



Western SARE Program

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12 FRUITS FOR ISLAND PROMOTION

Situation

Small producers of coffee and macadamia nuts in the Kona region of Hawaii have struggled with high costs and limited land and labor. Producing locally adapted tropical fruits, and creating marketing linkages between the farms and high-end restaurants within marketing distance, could add profitable crop alternatives.

Objectives

1. Identify 12 species of exotic tropical fruits with high potential for year-round market acceptance
2. Develop and demonstrate a prototype polyculture tropical fruit production system based on sustainable production technologies
3. Develop direct and wholesale markets for both fresh fruit and processed products
4. Help the Kona Pacific Farmers Cooperative expand into new activities, including the long-term marketing of the fruits developed from this project



Figs, one of the 12 fruit species selected, have proved popular among island chefs.

Actions

The project team conducted these activities:

- Gathered information on 100 fruits already grown in the region
 - Based on surveys of 54 island chefs, selected 12 trees for demonstration
1. Loquat – three varieties
 2. Mysore berry
 3. Poha (Cape gooseberry)



Rangpur “Kona lime has also proved popular.

4. Pomegranate – four varieties
 5. Cherimoya – two varieties
 6. Tamarillo (tree tomato)
 7. Rangpur “Kona” lime
 8. Tropical apricot
 9. Grumichama
 10. Surinam cherry – two varieties
 11. Kumquat – two varieties
 12. Figs – two varieties
- Developed a 1-acre demonstration site on land

Research and Education Grant

Project Number: SW03-055

Project Title: Development of

A Sustainable Polyculture and Marketing System for Exotic Tropical Fruits

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Western SARE, a USDA organization, funds grants for research and education that develop or promote some aspect of agricultural sustainability, which embraces

- *profitable farms and ranches*
- *a healthy environment*
- *strong families and communities.*

The Western Region, one of four SARE regions nationwide, is administered through Utah State University.

Western SARE:
<http://wsare.usu.edu>

National SARE
www.sare.org

adjacent to coffee and macadamia nut processing facilities of Kona Pacific Farmers Cooperative

- Planted trees (both purchased and donated) and developed sustainable and organic production protocols
- Created an agritourism attraction with educational kiosks, displays, pathways, signage and landscaping
- Created demand for fruits by providing information to chefs and other potential buyers and alerting them to fruit availability

Results

The production and marketing information gathered from the project has been provided to producers through workshops, publications and the 12 Trees website, www.hawaiifruit.net/12trees.html, which receives more than 2,500 visits a month.

Faculty and students in the UH West Hawaii Culinary Arts Program in Kona developed recipes using the 12 fruits (fresh and processed) and



Above, jackfruit, another fruit gaining acclaim, and below, figs from UC Davis, which are part of a new Hawaii Western SARE Farmer/Rancher grant.



The flower of the grumichama, also known as Brazilian cherry.

tested them with consumers. Graduates carry this knowledge into the local restaurant industry.

Brown turkey figs, gaining popularity among chefs, generated \$3,263 in sales from the project. Demand now exceeds supply from 20 farms that have started producing figs.

The project has been featured locally and nationally on television and in magazines and newspapers.

Potential Benefits

- Project results have been discussed widely and put into practice by local farmers
- Kona growers who increased production based on seasonal diversification cite benefits like reduced need for external labor during the coffee-picking season
- Growers are profiting from figs, tropical apricot



Visitor kiosk under construction.

and Kona rangpur limes, and many report easier sales of fruit not sold in years before the project

- Cost-of-production figures have helped growers dealing with chefs and grocers
- Demand for project fruit has been high, presenting a challenge for supply, which also includes fruit from trees not part of the initial planting – including rollinia, jackfruit and jaboticaba
- Results have been put in place in south India and are under study in Japan