

**Citrus Pest and Disease Prevention Committee (CPDPC)  
Science and Technology Subcommittee Meeting**

**Meeting Minutes  
September 8, 2021**

There was a quorum of the Science Subcommittee and the following were in attendance:

**Science Subcommittee Members Present:**

Dr. Ed Civerolo	Dr. Melinda Klein	Ram Uckoo
Aaron Dillon	Dr. Etienne Rabe	Jack Williams
Dr. Subhas Hajeri		

**CDFA Staff:**

Karina Chu	Anmol Joshi	Lydia Rodriguez
Kiana Dao	Marina Kaiser	Briana Russell
Paul Figueroa	Daniel Lee	Dr. Heather Scheck
David Gutierrez	Alex Muniz	Claudia Vazquez
Victoria Hornbaker	Keith Okasaki	Jennifer Willems
Laura Irons	David Phong	Amelia Wright

**Other Attendees:**

Price Adams	Rick Dunn	Margaret O'Neill
Dr. Jim Adaskaveg	Jim Gorden	Curtis Pate
Jim Cranny	Dr. Jonathan Kaplan	Cressida Silvers
Natalie DeAngelo	Marcy Martin	Keith Watkins
Holly Deniston-Sheets	Mark McBroom	Sandra Zwaal

All attendees participated via webinar.

**Opening Comments**

Dr. Etienne Rabe called the meeting to order at 2:01 p.m. He informed the subcommittee that Dr. Monique Rivera will be leaving her position with the University of California, Riverside, at the end of the year and therefore agenda item three, the trap analysis work plan, would not be discussed. He announced that the main agenda item would be the sweet orange scab (SOS) working group update, including a presentation of data by Dr. Jim Adaskaveg and a potential proposal for the full committee. Also, the scientific review of the southern California huanglongbing (HLB) program would not be discussed at this meeting. Price Adams explained that Nuffer, Smith, Tucker is assisting Dr. Rabe in establishing an independent scientific advisory panel to evaluate the efficacy of the program. Dr. Rabe and Victoria Hornbaker will finalize a list of recommendations for Secretary Karen Ross' review and approval. Panel nominations should be emailed to Ms. Adams or Ms. Hornbaker.

### **Ethyl Formate Registration**

Jim Cranny from the California Citrus Quality Council (CCQC) provided an update on ethyl formate registration. CCQC is assisting the registrant to identify application rates, treatment timing, and packinghouses interested in using ethyl formate for grove treatments. CCQC then plans to work with the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Services (APHIS) to get approval for international trade.

### **Trap Analysis Work Plan**

N/A

### **Sweet Orange Scab Working Group Update**

Dr. Adaskaveg presented an overview of SOS, a fungal plant pathogen caused by *Elsinoë australis*. The presentation introduced SOS symptoms, its history, life cycle, transmission, and status in California. He stated that spray treatment programs applied eight weeks after bloom have proven highly effective at controlling SOS.

In response to questions posed by the subcommittee members, Dr. Adaskaveg provided the following insights:

- The main concern is determining if SOS is living endemically as a yeast or causing wind scar symptoms. Frequent detections indicate a continuous supply of spores despite the various southern California environments; and
- Fungicides are more costly but highly successful in limiting detections in surveys and preventing disease.

Keith Okasaki summarized the SOS-regulated areas and the implications of an SOS statewide quarantine versus an interior quarantine. The California Department of Food and Agriculture (CDFA) has detected SOS through surveys conducted from 2016 – present. Accordingly, CDFA established a regulated area with a five-mile radius around detections based on requirements established in the federal order for SOS to prevent the intrastate and interstate spread of the pathogen. Regulated areas have been established pursuant to CDFA's delegated authority granted by the USDA federal order.

Mr. Okasaki underscored that SOS regulatory requirements do not supersede Asian citrus psyllid or HLB quarantine requirements. An SOS detection results in an 800-meter delimitation survey and the establishment of a regulated area with a five-mile radius. If an interior quarantine is established, the regulated areas would be transitioned to quarantine areas. Under a statewide quarantine, growers would not need to remove stems and leaves to ship fruit to a packinghouse. However, the more than 85 packinghouses throughout the state would be greatly impacted as they need to comply with SOS protocols for domestic shipments and exports to Australia and New Zealand. Fruit from Arizona would not require SOS mitigation to be brought into California.

Nurseries would also be greatly impacted. The federal order requires an approved structure with a solid roof to prevent rain disbursement. The solid roof must be water-resistant but there are no specifications on roofing material as long as the criteria is met.

Positive pressure in the structure does not negate the roof requirement. Only nurseries with an approved structure may ship citrus interstate. Nurseries, without an approved structure would be limited to shipping within the contiguous SOS quarantine or to non-citrus producing state under a Limited Permit. A statewide quarantine would likely result in costly structural changes for more than 35 nurseries.

Mr. Cranney stated that it would be more advantageous for the industry if an SOS state interior quarantine were established and suggested the following actions:

- Continue researching the SOS pathogen
- Research the efficacy of packinghouse treatments to limit redundant actions
- Request APHIS allow tarping in place of stem and leaf removal for growers
- Propose the use of a propagation standard to detect SOS rather than the polymerase chain reaction method

Propagation standards, fungicide treatments, and surveys offer pathways for growers to be removed from the regulated area if SOS is no longer detected.

Mr. Cranny and Dr. Adaskaveg will provide a formal proposal at the next SOS working group meeting scheduled for September 15<sup>th</sup>. If approved, CDFA may call a short meeting with the Science Subcommittee to evaluate the proposal before going to CPDPC.

### **Scientific Review of Southern California HLB Program**

N/A

### **Other Items and Adjournment**

Dr. Rabe reminded everyone to send names or recommendations for science advisory panel members to Ms. Adams or Ms. Hornbaker. Dr. Rabe adjourned the meeting at 3:34 p.m.