



# 57<sup>th</sup> Annual Walnut Research Conference

Wednesday, January 29 - Friday, January 31, 2025

## Agenda

P=Proposal (15 min), R=Report (15 min); R+P=Report + Proposal (20 min);  
FAR+=Farm Advisor Report with LAWREA Project Funded by CWB (15 min);  
FAR= Farm Advisor Report (10 min)

Report PDFs available online at: [www.ucanr.edu/sites/cawalnut/YearsListing](http://www.ucanr.edu/sites/cawalnut/YearsListing).

\*\*Page numbers refer to Walnut Research Reports book.

### Wednesday, January 29

9:00 AM to 12:00 PM Walnut Work Group meeting and bag lunch†.....South Wing Lounge, BML

†UC Walnut Workgroup Meeting is for *UC & USDA researchers and UC farm advisors only*.

Direct Workgroup questions to Clarissa Reyes [clareyes@ucanr.edu](mailto:clareyes@ucanr.edu)

1:00 PM Conference Welcome.....Luke Milliron, Conference Chair

### Orchard Management Part 1

<b>Moderator: Curt Pierce, UCANR</b>			
1:10	R. Verloop, CWB & CWC		State of the CA Walnut Industry – Overview
2:10	R+P	B. Lampinen, UCD	Walnut Orchard Management: Pilot Projects, Field Testing, Adaptive Research and Problem Solving by C.E. Farm Advisors and Specialists (1-12)**
2:30	R+P	K. Shackel, UCD	Pilot On-farm Irrigation Trial Using Automated SWP Sensing; Testing the Suitability of Optical Dendrometry for Automated SWP Measurement (13-22)

2:50	FAR	C. Zuber, UCANR	Early Small Trial Insights and Anecdotal Thoughts with Regards to Walnut Edible Yield
3:00	Barbara Blanco-Ulate, UCD		Edible Yield Discussion: Avenues for Investigation
3:35	ADJOURN		

**3:45 - 5:15 PM SCRI Walnut Rootstock Advisory Panel..... Main Lecture Hall – BML**

**DINNER – On your own in the area.**

**Thursday, January 30**

**7:00 – 8:00 AM Hot Breakfast.....BML Foyer**

## Orchard Management Part 2

<b>Moderator: Hardeep Singh, UCANR</b>			
8:00	FAR+	E. Fichtner, UCANR	Walnut Scale – Dormant Versus Delayed Dormant Management (115-118)
8:15	FAR+	K. Aram, UCANR	Improving Irrigation for Walnuts in Contra Costa County (23-36)
8:30	P	K. Aram, UCANR	Local Applied Walnut Research & Extension Activities
8:45	FAR+	J. Ott, UCANR	Tracking Walnut Hull Anomalies and Subsequent Nut Quality (79-81)
9:00	FAR	C. Gonçalves, UCANR	Weed Management Using Organic Herbicides for Walnut Orchard Floor Management
9:10	FAR+	A. Mohamed, UCANR	Evaluation of Satellite Derived ET Against Low Cost In-Situ ET Sensor in Walnuts for Precision Irrigation (43-51)
9:25	R+P	C. Reyes, UCANR	Developing Nutrient Requirements for Young Walnut Orchards After Whole Orchard Recycling (53-64)
9:45	FAR+	B. Wheeler-Dykes, UCANR	Support of Glenn County Establishment and Continuation of Walnut Research and Extension Program (65-69)

10:00	<b>BREAK</b>		
10:20	P	J. Miranda, CSU Chico	Improving Walnut Crop Yield Estimations with Aerial Data Collection
10:35	FAR+	K. Jarvis-Shean, UCANR	Effectiveness and Mechanisms of Dormancy Breaking Treatments for Walnuts (71-77)
10:50	R+P	B. Hanson, UC Davis	Weed Management in the Conventional Walnut Production System; Field Research and Extension (37-42)
11:10	P	G. Marino, UCD	The TreeChill Model: Tree Temperature Predictions to Improve Chill Accumulation Estimates in Walnut
11:25	ORCHARD MANAGEMENT DISCUSSION		

## Entomology

<b>Moderator: Cindy Kron, UCIPM</b>			
11:55	FAR+	S. Gyawaly, UCANR	Walnut Pests Update – North Sacramento Valley (82-87)
12:10	R	H. Wilson, UC R/UCANR	Improving Treatment Decisions for Navel Orangeworm in Walnuts (95-99)

**12:25 LUNCH.....BML Foyer**

1:25	FAR+	J. Rijal, UCANR	Walnut Pests Update – North San Joaquin Valley (89-94)
1:40	R	J. Rijal, UCANR	Efficacy of Entomopathogenic Fungus and Nematodes on Walnut Husk Fly
1:55	R+P	R. Van Steenwyk, UCB	Attract-and-Kill Methods Utilizing Lactone Pheromones as Attractants
2:15	R	R. Van Steenwyk, UCB	Grower/PCA Evaluation of the New Walnut Husk Fly Pheromone (109-114)
2:30	PEST MANAGEMENT DISCUSSION & BREAK		

## Breeding & Genomics Part I

<b>Moderator: Idongesit Mokuwunye, UCANR</b>
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3:05	R+P	A. Dandekar, UCD	Translating Genome Editing Tools for Walnut Improvement; Deploying Genome Editing Tools for Protection of Walnut Productivity and Quality (119-128)
3:25	R+P	A. Dandekar, UCD	Improved Diagnostics for Walnut Blight Disease and Development of a Walnut Blight Protecting Rootstock (129-140)
3:45	R+P	A, Dandekar, UCD	Defining The Susceptibility of Kernel Color Darkening (141-147)
4:05	R. Verloop, CWB&CWC	PANEL DISCUSSION: Improving Grower Prosperity Through Improved Industry-Researcher Coordination and Collaboration	
4:55	ADJOURN		

**6:00 PM Social** at The Lodge at Bodega Bay (note: NEW location this year) – Hosted by Diamond Foods, Inc.

**7:00 PM Dinner** at The Lodge at Bodega Bay (note: NEW location this year) - Hosted by the California Walnut Board for UC and USDA Researchers and Farm Advisors  
Dinner is no-host for industry attendees and guests.

## Friday, January 31

**7:00 – 8:30 Hot Breakfast**.....BML Foyer

### Breeding & Genomics Part II

<b>Moderator: Clarissa Reyes, UCANR</b>			
8:30	R+P	P. J. Brown, UCD	Walnut Improvement Program (149-172)
8:50	R+P	P. J. Brown, UCD	Exploring and Exploiting Novel Biological Resistance Traits of Clonal Walnut Rootstocks (173-184)
9:10	R+P	B. Castro, UCD	Nematode-Resistant Walnut Rootstocks: Biotechnological Solutions for a Sustainable California Walnut Industry (185-187)
9:30	<b>BREEDING &amp; GENOMICS DISCUSSION</b>		

### Plant Pathology & Nematology

<b>Moderator: Jaime Ott, UCANR</b>			
9:50	R+P	T. Michailides, UCD	Determining Levels of Bot and Phomopsis in the orchard, effect of a bloom spray on Bot, Phomopsis and mold and, Effects of a Combination of Ethephon with Fungicide Against Mold Continue Refinement of Pre-season Detection and Risk Assessment Tools for Botryosphaeria and Phomopsis Blight and Kernel Mold in Walnut Orchards. (188-202)
10:10	R+P	J. Adaskaveg, UCR	Epidemiology and Management of Walnut Blight (204-216)
10:30	R+P	A. Westphal, UCR	Implementing Soil Treatment Strategies for Suppression of Plant-Parasitic Nematodes in Walnut (218-228)
10:50	P	L. Liu, U. of Georgia	Enhancing Biopesticide Efficacy and Stability for Walnut Blight Control Through Circular Utilization of Walnut Shell-Derived Biomaterials
11:05	PLANT PATHOLOGY & NEMATOLOGY DISCUSSION		

**11:30 AM Closing Remarks & Adjourn .....Luke Milliron, Conference Chair**

**11:45 AM Juglans Crop Germplasm Committee Meeting (register for sack lunch)**