California Asian Citrus Psyllid and Huanglongbing Research and Extension Summit

October 4th and 5th, 2016

UC Riverside
Highlander Union Building, Room 302S

University of California
Agriculture and Natural Resources
Organizing committee:
J.C. Chen, USDA-ARS
Matt Daugherty, UC Riverside
Kris Godfrey, UC Davis
Beth Grafton-Cardwell, UC Riverside
Mark Hoddle, UC Riverside
Neil McRoberts, UC Davis
Marylou Polek, USDA-ARS

Funding provided by
**Program at a glance**

**Day 1 – October 4th**
8 – 9 am     Breakfast
9 – 9:15     Opening remarks and introductions
9:15 – 10:20 Session 1 – Vector management
10:20 – 10:40 Break
10:40 – noon Session 1 (cont.)
Noon – 1:30  Lunch
1:30 – 3     Session 2 – Pathogen and disease detection
3 – 3:20     Break
3:20 – 5     Session 2 (cont.)
5 – 6        Poster and networking session
6 – 8pm      Dinner

**Day 2 – October 5th**
8 – 9 am     Breakfast
9 – 10:15    Session 3 – Disease management
10:15 – 10:35 Break
10:35 – noon Session 3 (cont.)
Noon – 1:30  Lunch
1:30 – 3     Concluding discussion
3 – 5pm     Tours of USDA Germplasm Repository and CDFA Biological Control Facility
Session 1: Vector biology and management

Mark Hoddle – Moderator
October 4, 2016

9:00 am – Opening remarks – Michael Pazzani (UC Riverside)

9:15 am – Strategies and constraints while managing psyllids in California – Beth Grafton-Cardwell (UC Riverside)

9:30 am – Extension and outreach efforts for ACP and HLB in California – Anne Schellman (UC ANR) & Jessica Northrup (NST)

9:50 am – Reconstructing the ACP invasion in Southern California – Matt Daugherty (UC Riverside)

10:05 am – Update on ACP biological control releases in Southern California – David Morgan (CDFA)

10:20 am - Break

10:40 am – Assessing the impact of invasive ant management on Asian citrus psyllid biological control – Kelsey Schall (UC Riverside)

10:55 am – RNAi and novel insect virus strategies targeting the Asian citrus psyllid – Yen-Wen Kuo (UC Davis)

11:10 am – Exploring the dynamic interplay between Diaphorina citri and Ca. L. asiaticus using 'omics technologies – Surya Saha (Cornell)

11:25 am – Noon – Discussion with group
Session 2: Pathogen and disease detection

Kris Godfrey – Moderator
October 4, 2016

1:30 pm – Update on the hot spot cluster analysis of Ct-values from Asian citrus psyllid samples – Dave Bartels (USDA, APHIS, CPHST)

1:45 pm – Analysis of the Texas EDT studies: What has been learned and what is happening now – Neil McRoberts (UC Davis)

2:00 pm – Early detection of HLB based on CLas-induced changes in citrus microbiota – Johan Leveau (UC Davis)

2:15 pm – Metabolomics as a high throughput early detection method of CLas in citrus – Carolyn Slupsky (UC Davis)

2:30 pm – Serological detection methods for HLB – Wenbo Ma (UC Riverside)

2:45 pm – Mass spectrometry volatile measurements for citrus greening: mail in testing on demand – Cristina Davis (UC Davis)

3:00 pm – Break

3:20 pm – The role of small RNAs in natural defense responses against HLB – Hailing Jin (UC Riverside)

3:35 pm – Pre-symptomatic HLB detection by polarized imaging technique – Ali Pourreza (UC ANR, KAREC)

3:50 pm – 5:00 pm – Discussion with group
Session 3: Disease management

Neil McRoberts – Moderator
October 5, 2016

9:00 am – Who’s on first? Review of current HLB focused research – Marylou Polek (USDA-ARS)

9:15 am – Identification and assessment of antivirulence compounds for control of HLB – Hong Lin (USDA-ARS)

9:30 am – Update on genomic research in “Candidatus Liberibacter asiaticus” and Asian citrus psyllids from California – JC Chen (USDA-ARS)

9:45 am – Development of an infectious cDNA clone of a California strain of Citrus tristeza virus for the fight against huanglongbing – James Ng (UC Riverside)

10:00 am – Advantages of RMCE transgenesis for improved citrus – James Thomson (USDA-ARS)

10:15 am – Break

10:35 am – Generating HLB resistant citrus – Chandrika Ramadugu (UC Riverside)

10:50 am – California citrus industry and USDA support projects for the rapid introduction of potentially HLB tolerant germplasm in to California – Georgios Vidalakis (UC Riverside)

11:05 am – Report on the external review of the Citrus Research Board funded ACP and HLB research – Melinda Klein (CRB)

11:20 – Noon – Discussion with group
The summit will be held on the UC Riverside campus in room 302S of the Highlander Union Building (HUB) located near the center of campus. A searchable campus map can be found here: [https://campusmap.ucr.edu/](https://campusmap.ucr.edu/)

Wireless internet will be available to all attendees on UCR’s guest network. Login information will be provided at the outset of the summit.

**Poster session**
An informal poster and networking session will be held prior to dinner on the first day of the summit. Please contact Matt Daugherty (mattd@ucr.edu) for details.

**Registration**
A $55 registration fee is requested for all participants. The registration link is: [https://webpay.ucr.edu/webpay/HOME](https://webpay.ucr.edu/webpay/HOME)  No onsite registration will be available.

**Transportation from Ontario Airport**
Ontario International Airport is the closest airport to UC Riverside. Super Shuttle has regular service between Ontario airport and UCR for approximately $40: [www.supershuttle.com](http://www.supershuttle.com)  Advance reservations are preferred.

For directions from other Southern California airports or other transportation options in the area, see: [https://www.ucr.edu/about/directions.html](https://www.ucr.edu/about/directions.html)

**Parking**
Summit attendees can purchase $5 daily parking passes for Lot 24 (P24 in the attached map). Parking attendants will be present to provide directions to the Highlander Union Building (HUB). University, state, and federal vehicles can park for free in campus lots.
Lodging

The map below shows the location of hotels, which range between ¾ and 2 ½ miles from the UCR campus. Most of those listed offer a government rate.

Downtown Riverside (approximately 2 ½ miles from campus)
A. The Mission Inn: 3649 Mission Inn Ave. 951-784-0300. *No govt. rate
B. Hyatt Place: 3500 Market St. 951-321-3500.
C. Marriott Riverside at the Convention Center: 3400 Market St. 951-784-8000.

Near campus (15-20 minute walk to campus)
D. Comfort Inn: 1590 University Ave. 951-683-6000.
E. Courtyard Riverside UCR: 1510 University Ave. 951-276-1200.
F. Dynasty Suites: 3735 Iowa Ave. 951-369-8200.
G. Motel 6: 1260 University Ave. 951-784-2131. *No govt. rate
Facility tours

At the conclusion of the summit on October 5th, tours will be available of the USDA Germplasm Repository adjacent to the UCR campus, and the CDFA’s Mt. Rubidoux Biological Control Facility near downtown Riverside.

1. The CDFA Mt. Rubidoux Biological Control Facility is located at [4500 Glenwood Dr. Riverside, CA](https://www.google.com/maps/place/4500+Glenwood+Dr.+Riverside,+CA/@33.9587218,-117.3952872,18z/data=!4m5!3m4!1s0x80f5a2a22d2e0f9:0xc83e3b04e17ebe75!8m2!3d33.9587218!4d-117.3931017), approximately 3 miles west of campus on Martin Luther King Blvd., which turns into 14th St. Carpooling is encouraged as parking is limited. Park in the gravel lot marked “P”, then walk to the conference room in building “F”.

   ![Map of UCR campus with tour locations](image)

   The tour will describe mass-rearing and release efforts for the two ACP parasitoid species in urban Southern California.

2. The USDA ARS National Clonal Repository for Citrus & Dates is located off of Canyon Crest Drive, as you leave campus. The gate will be open (arrow G). Follow road to the facility and park (P) either outside the office or along the road. We will visit inside the headhouse first before going out to the Citrus Variety Collection.
Understand how the USDA partners with University breeding, evaluation and CCPP programs; see how citrus plant tissue is prepared for cryo-preservation; visit the UC-Givaudan Citrus Variety Collection and collect a microbiome sample.