Sustainable and Organic Agriculture Program

Update

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College of Tropical Agriculture and Human Resources
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Sustainable and Organic Agriculture Program (SOAP)

- Established in 2009
- Certified organic research plots starting in 2009
- Statewide program focuses on:
  - Increasing farm income
  - Promoting environmental stewardship
  - Supporting prosperous farm families and communities
Statewide SOAP Program

- Ag Professional Trainings (annual)
- Applied Research
- Soap Learning Centers
- Organic certified plots
- Outreach materials and events
  - Workshops, field days, traveling team, etc.
- Website Information
- Online Quarterly Newsletter
  - Topic Leaders
- Social Media Awareness Campaigns
- Testimony to increase awareness
- Go Farm & Master Gardener instruction and field support
- Student organic farm training (SOFT)
Advancing Sustainable Agriculture with SARE

• 92 grant projects funded since 1988
  • 5.5 million dollars in funding into Hawaii

• Sustainable and organic agriculture impacts
  • 1032 farms conducted no till practices
  • 385 farms implemented conservation tillage
  • 365 farms implemented cover cropping systems
  • 53% of producers using a new technique after reading a SARE publication
  • 79% improved soil quality through SARE project
  • 64% of producers said their project helped them reach higher sales

Based on 2012 U.S. Census of Agriculture data provided by the National Agricultural Statistics Service (NASS) for the National Association of State Departments of Agriculture (NASDA)
WSARE Grant Deadlines

• Professional Development Program Grants (due November 7, 2018, noon MST)

• Farmer/Rancher Grants (due November 28, 2018, noon MST)

• Professional + Producer Grants (due November 28, 2018, noon MST)

• Research to Grass Roots Grants (due November 28, 2018, noon MST)
Incoming WSARE co-leaders
Sharon Motomura-Wages & Jensen Uyeda
Applied Research

• Local Fertilizers
• Pest Control
• Variety trials
• New crops
• GE/Conventional/Organic

Research and Grad Student Projects

Project Develops Local Fertilizer Options for Hawaii

At the Western SARE conference held in Hawaii, stakeholders identified replacing imported fertilizers with local resources as the highest priority.

According to Theodore Radovich at the University of Hawaii, possible inputs include commercial green waste composts, rendered animal products and invasive algae from coral reef remediation projects. These by-products are readily available, but bottlenecks exist that inhibit use and adoption by growers.

To address these problems, Radovich developed a Western SARE-funded project to conduct a series of greenhouse and on-farm trials in cooperation with university faculty, commercial growers and industry partners. Radovich and his project team evaluated quality, maturity, nitrogen release patterns and crop growth for 10 composts through lab incubation and greenhouse trials. They collected samples of major algae invasive species and of rendered animal products.

Findings include:
• Bio-security protocols have reduced concerns of algae spread to other areas.
• There is an increased demand for locally produced rendered animal products. The increased reliance on local inputs will reduce the demand for off-state fertilizers.
• Farmers utilizing the invasive algae, mainly two and sweet potato ferns, are reporting increases in the yield and quality of their crops.
• There is increased incorporation and utilization of locally produced composts among small farm holders. This may lead to increased net benefits, due to reduction in production cost.

Details are at myarea.sare.org/sare_project/wt11-055/
E Komo Mai

The Sustainable and Organic Agriculture Program (SOAP) of the University of Hawai‘i at Mānoa, College of Tropical Agriculture and Human Resources

Sustainable and Organic Agriculture

Across Hawaii, farmers and ranchers are experimenting with different ways of producing agricultural products, novel approaches which aspire to bring social, economic and environmental well-being to both farm families and to the rural communities in which they live.

Our Commitment to Sustainable Agriculture

Hawai‘i has a centuries-old tradition of sustainable food production. Pre-contact Hawaiian agricultural systems were closely linked to the natural environment to ensure long-term productivity and support hundreds of thousands of people. Today, the Sustainable and Organic Agriculture Program (SOAP) of the University of Hawai‘i at Mānoa, College of Tropical Agriculture and Human Resources, is dedicated to continuing this heritage by promoting sustainable, organic agriculture practices across the island chain.

Our Partners

To maximize the impact of our limited resources and address the breadth of training needs across our island chain, we continue to collaborate with other programs within UHM & CTAHR to finance and provide relevant training programs for CES agents and specialists, USDA NRDRC, Ag & Life Science Foundation for Agricultural Improvement, Island Agricultural Research & Extension Service (IARES) and others.
Using of Resistant Varieties in Combination with Screen Systems

University of Hawai‘i at Mānoa, CAHNR

Curcuminoid Content of Turmeric Grown in Hawaii
J. Calpito, A. Husnap, T. Radovich, and JP, Bingham,
University of Hawai‘i at Mānoa, CAHNR

Turmeric is historically important throughout the tropical Asia-Pacific region, including Hawaii where it is known as ‘ōlena. ‘Ōlena has recently re-emerged as a high value crop in Hawaii due to increased demand world wide for its medicinal value. The anti-inflammatory effects and other observed health benefits of turmeric are attributed to compounds called curcuminoids. Six (6) varieties of turmeric and 3 related species were field-grown in Waimanalo, O‘ahu from May 2017-January 2018 and analyzed for their curcuminoid content. Curcuminoid content of turmeric ranged from 1.1-9% (12-94 mg%) on a dry weight basis with the highest concentrations (9%) observed in ‘Brick’. See poster here.

Sources for Hawaiian-grown turmeric:

AlohaTurmeric

Biker Dude

FMH: Theodore Radovich. Email: theodore@hawaii.edu

UH CAHNR Macnut Variety Trial: Preliminary Data
Ehlu Isalo and Alyzza Cho
University of Hawai‘i at Mānoa, CAHNR

Hawaii has historically been the leader in the world for macadamia research and selecting commercial varieties. Many of the varieties currently produced are from the selection done in the 1990s. This preliminary data was collected from an assortment of mac nut varieties, originally planted by Dr. Milo Nagao in 2001, and were chosen for their high kernel quality and tree shape.
https://cms.ctahr.hawaii.edu/soap/