



INTERNATIONAL CONGRESS ON CITRUS NURSERIES

**RIVERSIDE & VISALIA CONVENTION CENTER,
CALIFORNIA, US
SEPTEMBER 29 - OCTOBER 6, 2022**

HOSTED BY

THE INTERNATIONAL SOCIETY OF CITRUS NURSEYMEN &
THE CALIFORNIA CITRUS NURSERY SOCIETY



<https://iscn.co/>

<https://www.ccns.info/>

PROGRAM



PRE-CONGRESS TOURS RIVERSIDE

DAY 1 PRE-CONGRESS

Thursday, September 29th, 8:00 am – 5:00 pm

8:00 AM to 8:30 AM Meet in the lobby of the Mission Inn Hotel at 3649 Mission Inn Avenue, Riverside, CA 92501.

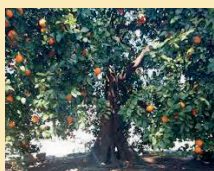
9:00 AM to 11:15 AM **UCR CITRUS CLONAL PROGRAM PROTECTION PROGRAM**
4650 14th st, Riverside CA, 92501



The CCPP provides a safe mechanism for the introduction into California of citrus varieties from any citrus-growing area of the world for research, variety improvement, or for use by citrus enthusiasts and the commercial industry of the state. This mechanism includes disease diagnosis and pathogen elimination followed by maintenance and distribution of true-to-type, primary citrus propagative material of the citrus varieties. Visit of the CCPP facilities includes in-vitro lab, greenhouses, and vertical farming. Tour by Georgios Vidalakis

11:30 AM to 1:30 PM **LUNCH [PROVIDED]** **FOOD LAB**
FOOD LAB, 3605 Mission Inn Ave, Riverside, CA 92501 in Riverside.

1:40 AM to 2:30 PM **THE PARENT WASHINGTON NAVEL ORANGE TREE**
The Corner of Magnolia and Arlington Streets, Riverside, CA.



This is the mother tree! The tree from which all navel oranges in the United States trace their roots. Planted in 1873 by a Riverside woman, the parent Washington navel orange tree has lasted 148 years and counting. Tour by Georgios Vidalakis

2:45 PM to 5:15 PM **UC RIVERSIDE GIVAUDAN CITRUS VARIETY COLLECTION**
UCR Agricultural Operations, 1060 Martin Luther King Blvd. Riverside, CA 92507



The collection is located at the UCR Agricultural Operations, located at 1060 Martin Luther King Blvd. Riverside, CA 92507. We will visit the UC Riverside Givaudan Citrus Variety Collection with Tracy Kahn and then head back to downtown Riverside where the 1st-day pre-congress tour end.

5:30 PM Return to downtown Riverside where the 1st-day pre-congress tour ends. Dinner on your own.

DAY 2 PRE- CONGRESS

Friday, September 30th, 8:00am – 5:00pm

8:00 AM to 8:30 AM Meet in the lobby of the Mission Inn Hotel at 3649 Mission Inn Avenue, Riverside, CA 92501.

10:00 AM to 12:30 PM **GLESS CITRUS NURSERY**
68461 Harrison St, Thermal, CA 92274



Gless Ranch Nursery was founded as Young's Nursery in 1954 when Dowlin Young, along with his wife and business partner, Daisy, sought to grow citrus in a quarantine-free region of California and in the favorable desert climate of the Coachella Valley. Gless Ranch now farms in both Riverside and Kern counties, with crops that include oranges, grapefruit, lemons, mandarins, avocados, dates, and figs. Young's Nursery has supplied many of the needed trees to Gless Ranch's farming operations for over half of a century.

12:45 PM to 1:45 PM **LUNCH AT THE GLESS RANCH [PROVIDED]**
Box Lunch.

2:00 PM to 3:45 PM **UCR COACHELLA VALLEY AGRICULTURAL RESEARCH STATION (CVARS)**
Thermal, CA 92274



CVARS is representative of desert agricultural production systems, focusing on citrus, date palms, and alfalfa. The research conducted at this station serves as the basis for new, improved plant varieties for agricultural and urban landscapes, as well as new, more sustainable agricultural practices to enhance crop productivity. We will visit lemon and rootstock trials. Tour by Glenn Wright

5:30 PM Return to Riverside. Dinner on your own.

DAY 3 TRANSFER DAY

Saturday October 1st

7:30 AM to 7:45 PM Hotel checkout & meeting at the lobby of Mission Inn Hotel.

8:00 AM to 5:00 PM **TRAVEL DAY TO VISALIA WITH FIELD VISIT**

This bus will take the Congress attendees to Visalia to attend the Congress meetings and Tours. During the transfer, we will have a chance to stop at **Lyn Citrus Seed**. Tour by Lyn Citrus and tour of a Gold Nugget Trial by Zachary Thomas

Lunch is provided at Hodel's country dining.

Visit rootstock trial Porterville. Nestled in the Sierra foothills of SE Porterville is a UCR Rootstock trial of Tango on more than 20 rootstocks. Planted in 2008, it is the oldest trial of this kind in CA. The farm is a historic location and one of the first developed to citrus in central California that, dates back to 1912.

Drop off at around 5 pm at the Marriott in Visalia. Dinner on your own, lots of restaurant selections a short walk from the Marriott in downtown Visalia.

DAY 4 FREE DAY

Sunday, October 2nd

ALL DAY Attendees have a free day in Visalia or book a day trip to the Central Coast, Hearst Castle, Wine Country, or Sequoia National Park.
Connect with Martha at Cruise Experts for bookings.

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Tree Seedling Nursery Containers



CONGRESS VISALIA

VISALIA CONVENTION CENTER

303 E ACEQUIA AVE, VISALIA, CA 93291



DAY 1 CONGRESS

Monday October 3rd, 2022

7:00 AM Registration, Coffee & Poster set up.

8:00 AM Formal Welcome and Congress organizer's instructions.

8:20 AM **Gabriel Youtsey, Keynote - Industry 4.0.** Gabriel (Gabe) Youtsey serves as the Chief Information Officer for UC Agriculture and Natural Resources. He provides leadership to UC ANR's information technology unit to support programmatic, educational, administrative, and marketing-oriented projects. One of his goals is to accelerate the pace of innovation and industry adoption of new technologies to create sustainable growth and improve the profitability of the CA agriculture industry. Youtsey believes that to help secure California's place as a global leader, organizations, universities, and companies will need to embrace what is called Industry 4.0., an industry embracing the internet of things, artificial intelligence, big data, and more. He will give an in-depth overview of his work and collaborative projects.



Session 1. New Technologies for long-term solutions. Moderator, Juan Ortuzar.

8:50 AM Talk 1 - Smart Production Nursery - Australia Smart Farming Project. **Wayne Parr**, Golden Grove Nursery, Australia.

9:10 AM Talk 2 - Integrating data for tree crop modeling under climate change. **Alessandro Ossola** UC Davis, USA.

9:30 AM Talk 3 - Manipulating light and temperature in the nursery to improve budbreak and growth during winter. **Rayane Barcelos Bisi**, USDA ARS Fort Pierce, Florida, USA.

9:50AM Talk 4 - Leveraging carbon-based fertilizers and microbes mediated processes to move toward a circular citriculture. **Deborah Pagliaccia**, UC Riverside, USA.

10:10 AM Talk 5 "Accelerating growth and treating disease via metabolic modeling of citrus". **James Borneman**, UC Riverside, USA. Via Zoom

10:30 AM Coffee Break & posters review.



Session 2. Varietal Management & Future Market Opportunities. Moderator, Jose Lima & Veronica Herrera.

- 10:50 AM** Talk 6 - Global Trends in Citrus Varieties. **Graham Barry**, XLnT Citrus, South Africa. Via Zoom
- 11:20 AM** Talk 7. Where is the value proposition of new cultivars? Who are they for? **Rodrigo Cruzat**. Biofrutales Consortium - Chile. Via Zoom
- 11:50 PM** Talk 8 - Developing and commercializing proprietary varieties: grape industry insights. **David Marguleas**, SunWorld.
- 12:20 PM** Lunch [Provided]



Session 3. Production & inventory management. Moderator, Heidi Cervantes.

- 1:20 PM** Talk 9 - Leaning Out your Processes. **Gerson Cortes**, Flow Vision, USA. Via Zoom
- 1:40 PM** Talk 10 - Recent innovation in the production and supply of citrus rootstock seed and scion budwood from the Citrus Foundation Block in South Africa. **Jacolene Meyer**, South Africa.
- 2:00 PM** Talk 11 - Nursery Inventory Management. **Jonathan Chislett**, Chislett Farms, Australia.
- 2:20 PM** Coffee Break & posters review.



Session 4. The latest on Nursery Automation & Nutrition Management. 5-10 minutes short talks. Moderator, Michael Frantz.

- 2:40 PM** Talk 12 - Applying Burros 'Pop-Up Autonomy' to the Citrus Nursery. **Chris Thiesen**, Burro, USA
- 2:50 PM** Talk 13 - Nutritional standard of Citrus nursery plants in Brazil. **Camilo Lázaro Medina**, Vivecitrus/Conplant. Brazil
- 3:10 PM** Talk 14 - Citrus Automation Solutions. **David Bovell**, Bellpark, USA

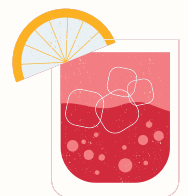


Session 4. The latest on Nursery Automation & Nutrition Management. 5-10 minutes short talks. Moderator, Michael Frantz. Continue.

- 3:20 PM** Talk 15 - Systems Approach to Citrus Growing. **Lars Jensen**, Blackmore Company, USA
- 3:30 PM** Talk 16 - Molecular effusion as an analogy to psyllid entry through a breach in protective structure. **Tom Delfino**. California Citrus Nursery Society (CCNS) Former Executive Director, USA
- 3:40 PM** **Interactive Workshop 1. Benchmarking your citrus nursery.**
Moderators Jose Lima & Nate Jameson
The moderator Jose Lima will open the workshop. He will provide an overview on the tools and concepts to understand if a citrus nursery has a solid foundation that leads to a high-quality product. Open discussion with the audience will follow.
- 4:40 PM** Closing remarks
- 4:45 PM** ISCN Board & Business Meetings. Be sure you have paid the \$125 membership fee to be a voting member.
- 5:45 PM** CCNS Board & Business Meetings. Be sure you have paid the \$125 membership fee to be a voting member.



**MONDAY, OCT. 3 FROM 5-7 P.M.
HAPPY HOUR
SPONSORED BY BURRO.AI (RSVP)**



Join the Burro team for Happy Hour, and a chance to interact with Burro's Pop-Up Autonomy at their Visalia Office.

Light appetizers (from The Planing Mill) and beverages provided. Space is limited.
RSVP by Thursday, Sept. 29 by email.

Burro Address: 720 E. Center Ave. Suite A. Visalia, CA. 93292

Parking is available Center Ave, or also on the South side of Center Ave. across from The Planing Mill / The Caskey Building.

7:00 AM Registration and Coffee

8:00 AM Welcome and Congress Organizer's Instructions

8:20 AM David Karp, Keynote - *The Modern Citrus Cultivars Descriptive Database, a new resource for citrus nurseries and researchers.*

David Karp will introduce his “Modern Citrus Cultivars Descriptive Database, MCCDD”, a guide to 900 citrus varieties that have appeared since 1980, including nomenclature, intellectual property details, breeders, pedigrees, and descriptions. David Karp is an Assistant Specialist, Department of Botany & Plant Sciences, University of California, Riverside. He started compiling a guide to modern citrus varieties as co-editor of the Register of New Fruit and Nut Cultivars, and one day, he made the fateful decision to try to list and describe them all. David is also a traveler and writer. He writes a weekly column, Market Watch, at the Los Angeles Times, and he has written articles for The New York Times, The Wall Street Journal, Gourmet, Smithsonian, Sunset, Star-Ledger and, Saveur publications. **



Session 5. Biosecurity: Disease Prevention and Nursery Evaluation. Moderator, Nate Jameson.

8:50 AM Talk 17 - Updates on a high volume citrus pathogens detection approach.

Doug Hill, Technology Evolving Solutions & **Georgios Vidalakis**, UC Riverside, USA.

9:10 AM Talk 18 - The role of the South African Citrus Improvement Scheme (CIS) in ensuring citrus biosecurity in southern Africa. **Paul Fourie**, Stellenbosch University & Citrus Research International, South Africa. Via Zoom

9:30 AM Talk 19 - Star-grading of nurseries participating in the South African citrus nursery certification scheme. **Michael Nell**, Citrus Research International, South Africa.

9:50 AM Talk 20 - The citrus nursery tree certification program in Spain. **José Cuenca**, AVASA. Spain.

10:10 AM Coffee Break & posters review.

DAY 2 CONGRESS

Tuesday October 4th, 2022



Session 6. Current and Future Trends in New Scion & Rootstocks Cultivars Globally. Moderators Mikeal Roose & Claire Thomas Federici

- 10:40 AM** Talk 21 - Disease resistant, novel citrus cultivars generated through breeding citrus with Australian limes. **Chandrika Ramadugu**, UC Riverside, USA. Via Zoom
- 11:00 AM** Talk 22 - The Citrus rootstock program of IVIA. **Maria Angeles Forner-Giner**, Instituto Valenciano de Investigaciones Agrarias (IVIA), Spain. Via Zoom **
- 11:20 AM** Talk 23 - Breeding scion and rootstock cultivars for HLB tolerance. **Fred Gmitter**. University of Florida
- 11:40 AM** Talk 24 - Rootstock propagation method and root structure – How much does it matter? **Ute Albrecht**, University of Florida, IFAS. Via Zoom
- 12:00 AM** Lunch [Provided]



Session 7. California Citrus Production. Moderator, Tom Delfino & Deborah Pagliaccia

- 1:10 PM** Talk 25 - History of citrus production in California. **Tom Mulholland**, Mulholland Citrus, USA.
- 1:30 PM** Talk 26 - The History of California's battle with ACP and HLB. **Aaron Dillon**, Four Winds Growers Nursery, USA.
- 1:50 PM** Talk 27 - Citrus Production on a Trellis. **Craig Hornung**, Hornung Brothers Farming & AC-Foods Citrus Production, USA.
- 2:10 PM** Talk 28 - Current and future trends in citrus production & markets. **Daniel Kass**, Ac Foods, USA.
- 2:30 PM** Talk 29 - Challenges Facing the California Citrus Grower. **Casey Kramer**, California Citrus Mutual, USA.
- 2:50 PM** Coffee Break & posters review.

3:10 PM Workshop - Moderators Roger Smith & Aaron Dillon

Best Nursery Management Practices, Topics may include: Water treatment, pathogen control, drainage water, record-keeping, certification of propagation material, biosecurity, sustainability.

4:40 PM Adjourn

6:00 PM Bar open from 6 pm to 9 pm
Social 6-7 pm
Dinner served at 7 [Provided]

Roger Smith introduces the keynote

Filip van Noort, Keynote - *From outdoors to indoors.*

Filip will touch on the benefits of growing in protected environments and cover some of the challenges nurseries may face going from outdoor to indoor production. He will also discuss tools that can be used for data collection on climate and watering in indoor production. Filip will share some cultivation details on vanilla, black pepper, or other crops that are typically outdoors but could benefit from being moved to indoor production.

Close remark by Nate Jameson, Briteleaf Nursery

CONGRESS TOURS VISALIA



DAY 1 TOUR

Wednesday, October 5th, 8:00 am – 5:30 pm

7:00 AM to 7:30 AM Meeting in front of Convention Center/Marriott Hotel to load bus.

8:00 AM to 10:45 AM **TREESOURCE CITRUS NURSERY**

34816 Rd 192, Woodlake, CA 93286



Part of the AC Foods family of companies, TreeSource Citrus Nursery, is the industry leader in producing Citrus Liners and potted citrus trees for farmers. AC Foods is currently operating nearly 20,000 acres of grapes, citrus, blueberries, and tree nuts across California, the Pacific Northwest, and Australia. Across AC Foods, regenerative management practices are infused into a food system to pursue their vision of a world where everyone has access to better, healthier food. Worker Safety, Systems Management, Automation, Autonomous robots, Climate controlled greenhouses, chip bud propagation, and Biological Control are all uniquely implemented at TreeSource, which has recently added more than 200,000 sq. ft. of new facilities since ISCN visited in 2014.

Visit <https://www.citrustreesource.com/>

11:00 AM to 12:30 PM **MONROVIA NURSERY**

32643 Road 196, Woodlake CA 93286



Monrovia has been a pioneer in the art of growing plants for nearly 100 years. Since founded in Southern California by Harry E. Rosedale, Sr., in 1926, they have been dedicated and obsessed with quality. They now have separate nurseries in various regions to deliver plants throughout the country.

Quality starts by selecting the best varieties of plants to grow and working with breeders from around the world to test and trial plants before they are deemed suitable for each garden. They now produce more than 4,000 varieties for every landscape need and every region. Monrovia is focused on giving every plant what it needs to thrive, from the custom soil mixes they developed to ensure healthy roots to the care they take in pruning and shaping plants as they grow.

Their 600-acre Central California nursery, located in Woodlake, Ca, offers the perfect climate to grow a wide range of plants that cross all zones nationwide. Visit <https://www.monrovia.com/>

CONGRESS TOURS VISALIA



DAY 1 TOUR

Wednesday, October 5th, 8:00 am – 5:00 pm

1:00 PM to 2:30 PM LUNCH AT LINDCOVE RESEARCH AND EXTENTION CENTER, LREC [PROVIDED]

2:30 PM to 4:00 PM LINDCOVE RESEARCH AND EXTENTION CENTER, LREC
22963 Carson Ave, Exeter, CA 93221

Sweetening the
Future of Citrus
at Lindcove



"The Lindcove Research and Extension Center fosters research, education, and outreach programs focused primarily on the citrus crop but also has projects on avocado, olive, and walnuts. We support research projects by University of California academics as well as local and regional partners that address critical needs in horticulture, pests, and diseases and breeding new varieties." Tour by Ashraf El-Kereamy

4:10 PM to 5:00 PM MCEWEN NURSERY - HOMEMADE SEED EXTRACTOR
22144 Boston Ave, Exeter 93221

5:30 PM RETURN TO MARRIOTT/CONVENTION CENTER

**6:30 PM to 9:30 PM NATIONAL CITRUS NURSERY GROWER'S
ASSOCIATION INFORMAL MEETING
SEQUOIA BREWING**



124 W Main St, Visalia, CA 93291

Join us to have an informal conversation on this initiative and help to shape its future mission and vision.

CONGRESS TOURS VISALIA



DAY 2 TOUR

Thursday, October 6th, 8:00am-6:00pm

7:00 AM to 7:30 AM Meeting in front of Marriott Hotel/Convention Center to load bus.

8:00 AM to 11:00 AM **WONDERFUL**



16810 Ave 362, Visalia CA 93292

Wonderful Citrus's history of growth and innovation has developed the company into the largest fresh citrus grower in the western United States. It is the first citrus company to adopt the Produce Traceability Initiative (PTI) to trace each piece of fruit back to the ranch. Sustainability is a daily commitment in their groves. They employ drip irrigation and fan jets, minimize pesticide use in favor of environmentally safe alternatives, and focus on minimizing soil erosion. We will visit their state-of-the-art commercial nursery, where Wonderful Agricultural Management grows premium-quality trees for all of their farming operations – the same trees that have been available to Citrus and pistachio growers since the 1960s. Visit <https://www.wonderfulcitrus.com/>

11:45 AM to 1:00 PM **LUNCH AT MULLHOLLAND CITRUS [PROVIDED]**

5505 S. Hills Valley Road, Orange Cove, CA 93646

1:00 PM to 3:00 PM **MULLHOLLAND CITRUS**

5505 S. Hills Valley Road, Orange Cove, CA 93646



Mulholland Citrus was founded in Orange Cove, California, in 1955. In 1978, at 26 years old, Tom Mulholland set out to start his own nursery on Hills Valley Road in Orange Cove. From the beginning, Tom worked hard to produce the very best in market-quality citrus. As part of the third generation of Mulholland's in agriculture, Tom Mulholland's current interest in farming came from being involved on his father's citrus ranch, though it was not his intention to pursue a career in the family business. Following his graduation from Sonoma State where he earned a degree in Environmental Studies and Urban Planning, Tom traveled the world.

After his return to the farm, he began germinating citrus seeds, a practice taught by his father. Forty years later, Tom continues down this path, annually germinating seed, producing citrus nursery stock, and developing new orchards. Over the years, Tom moved from field propagation to greenhouse propagation, developed new citrus varieties, created an alternative to pesticides with a rearing insectary, installed new irrigation techniques and orchard profiles, and helped innovate new packing machinery, as well as new retail marketing schemes. Visit <http://mulhollandcitrus.com/> Tour by Tom Mulholland.

CONGRESS TOURS VISALIA



DAY 2 TOUR

Thursday, October 6th, 8:00am-6:00pm

3:15 PM to 4:30 PM FIELD TRIALS

Orosi rootstock field trial. Tour by Mike Roose

5:00 PM RETURN TO CONVENTION CENTER/MARRIOTT

6:30 PM INFORMAL DINING OUT ACTIVITY

On your own.