

Public Seed Initiative and Seed Production Workshops

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Kohala Center, and UH-Manoa (HV)

Cooperators: Kauai Regeneration
Botanical Gardens; Ceres Foundation,
Organic Seed Alliance



College of Tropical Agriculture and Human Resources
University of Hawai'i at Mānoa

6th Annual East Side Seed Exchange & Harvest Festival!

Saturday November 26th, 9:30am – 3:30pm

At La'akea Permaculture Community

Bring your favorite dishes using only locally grown food
for the **100% LOCAL FOOD COOK OFF AND POTLUCK!!**



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Hawaii Statewide Seed Assessment 2010

SurveyMonkey.com

**Kohala Center,
Organic Seed Alliance & CTAHR**

N= 128 responses



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Farm Size in Survey

- Range= 0-250 Acres
- Most farms= 1 Acre
- Average size= 10 Acres
- Larger farms= 250, 195, 75, 10-20
- N= 88



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Environmental Conditions in Farm

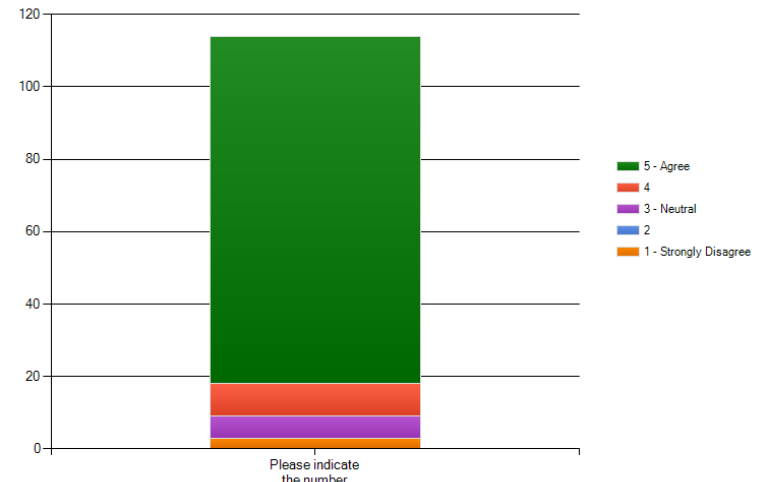
Frequency mentioned

- Rainfall- 9,15, 30.. 100s, 125, up to 180”
- Elevation- sea level, range 200 to 1000s, and 1000-3000 ft
- Temperature minimums- 30s to low 80s
- Temp. maximums- low 80s to mid 90s



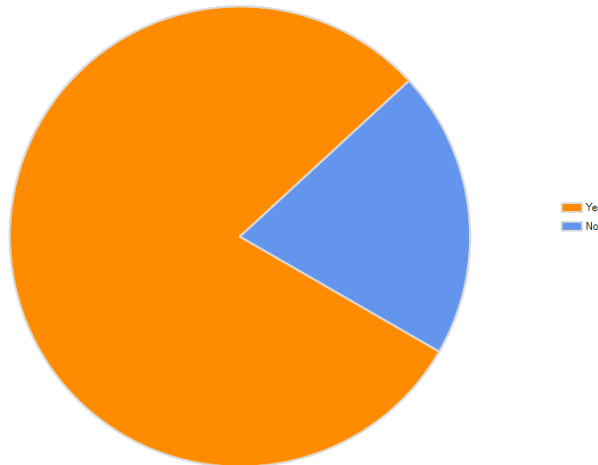
Breeding in Hawaii important for Food Security?

Please respond to the following statement: Breeding plant varieties in and for Hawai'i is an important priority for the future success of Hawaiian agriculture and local food security. On a scale of 1 to 5, please state whether you agree or disagree.



Experience Producing or Saving Seed?

Do you have experience in producing or saving seed?



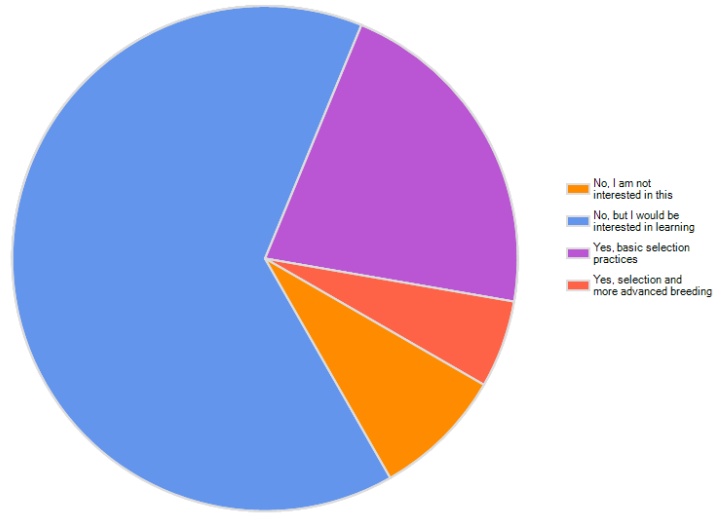
Years of Experience Saving Seed

- Range 1-50 yrs
- Average= 10 years
- median= 5 years
- Less than 3 years= 43%



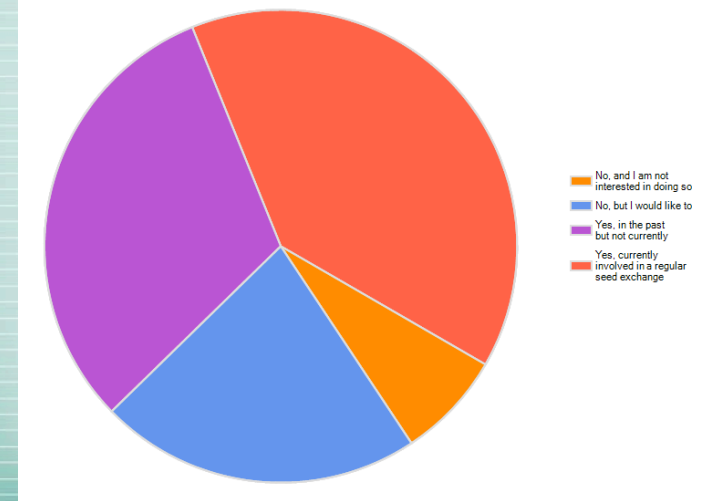
Have You conducted crop improvement, breeding?

Have you conducted crop improvement/breeding?



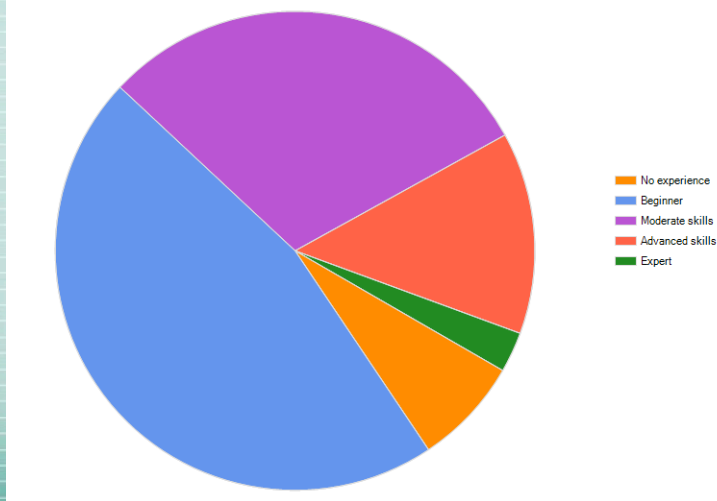
Have you participated in Seed Exchanges?

Have you ever participated in seed exchanges?



Seed Saving Skills?

Assessing your own seed saving/production skills, please rate your technical competence and knowledge in seed saving:



Information Needs on Seed Saving?

- Isolation distance (65%)
- Population size (77%)
- Seed maturity, harvest time (76%)
- Harvest guidelines (51%)
- Processing and storing (58%)
- Roguing guidelines (63%)

Interest on Public Seed Initiative?

List of Top Activities

- Saving Seed, personal use
- Restoring seed of Heritage or traditional Hawaiian Crops
 - Seed exchange programs
- Attending advanced Seed Saving Class
 - Participating in Variety Trials
- Attending class on crop Improvement



Crops, success in Seed Production

Frequency mentioned

- No. 1. N= 46, beans, brassicas (kale), lettuce, Native, papaya, pumpkin, sweet corn, tomato
- No. 2. N= 45, arugula, basil, beans, cilantro, corn, ginger, herbs, cucurbits, papaya, tomato,
- No. 3. N= 54, basil, beans, dill, edible hibiscus, green onions, lilikoi, maile, potato, sesame, tobacco, flowers



Crops, most difficult for Seed Production

Frequency mentioned

- No. 1. N= 35, awa, basil beans, pepper, broccoli, onion, carrots, native, corn, cucurbits, lettuce, papaya, lettuce, ornamentals
- Most mentioned overall: arugula, beets, broccoli, cabbage, carrot, chard, corn, kale, lettuce, onions, pepper, cucurbits



Agenda Workshop Kauai: Day 1

- 10:00 - The Hawai'i Public Seed Initiative: Where Have We Been and Where Are We Going?
- 10:15 –Overview Experience with Gardening and Seeds on Kaua'i
- 10:30 – 11:00 a.m. Global Seed Industry



Agenda Workshop Kauai: Day 1

11:00 a.m. - 12:30 p.m. **Seed Basics: Botany and Biology**
by Russell Nagata & Paul Massey

- Monocot and Dicot Plant Differences
- Open-Pollinated vs. Hybrid vs. Heirloom Varieties
- Inbreeding vs. Outbreeding:
Know Your Crop's Mating Preferences
- Selfing vs. Cross Pollination Pollen Transfer
- Reproductive Cycles: Annuals, Biennials, and Perennials



Agenda Workshop Kauai: Day 1

1:15 - 2:15 p.m. **Growing Crops for Seed in the Garden**
by Paul Massey, Jill Richardson, & Russell Nagata

- Culture & Growing Conditions
- Population Numbers: Maintaining Genetic Diversity
- Addressing Seed Purity: Different Strategies
- Isolation Distances (Physical Barriers, etc.)
- Selection: Locally Adapted Varieties, Rouging
- Harvesting Seed



Agenda Workshop Kauai: Day 1

4:15 – 5:00 p.m. Action Agenda: **Establishing a Network of Seed Growers** by Jill Richardson & Paul Massey

Come together with your ahupua'a group and choose a group moderator to record and organize your information. Your group will continue this process on Day 2 and the moderator will report back to the conference as a whole.



Agenda Workshop Kauai: Day 2

9:15 - 10:45 a.m. Harvesting Seed in the Garden & Growing Requirements for **Producing Lettuce for Seed** by Russell Nagata

11:15 a.m. - 12:30 p.m. Fruit Quality Characteristics and **Selection of Tomato Varieties for Seed** by Glenn Teves

2:30 - 4:30 p.m. **kalo propagation and production** with 3rd generation taro farmers Chris Kobayashi and Dimi Rivera.



Variety Trials



Variety Trials

