

UC Cooperative Extension Butte County 2024 Update



Rice Farming Systems Advisor: *Luis Espino*

In 2024, my program is continuing work on management of rice diseases. I am testing products that promote disease resistance on plants in combination with a conventional fungicide. I am also testing a new fungicide active ingredient against major rice diseases. By drain time, I will be conducting a Sacramento Valley disease survey to make sure growers still have the option to burn straw after harvest. Areawide monitoring of armyworms continues, providing information that growers and PCAs can use to better time their armyworm monitoring. In collaboration with other academics, I will be developing agronomic and pest management guidelines for no-till, drill-seeded rice.

Orchard Systems Advisor: *Luke Milliron*

Almond variety evaluation has been a major focus of my orchards program in 2023 and 2024. I have two almond variety trials planted at the CSU, Chico farm that are funded by the Almond Board of California and are testing nearly 60 varieties. One very promising numbered variety 'Y117-91-03' that I have been evaluating from the USDA has been determined to be self-fertile, high-yielding, and have good kernel quality; it is scheduled to be released in 2025. I have also been busy evaluating a growing list of problems with the Monterey variety we are seeing in some northern Sacramento Valley orchards.



Integrated Pest Management Advisor: *Sudan Gyawaly*

The Integrated Pest Management program conducts education and research programs to support growers, pest control advisers, and other clientele on pest management issues. I wrote newsletter articles, attended one-on-one farm calls, and organized and presented at grower meetings. I also monitored important pests and their populations in almonds, walnuts, and peaches and provided the degree day information to my clientele. In 2024, in collaboration with other UC colleagues, I am surveying the invasive Carpophilus beetle and invasive brown marmorated stink bug in almonds and coordinating the field testing of a new walnut husk fly lure in walnuts in the Sacramento Valley.

Agriculture and Natural Resources Economics Advisor: *Domena Agyeman*

I joined UCCE in January 2024. My research interests encompass natural resources and environmental policy impact assessments, economic contribution and impact analyses, producer investment decision-making assessments, and consumer preferences assessments. In my Advisor role, I aim to leverage my expertise to highlight the economic contributions and impacts of local agriculture and natural resources industries and to provide producers and other stakeholders in the region with information that will help them navigate their business challenges and opportunities. I am conducting needs assessments to understand the specific needs of stakeholders and tailor support mechanisms effectively.



4-H Youth Development Advisor: *Nicole Marshall-Wheeler*

In the 2023-2024 program year, the Butte County 4-H Youth Development Program served 1,341 youth with support from 143 adult volunteers. Our 4-H Community Club Program serves each community in Butte County through 13 clubs. This year, Butte County 4-H expanded its reach by providing professional development to 90 Butte County Office of Education afterschool educators on "Cooking Academy", a healthy living curriculum for afterschool programs. This curriculum was taught at 27 school sites across Butte County.

Community Nutrition, Health and Food Security Advisor: *Veronica Van Cleave-Hunt*

The Butte County Nutrition Education programs reached nearly 6,000 youth and adults in 2023. The target audience for the Expanded Food and Nutrition Education Program and the CalFresh Healthy Living Program are individuals that qualify for supplemental nutrition assistance. Participants of each program received evidence-based health education series on the topics of food preparation, nutrition, physical activity, and money management; these lesson series take place at schools and residential communities. In addition to lesson series, educators from both programs table at community health and school events to provide information about initiating and maintaining healthy lifestyle habits.





Master Gardener Program Coordinator: *Jennifer Lange*

Year 2023/2024 has been extremely successful for the UC Master Gardeners of Butte County. Our 82 Master Gardeners have contributed over 5,000 hours of volunteer time, educating Butte County residents with UC-backed, science-supported gardening techniques with emphasis on sustainability. In collaboration with Chico Area Parks and Recreation, the Master Gardeners have developed a Learning Garden at the Dorothy F. Johnson Center. The Garden is entering the final stages of design, with the completion date set for late fall. In June, we welcomed 31 new Master Gardeners to our ranks. We look forward to another amazing year of programming and public outreach.

Dairy Advisor: *Betsy Karle*

The dairy program focused efforts on research to evaluate manure management technologies that reduce methane emissions and disease prevention and treatment strategies that improve antibiotic stewardship. Results from studies were presented at local meetings and statewide meetings and in a variety of industry publications. Scientific publication topics included innovative calf housing strategies, farmworker education programs, novel discoveries around antimicrobial resistance, and applied by-product feeding and management tools.

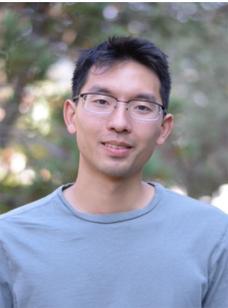


Livestock and Natural Resources Advisor: *Tracy Schohr*

I am conducting extension, education and applied research focusing on livestock production, water, agribusiness, and sustainable range and pasture management. I collaborate with colleagues to host trainings and provide technical assistance on animal health, regulatory compliance, predators and more. My research program includes investigating post-fire ecological impacts and grazing cattle distribution on public lands. This work has been instrumental in the continuation of grazing on Forest Service Allotments following recent fires. In addition, my program includes research on irrigated pasture enhancement strategies, rangeland drought resiliency, and goat grazing effectiveness to reduce fire fuel loads. My program is developing solutions to the complex issues facing commercial livestock producers in the region.

Forestry and Natural Resources Advisor: *Ricky Satomi*

The forestry program has been working to improve the recovery and resilience of local forest ecosystems. The program provides targeted workforce trainings on GIS, reforestation, forest stewardship, and home hardening. In-field trainings are also offered to local educators on advanced forestry topics with certified environmental education curricula. In this coming year, research efforts will continue on post-fire vegetation management and development of literature supporting forestry workforce education.



Orchard Crops Advisor: *Jaime Ott*

In 2023 and 2024 my program has focused on both assessing the needs of growers in the area and on providing valuable extension programming to growers, PCAs, and other industry partners. In both years, I have organized North Sac Valley Prune Day and Walnut Day, bringing UC-backed research to the local community. At the 2024 North Sac Valley Walnut Day, I put together an extended program which included a panel on the economic situation facing walnuts over the short and medium term. I have received feedback from several growers that this meeting, and the panel, were the most valuable programming they have seen in many years. In addition to organizing meetings, I have spent a great deal of time out in the field talking with growers about production concerns and challenges in their orchards.

Orchard Systems Advisor: *Clarissa Reyes*

This year, Luke and I are collaborating on a new whole orchard recycling project in walnuts, with two sites in Sutter and San Joaquin counties. Whole orchard recycling is an alternative orchard removal practice that involves chipping old trees after they are pulled from the ground and reincorporating this biomass into a new orchard site, which reduces air pollution, recycles carbon and other nutrients from the old trees into the soil, and provides several other soil health benefits. This project aims to develop fertilization guidelines to implement whole orchard recycling in walnut orchards, thanks to support from the California Walnut Board & Commission.



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