

## The story of seed -- a living treasure

by Nancy Redfeather And Janis Wong  
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When you buy a packet of spinach seeds at the store and bury a handful in the soil, do you see the seed as a living, renewable and sustainable agricultural treasure? As possibly an heirloom to be lost?

That's long been the message of organic growers and seed producers, a message now receiving mainstream attention. Most recently, the March issues of *Sunset* and *Vegetarian Times* magazines feature articles on "Edible Heirlooms" and "Vanishing Veggies." Seed symposiums hosted by organizations around the world look at restoring and revitalizing seeds and the seed industry.

Next weekend, farmers, gardeners and seed experts from Hawaii and the mainland will meet for the "Hua Ka Hua -- Restore Our Seed" symposium" at the Outrigger Keauhou Beach Resort to share ways to grow, select and save high quality seeds for both home and market.

The public is invited to a free presentation Friday evening to learn more about seed, from early crop domestication by hunter-gatherers to today's agribusiness. Matthew Dillon, of Organic Seed Alliance, and Frank Morton, of Oregon's Wild Garden Seeds, will tell "The Story of Seed: Wild, Domesticated, Bred and Engineered -- Where Did We Begin and Where Might We Go?" from 5:30 to 7 p.m.

"Seed is both the cumulative genetic information that interacts with the environment as crops grow, and a repository of cultural information that holds the story of the co-evolution of humans and plants," Dillon said. "The loss of seed diversity and seed knowledge go hand in hand and such loss poses a risk, not only to food security, but to our cultural understanding and well-being."

Nancy Redfeather, of The Kohala Center and symposium coordinator, said "Seed is the foundation of all agriculture. Open-pollinated seed, which are seed varieties that can be saved and grown true to the parent, are being lost at a rapid rate. In the United States, 95 percent of seed varieties that were grown in 1900 are no longer available today.

"Only a few generations ago, crop biodiversity was maintained by people on farms and in gardens. Of all the food plant varieties that once fed humanity, only 25 percent remain and only 10 percent of the remaining varieties are available for sale today. These hardy genetic varieties were the mainstay of the home and market garden for centuries."

Hawaii is a good example of the loss of seed varieties. Today, we import nearly 90 percent of our food and 99 percent of our seed. Yet, the planters of old Hawaii, the mahiai, had a vision and knowledge of sustainable agriculture.



"Their agricultural systems produced food for large populations on all the islands. In his book, "Native Planters," Craighill Handy talks about the 232 varieties of sweet potato, or uala. Today, only 69 years later, less than 30 varieties exist," Redfeather said.

"The best way to prevent local crop varieties from disappearing is to keep them as a part of our living heritage," said Alvin Yoshinaga, of the University of Hawaii Center for Conservation Research and Training and a symposium speaker.

Expanding our knowledge of seed breeding, growing and saving is a first step, a step being taken by "Hua Ka Hua -- Restore Our Seed," which combines the efforts of faculty members of both UH Manoa and Hilo, Organic Seed Alliance, Hawaii Organic Farmers Association, The Kohala Center, as



Frank Morton, from Wild Garden Seeds in Philomath, Ore., will be a featured speaker Friday night and Saturday at the seed symposium. - [wildgardenseed.com](http://wildgardenseed.com)

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Gerry Herbert and Nancy Redfeather grow a wide variety of plants and produce many pounds of seeds annually on their 1.2-acre organic mini-farm.  
- Nancy Redfeather | Special To West Hawaii Today

well as home gardeners and farmers from across the state.

This statewide initiative begins with the symposium. For symposium details and registration, visit [kohalacenter.org/seedsymposium/about.html](http://kohalacenter.org/seedsymposium/about.html) or contact Redfeather at 322-2801 or [nredfeather@kohalacenter.org](mailto:nredfeather@kohalacenter.org).

The Friday public presentation and the symposium are hosted by The Kohala Center, with funding from the U.S. Department of Agriculture Organic Research and Education Initiative and the Hawaii County Department of Research and Development. Other sponsors include the College of Agriculture, Forestry, and Natural Resource Management, UH Hilo; the College of Tropical Agriculture and Human Resources, UH Manoa; and Keauhou-Kahaluu Education Group/Kamehameha Schools.

**Redfeather lives with her husband, Gerry Herbert, at Kawanui Farm in Honalo. She is the coordinator for The Kohala Center's Hawaii Island School Garden Network project. Wong coordinates media relations for the Kohala Center.**

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### Tropical gardening helpline

**Eden asks:** I have heard that an easy way to reduce kitchen waste and produce fertilizer is to use worms to eat my garbage. I think there have been several workshops on the topic but I've missed them. What are the basics and how do I get started?

**Answer:** Yes, you can dispose of your kitchen waste sustainably by having worms eat your garbage. The bonus is that the worms will also produce a nutrient-rich compost called vermicompost.

Several worm species are especially suited to living in a worm box, eating large volumes of kitchen waste, reproducing rapidly and producing high quality vermicompost. Georgia jumpers, California red wigglers and India blue worms are all good choices for Hawaii and they are available from worm composters here, as well as in Hilo and on Oahu. It is illegal to import them into the state, however, so find a source in Hawaii. These species are not native and should not be introduced to your garden or open compost pile. They are ideally suited to worm boxes and will not thrive in other conditions.

Creating a home for your worms requires making a box of wood or plastic or using an old Styrofoam cooler, putting drainage holes in the bottom and a few air holes around the top. Filling the container with shredded newspaper that has been dampened thoroughly but only to a moisture level comparable to a wrung out sponge. Once you have the box and bedding in place, you can introduce the worms and start feeding them a little at a time until you see their numbers increasing.

These basics, as well as more advice and answers to questions, will be available at a one-hour free presentation on vermicomposting at 10 a.m. Wednesday at the Sheraton Keauhou Farmers Market. For those who have a worm box set up, worms will be for sale.

The Kona County Farm Bureau sponsors the market of local produce and crafts, sold by the growers and creators, every Wednesday in the Sheraton Keauhou Bay Resort and Spa's lower parking lot. Produce and products are for sale and a weekly presentation or performance by local talent is held.

**This column is produced by Diana Duff.**

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### Gardening events

- **Friday:** "The Story of Seed" a free presentation from 5:30 to 7 p.m. in the Kahaluu Conference Room at the Outrigger Keauhou Beach Resort. Visit [kohalacenter.org/seedsymposium/about.html](http://kohalacenter.org/seedsymposium/about.html) for more information.

- **Saturday and Sunday:** "Hua Ka Hua -- Restore Our Seed" symposium from 8:30 a.m. to 4:30 p.m. both days. Visit [kohalacenter.org/seedsymposium/about.html](http://kohalacenter.org/seedsymposium/about.html) for more information.