Yellow Leaf Curl Virus Resistance in *Solanum pimpinellifolium* is Conferred by the *Ty-1/Ty-3* Locus and an Additional Resistance Locus (loci) - Upinder Gill, University of Florida/IFAS Gulf Coast REC
 - Identification and Mapping of Late Blight Resistance QTLs in the Wild Tomato Accession PI 224710 (*Solanum pimpinellifolium* L.) - Majid Foolad, The Pennsylvania State University Dept. of Plant Science
 - Understanding Mechanism of EFR Based Bacterial Wilt Resistance in Tomato - Sanju Kunwar, University of Wisconsin-Madison
 - Mapping Quantitative Trait Loci for Bacterial Canker Resistance in Tomato - Su Subode,
 - Using *Solanum galapagense* as a Source of Drought Resistance through Introgression Breeding and Grafting for Tomato Improvement - Sean Fenstemaker,
- 7:00 p.m. Tomato Crop Germplasm Committee meeting (closed)
- 9:00 p.m. End of Day 2

Day 3

11/19/2019

- 8:00 a.m. **Coffee-Pastries**
- 8:30 a.m. **Keynote:** Discovery of Bacterial Resistance Traits and Generation of a Tomato Variety with Immunity to *Xanthomonas*, *Pseudomonas* and *Ralstonia* - Alex Schultink, Fortiphyte
- 9:00 a.m. High-throughput Screen Identifies Resistance against Bacterial speck in Wild Tomato - Jennifer Lewis,
- 9:20 a.m. Characterization of Tomato (*Solanum lycopersicum*) Accessions for Resistance to Phylotype I and Phylotype II Strains of *Ralstonia solanacearum* species complex (RSSC) under high temperature - Sanju Kunwar, University of Wisconsin-Madison
- 9:40 a.m. Characterization and Mapping of Resistance to Target Spot (*Corynespora cassiicola*) in Wild Tomato Accessions - Edgar Sierra, University of Florida/IFAS Gulf Coast REC
- 10:00 a.m. **Break**
- 10:30 a.m. Genetic Characterization of Late Blight Resistance in *Solanum pimpinellifolium* Cccession PI 270443 and Deployment of Resistance in the Cultivated Tomato - Mengyuan Jia, The Pennsylvania State University
- Majid Foolad, Tomato breeding activities at Penn State
- 11:00 a.m. *In vivo* imaging of labeled *Xanthomonas* Strains Permits Quantification of Pathogen Growth and Assessment of Disease Resistance in Tomato - Eduardo Bernal,
- 11:20 a.m. Evaluation of Systemic Acquired Resistance Inducers as Alternatives to Copper to Manage Bacterial Spot of Tomato - Inga Meadows, North Carolina State University
- 11:40 a.m. Efficacy of Biorational Products against Bacterial Leaf Spot on Processing Tomatoes - Francesca Rotondo, The Ohio State University
- 12:00 p.m. **Lunch**
- 1:00 p.m. Assessing Impacts and Management Options for Stem Rot and Premature Vine Decline caused by *Fusarium falciforme*—A New Syndrome with Significant Impacts on the California Processing Tomato Industry - Cassandra Swett, University of California Davis
- 1:20 p.m. Application Matters! Telone II Provides Effective Root Knot and Potential Fusarium Wilt Control for Tomato Production in Florida --- - Gary Vallad, University of Florida/IFAS Gulf Coast REC
- 1:50 p.m. Grafted Tomatoes with Late Blight Resistance for the Organic Market - Paul Shoemaker,
- 2:10 p.m. Identifying the Genetic Basis of Fruit Pigmentation in the Tomato Wild Relative *Solanum galapagense* Accession LA1141 - Sean Fenstermaker,
- 2:30 p.m. **Keynote:** Michael Bledsoe

- 3:00 p.m. **Keynote:** Managing Tomato Brown Rugose Fruit Virus -
An Emerging Resistance Breaking Tobamovirus Infecting Greenhouse
Tomatoes Worldwide - Kai-Shu Ling, USDA- Agricultural Research
Center, U.S. Vegetable Lab
- 3:30 p.m. Paul Shoemaker, TBD
- 3:50 p.m. Roundtable Discussion
- 5:00 p.m. End of Day 3

Day 4

11/20/2019

- 8:00 a.m. **Coffee-Pastries**
- 8:30 a.m. New Tomato Hybrids Improved for Fruit Quality and Disease Resistance
at NC State University - Dilip Panthee, North Carolina State University
- 8:50 a.m. Fla. 8982, a Fusarium Wilt Race 3 and TSWV Resistant Hybrid
With Heat-Tolerant Fruit Setting - Sam Hutton, University of
Florida/IFAS Gulf Coast REC
- 9:10 a.m. Perspectives on Breeding for Flavor - Jay Scott, University of
Florida/IFAS Gulf Coast REC
- 9:30 a.m. **Keynote:** Breeding Specialty Tomatoes for Improved Quality and
Disease Resistance - Randy Gardner, North Carolina State University
- 10:00 a.m. **Break**
- 10:30 a.m. Area Reports
- 11:00 a.m. Business Meeting
- 12:00 noon **Lunch**
- 1:00 p.m. Molecular Breeding Workshop (open)
Generation and utilization of sequence data
Marker platforms and applications
Things to consider when implementing genomic selection
Genomic selection in strawberry
Panel Discussion: Perspectives from experienced breeders/pathologists
- 6:00 p.m. **Banquet**

Day 5

11/21/2019

- all day Field Tours