



## The Need for Seed: Surveying the Interests of Local Seed Growers

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December 2022

The COVID-19 pandemic disrupted food supply chains across the world, driving unprecedented demand for seed and home gardening supplies. Seed suppliers of all sizes experienced an explosion of orders and seed shortages, limiting the availability of different varieties for farmers and gardeners as public interest in food self-sufficiency grows. This has clearly been observed in Hawai'i as well, with the UH Seed Lab reporting the equivalent of a whole year's sales in a single month during Spring 2020.

For Hawai'i growers, sourcing high-performing seeds can be a major barrier to production due to the state's unique climates and growing conditions. The CTAHR Extension Seed Saving Hui formed in 2020 to address the need for high-quality seed and supporting development of local seed production. An online needs assessment survey conducted in 2021 revealed important information about the state's existing small-scale seed saving and production and highlighted the potential for future expansion.

### Survey Summary: Experienced Growers (n=46)

Almost half of experienced seed growers responding to the survey had 10+ years of seed saving experience, and 83% were growing 1 acre of seed or less. Most experienced growers were home gardeners (n=30), followed by educators, farmers, and researchers. For these respondents, crops of greatest interest for seed saving included herbs, flowers, brassicas, tomatoes, and lettuce. Growers also indicated interest in saving seed from a greater diversity of crops, varieties developed by the University of Hawai'i, and crops and varieties that are adapted to local conditions and resistant to local stresses.

Respondents were asked about their current end market use for seeds. Nearly 90% of the experienced respondents saved seeds for personal use. At least 50% also utilized seed for public

distribution or food security. Only 30% responded that they sell seed or use it for educational purposes.

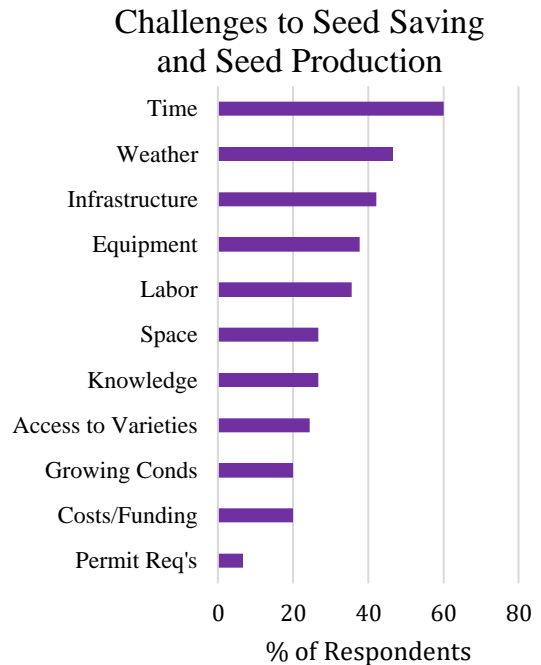


**Photo 1.** Equipment used for seed saving, some purchased by the Seed Saving Hui

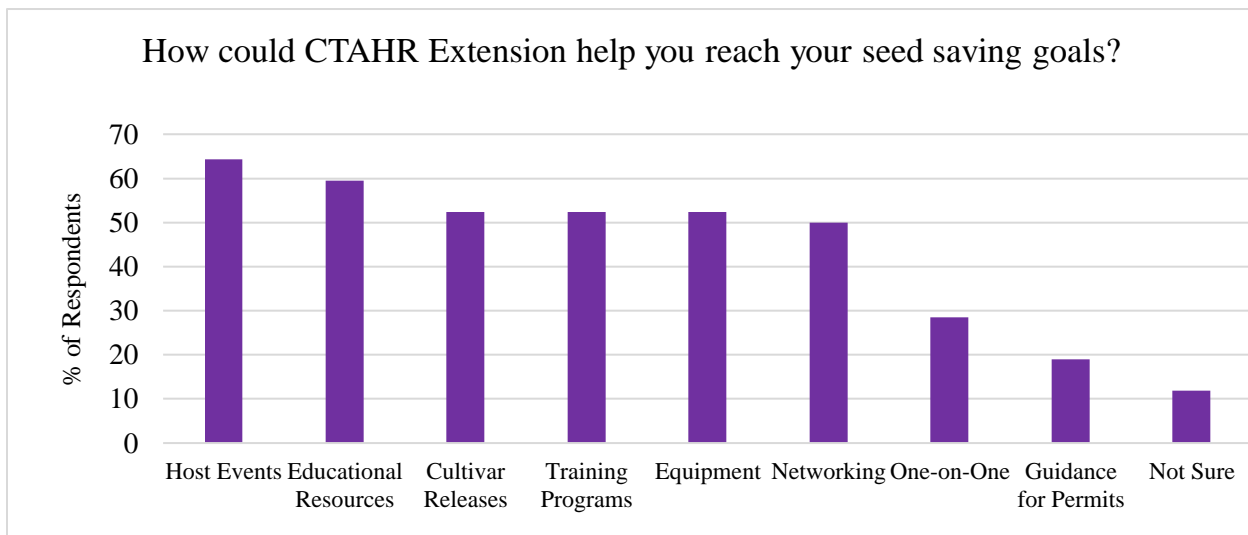
The most common challenge cited by experienced seed savers was time, followed by weather, infrastructure, equipment, and labor. Infrastructure and equipment are both budget priorities in the next phase of the Hui’s work, with a focus on making resources available to the community.

**CTAHR Extension and Seed Saving Goals Informed by the Survey**

One survey respondent commented, “I think seed saving is a major component of a healthy food system. Improving varieties for our unique island conditions is critical.” Respondents felt CTAHR could support future seed saving efforts through events (e.g., seed exchanges, trainings, networking), educational resources, varieties development and release, and equipment for seed saving projects.



**Figure 1.** Common challenges faced by experienced growers



**Figure 2.** How CTAHR Extension can help experienced growers with their seed saving goals

## Extension Education and Outreach

Since the formation of the Seed Saving Hui, Extension agents across the state have worked to address seed saving and seed production needs through educational outreach.

- A new seed saving page on the [CTAHR GET Local website](http://go.hawaii.edu/x8H) (<http://go.hawaii.edu/x8H>) compiles existing University of Hawai‘i resources on seed production and related issues, including the “Needs and Interests of Experienced Hawai‘i Seed Savers” Fact Sheet.
- Extension offices on Maui, Hawai‘i, O‘ahu, and Kaua‘i now have supplies such as screens and mesh strainers for groups interested in producing seed for public use (e.g. seed libraries, seed exchanges, school gardens). Interested parties can contact their [local extension office](https://go.hawaii.edu/kfV) (<https://go.hawaii.edu/kfV>) to inquire about using this equipment.
- Extension agent Glenn Teves is offering a new Seed Saving Workshop Series starting January 2023. Apply at <https://tinyurl.com/seedsaving2023>. Applications close on December 16<sup>th</sup>. [More information can be found on the flyer](https://go.hawaii.edu/kGQ) (<https://go.hawaii.edu/kGQ>).
- Teves also led three “Train the Trainers” sessions for CTAHR extension agents to equip educators with foundational knowledge about seed saving in Hawai‘i. Teves presented in-person seed saving lessons on Moloka‘i and Hawai‘i Island and led a virtual 3-part series on seed saving with Extension agent Jennifer Hawkins as part of the “Lunch and Learn” program. Recordings are available on the [Moloka‘i Extension YouTube page](https://go.hawaii.edu/Gfk) (<https://go.hawaii.edu/Gfk>).
- Teves and Extension agent Marielle Hampton worked with SEEDS of Honua to pilot a statewide citizen science project on seed saving where participants grew out and saved seed from F<sub>2</sub> tomatoes and pigeon pea varieties. In partnership with the Hawai‘i Seed Growers Network, the project will work with gardeners to evaluate snow pea varieties in 2023.



**Photo 1.** O‘ahu Extension agent Jensen Uyeda teaching growers to collect seeds in the field

- On October 1, 2022, O‘ahu Extension agents Joshua Silva and Jensen Uyeda hosted a seed saving workshop at the Poamoho Research Station for O‘ahu growers (n=18). Topics and demonstrations taught included pollination (flower types, roging, protection); seed harvesting; seed cleaning (wet vs dry, winnower machine, hot water treatment); seed storage (drying, refrigeration, "100 Rule"); and seed germination testing. 85% of

participants rated the workshop as Excellent, with 77% having learned at least 5 new things that they will adopt, such as wet seed cleaning techniques and using tools like blenders and winnowers.

- Extension agents Emilie Kirk and James Keach participated in the Hawai‘i Seed Summit on March 26, 2022 (n=58), presenting on the results of the survey and participatory plant breeding opportunities for Hawai‘i, respectively. There was acute interest from participants, including questions about how to support seed production and development in CTAHR as well as hopes for future workshops and programming. Agents Glenn Teves and Marielle Hampton also presented on their citizen science seed saving project ([recordings of the presentations](https://go.hawaii.edu/Pfk) - <https://go.hawaii.edu/Pfk>).

The Hui will continue providing education and outreach programs for the public and support local seed sources such as Hawaii Seed Growers Network and the UH Seed Lab. Through expansion of current initiatives to address the needs and interests of seed savers in Hawai‘i, CTAHR Cooperative Extension can enhance the growth and quality of local seed production.

*“We need many eyes and many hands for crop development and seed production.”  
- Hawai‘i Seed Summit participant*