

**California Citrus Pest and Disease Prevention  
Risk Based Survey Working Group Meeting**

**Meeting Minutes  
May 25, 2023**

**Interested Parties**

Karina Chu*	Dr. Daniel Lee*	Dr. Etienne Rabe*
Dr. Robert Clark	Dr. Weiqi Luo*	Briana Russell*
John C. Gless*	Mark McBroom*	Cressida Silvers*
Jim Gorden*	Keith Okasaki*	Leigh Sitler*
Dr. Subhas Hajeri*	Margaret O'Neill*	Dr. Ram Uckoo*
Dr. Melinda Klein*	David Phong*	

\*Participated via Webinar

**Call to Order, Roll Call, Introductions**

The Risk Based Survey Working Group Meeting was called to order by Dr. Ram Uckoo at 9:03 a.m. Dr. Uckoo welcomed the Risk-Based Survey (RBS) Working Group members and members of the public participating online.

**Discuss Weight Factors**

Dr. Weiqi Luo explained the RBS model used to determine high risk areas in central California is based on detections in southern California. Dr. Luo added it is difficult to determine if ACP detections in central California are from existing ACP populations or other means of introduction.

Dr. Uckoo asked what inferences can be drawn from RBS results in southern California and applied to central California. Dr. Luo responded by explaining the southern California information provides an initial weighting for central California. Once the initial surveys in central California are complete, his team will adjust the weight factors for the following year. Dr. Etienne Rabe commented that the Science Advisory Panel suggested the Citrus Pest and Disease Prevention Committee deemphasize RBS in the core area of southern California and focus on the residential and commercial interfaces. Keith Okasaki explained that the Citrus Pest and Disease Prevention Division is still required to perform delimitation survey and tree removal around detection sites. This working group will work on deemphasizing RBS around those areas.

Jim Gorden suggested dedicating no less than 50 percent effort to RBS around buffer zones between residential and commercial citrus. Dr. Uckoo stated that the RBS working group recommend the science subcommittee shift no less than 50 percent of RBS effort to the buffer zone survey within one mile or 1,600 meters of commercial citrus in southern California.

The working group began editing the “Risk Factor Weighting – Southern California Expert Consultancy” spreadsheet. Factors like organic citrus, farmers markets, packinghouses, ACP density, plant nurseries, etc., were given weight evaluations. Dr. Melinda Klein and Dr. Luo stated the ACP density in southern California data is an estimate. Despite the bias and without an ideal ACP density map, the information is still beneficial to the RBS model. The different RBS factors were given the following weights with each factor’s relative percent of the total in parenthesis:

- ACP density: 1.0 (27%)
- Organic citrus: 0.3 (8%)
- *Candidatus Liberibacter asiatica* (CLas+) locations: 1.0 (27%)
- Packinghouses: 0.2 (5%)
- Flea markets and swap meets: 0.4 (11%)
- Introduction Risk (census travel): 0.6 (16%)
- Plant nursery & big box stores: 0.1 (3%)
- Transportation Corridor (previously named Citrus Road): 0.1 (3%)

Mr. Okasaki noted that there is a large difference in risk between flea market and farmers markets. Farmers markets are more regulated and therefore less likely to be a route for ACP introduction. Flea markets and swap meets present a much higher risk due to vendors moving citrus fruit and plans throughout the state. Dr. Luo evaluates the RBS model twice a year and makes changes once a year to present to the committees.

The working group transitioned to the “Risk Factor Weighting - Central California Expert Consultancy” spreadsheet. Mr. Gordon commented that RBS resources should be focusing on psyllid populations in central California using breeding psyllid populations as the highest area of focus. David Phong suggested CLas+ locations and ACP density should be weighted the highest and the other factors proportionally weighted after. The different RBS factors were given the following weights with each factor’s relative percent of the total in parenthesis:

- ACP density: 2 (40%)
- Organic citrus: 0.3 (6%)
- CLas+ locations: 1.0 (20%)
- Packinghouses: 0.3 (6%)
- Flea markets and swap meets: 0.4 (8%)
- Introduction Risk (census travel): 0.6 (12%)
- Plant nursery & big box stores: 0.1 (3%)
- Transportation Corridor (previously named Citrus Road): 0.3 (6%)

Mr. Phong reiterated that the weightings are relative to each other. The working group changed the formula in the spreadsheets to display the weight percentage for each factor. Mr. Phong summarized in southern California, the weighting will be evenly split between the buffer areas surrounding commercial citrus and core area RBS. Dr. Luo and Dr. Klein will meet to further discuss the weighting data. The final version of the spreadsheet will be sent to the members of the working group for review before presentation to the subcommittee.

**Other Items and Adjournment:**

The meeting was adjourned at 11:12 a.m.