

**Hawai'i Public Seed Initiative**  
**"Hua Ka Hua" - Restore Our Seed Project 2011-2013**

**Seed Saving & Seed Production Basics**  
**for Farmers & Gardeners**  
**November 6-8, 2011**

**Day 1: Kaua'i Community College Elections Building, 2nd Floor**

**9:00 - 10:00 a.m.** Registration & Coffee

**10:00 - 10:15 a.m.** Welcome Remarks by Nancy Redfeather, Coordinator HPSI  
*The Hawai'i Public Seed Initiative: Where Have We Been and Where Are We Going?*

**10:15 – 10:30 a.m.** Overview by Paul Massey & Jill Richardson  
*Experience with Gardening and Seeds on Kaua'i*

**10:30 – 11:00 a.m.** Global Seed Industry by Hector Valenzuela

- *Why Do Farmers & Gardners Need to Save Seed*
- *History of Seed Production and Crop Breeding in Hawai'i*
- *Law Issues: Plant Variety Protection, Plant Patents, and Utility Patents*
- *Summary of Statewide Seed Assesment from the 2010 Seed Symposium*

**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*

**12:30 - 1:15 p.m.** Lunch Catered by Chef Keli Ranke  
*During lunch please check the map of the ahupua'a and make a note of where your farm or garden is located.*

**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*

**2:15 - 2:45 p.m.** Seed Viability & Why and How to Do Variety Trials by Hector Valenzuela

**2:45 - 3:45 p.m.** Seed Saving and Storage: Basic Techniques and Ideas by Paul Massey & Jill Richardson

**3:45 - 4:15 p.m.** Panel Discussion

**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.*

**Questions to consider:**

- *What is the average rainfall and temperature range of your location?*
- *What are you growing well and having success with?*
- *What are the most difficult problems you have encountered with growing?*
- *What crop or crops would your group like to focus on growing?*
- *What do you foresee as your biggest challenge? What are your thoughts on overcoming this?*

## Day 2: Regenerations Seed Garden

**9:00 - 9:15 a.m.** Overview of Regenerations Seed Garden by Paul Massey & Marshall Paul

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

- *Cleaning Techniques for Dry Seeded Crops*
- *Pollination, Isolation, and Optimal Numbers of Plants*
- *Seed Purity, Improving Lettuce Varieties, Roguing, and Selection*
- *Seed Storage and Viability Testing*

**10:45 - 11:00 a.m.** History of UH Seed and Breeding Programs by Hector Valenzuela

**11:00 - 11:15 a.m.** Break

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

- *Harvesting Seed and Seed Processing Techniques for Wet-Seed Crops*
- *Pollination, Isolation, and Optimal Numbers of Plants*
- *Seed Purity, Improving Tomato Varieties, and Disease Resistance*

**12:30 - 1:30 p.m.** Lunch at Regenerations Gardens Catered by Chef Keli Ranke  
*After lunch is the perfect time to take a self-guided tour of the garden.*

**1:30 - 2:00 p.m.** Panel and Participant Action Agenda: Establishing a Network of Seed Growers

*After reconvening in your ahupua'a groups, group leaders will share the highlights of Day 1 discussions. The panel will work together with each group to clarify information, address concerns, and clearly define goals.*

**2:30 - 4:30 p.m.** Drive to Wai'oli Farm in Hanalei. Tour and talk story about kalo propagation and production with 3rd generation taro farmer Chris Kobayashi and her partner Dimi Rivera.

## Day 3: Optional Tour of *One Song Farm* on Tuesday, November 8

Meet at **8:00 a.m.** at the Moloa'a Fruit Stand and carpool to *One Song Farm* for a tour with Sun and Lisa.

### *Mahalo to Our Workshop Presenters:*

- Hector Valenzuela, Ph.D., CTAHR Extension Vegetable Specialist
- Russell Nagata, Ph.D., CTAHR County of Hawai'i Extension Administrator. Prior to his current position, Russell worked as a plant breeder for the University of Florida conducting research on lettuce and St. Augustine grass turf.
- Glenn Teves, CTAHR Moloka'i Extension Office
- Paul Massey, Regenerations Botanical Garden
- Jill Richardson, Regenerations Botanical Garden
- Nancy Redfeather, Coordinator Hawai'i Public Seed Initiative, The Kohala Center
- Dimi Rivera and Chris Kobayashi, Kalo Growers, Wai'oli Farm
- Sun Hadley and Lisa Fuller, One Song Farm
- Lyn Howe, Workshop Coordinator



***THE HAWAII PUBLIC SEED INITIATIVE WORKSHOPS ARE MADE POSSIBLE  
THROUGH THE SUPPORT OF THE CERES TRUST.***