West/Southwest Farmer Production Resources

Curated research, guides, and experts from the Organic Research Hub picked for producers in the West/Southwest region of the US.

Organic Research Hub

The Organic Research Hub was built by the Organic Farming Research Foundation (OFRF), a nonprofit that has supported organic farmers with science-based research and guidance for more than three decades, and was funded by the USDA. It exists because organic farmers kept asking for the same thing: one trustworthy place to find research-backed answers, instead of piecing them together from scattered websites and forums. Today, the Hub brings all of that research together into a single, free, searchable library, so you can spend less time hunting for answers and more time using them.

ORGANIC FARMING RESEARCH FOUNDATION
ORGANIC RESEARCH HUB

See all resources and a directory of organic experts curated for the West/Southwest region at hub.ofrf.org/regions/west-southwest.

Featured Resources for the West/Southwest Region:

The Southeast region includes California, Utah, Nevada, Arizona, New Mexico, Texas, and Hawaii.

Research Summary

Fine-Tuning Fertilizer Applications in Organic Cool-Season Leafy Green Crops Can Increase Soil Quality and Yields

Balancing nitrogen and phosphorus rates can pose an ongoing challenge for organic growers. The high level of phosphorus (P) relative to nitrogen (N) in many organic fertilizers frequently results in an overapplication of phosphorus, which can be harmful to the environment. Researchers in California performed a series of experiments evaluating how organic fertilizers affect N and P mineralization rates in cool-season organic vegetable production systems.

Early Impacts of Cover Crop Selection on Soil Biological Parameters During a Transition to Organic Agriculture

Research shows that different cover crops can affect soil health in different ways. This study examined soil health in peanut-cotton plots under conventional and recently transitioned organic management using four cover crop treatments (rye, radish, rye/vetch mix, and rye/vetch/radish mix) and a conventional fallow.

Factsheet/Guidebook

Can Precision Irrigation Be an Effective Approach to Suppress Weed Pressure in Organic Lettuce Systems?

This factsheet, published by the University of Arizona Cooperative Extension, examines how precision irrigation technologies, particularly subsurface drip irrigation (SDI) combined with sensor-based scheduling, can suppress weed growth and improve water-use efficiency in organic iceberg lettuce production.

Transition to Organic: Alfalfa Production in Utah

This factsheet, published by Utah State University Extension, offers guidance for growers considering a shift to organic alfalfa production. It presents an overview of organic production systems, relevant certification requirements under the National Organic Program (NOP), and crop-specific considerations such as seeding, fertility, pest management, and market opportunities.

OFRF Research Grant Report

Organic Farming Systems Options for Controlling Coffee Leaf Rust (CLR) in Kona Coffee

A one-year participatory research project across five certified organic Kona coffee farms in Hawaii evaluated organic practices for Coffee Leaf Rust (CLR) management. Aiming to reduce disease impact by improving plant health through local inputs, the study tested four treatments: a fish emulsion-biochar granular fertilizer, Indigenous Micro-Organism (IMO) foliar sprays, a combination of both, and an untreated control, superimposed on existing farm practices. Monthly tracking of CLR incidence and defoliation revealed high variability among farms—some saw reduced disease and defoliation from increased fertilization, while others showed no effect. Due to these mixed single-year results influenced by differing weather and management, researchers sought two additional years of USDA-ARS funding under "Systems Approaches to Improve the Production and Quality of Specialty Crops."

Podcast

Biochar-Dairy Manure Mixes with Dr. Touyee Thao

Join Dr. Touyee Thao, Research Scientist at UC Agriculture & Natural Resources, for a discussion about the potential benefits of incorporating biochar and dairy manure amendments into organic vegetable production systems. Learn about what ratios work best when adding biochar and dairy manure, and how these amendments impact soil health, GHG emissions, and tomato productivity.

Webinar/Video

Effects of Different Organic Pastures on Dairy Heifer Growth and Development

Raising dairy heifers in a certified organic setting can be challenging. Organic producers can feed a total mixed ration (TMR) containing all the required nutrients, but due to high organic feed costs, many opt for a pasture-based system instead, with lower rates of gain. Join Jake Hadfield from Utah State University for a discussion about implementing mixed grass-legume pastures in organic dairy systems.

Organic Weed Management for Mixed Vegetable Farms

Weed management is a major challenge for organic production systems - including mixed vegetable farms. In this workshop, a UC Cooperative Extension Advisor will provide a short introduction to organic weed management, focusing on managing seedbanks, preventive practices, and emerging technologies. Then, two certified organic mixed vegetable producers will share their approach to weed management.

Tools

Course: Advising Organic Farmers in the Southwest (ORG-125)

This course from the Organic Agronomy Training Service prepares agricultural advisors to support organic farmers in the Southwest through certification guidance, regional networks, and arid-climate production strategies and best practices.

Organic Producer Marketing Toolkit

The Organic Producer Marketing Toolkit provides organic farmers and producers with resources to promote their businesses effectively. It includes a foundational marketing guide, media preparation toolkit, planning worksheets, and professionally designed collateral — brochures, posters, infographics, and tent cards — to help producers reach target audiences and communicate their organic story to customers.

FIND AN ORGANIC FARMING EXPERT NEAR YOU

Connect with 45+ verified Extension agents and researchers across all seven states in the West/Southwest — search by name, state, or an interactive map. The directory is growing regularly.

*View a PDF version of this document with hyperlinks, along with other resources on USDA programs that support organic production at **www.ofrf.org/resources/topp/**.*

ORGANIC FARMING RESEARCH FOUNDATION

Certified CCOF Organic

USDA ORGANIC

TRANSITION TO ORGANIC PARTNERSHIP PROGRAM