

Featured Farmers: Desmond Ogata, Darren Park, and Glenn Teves University of Hawai'i Seed Lab, University of Hawai'i at Mānoa

In this edition, we are highlighting the hard work and dedication of Desmond Ogata, Darren Park, and the University of Hawaii Seed Lab.

We interviewed Desmond and Darren along with Extension Agent Glenn Teves in early March 2023.

What is the UH Seed Lab and how did it come into being?

The UH Seed Program was established in the 1960's by a mandate from the legislature to provide Hawaii growers with access to locally adapted seed. It is part of the UH-CTAHR Agricultural Diagnostic Service Center (ADSC). The UH

Seed Program was established in the 1960's by a mandate from the legislature to provide Hawaii growers with access to locally adapted seed. In all these years, we have only raised the price of our seed twice. While I [Desmond] was originally hired on as the plant disease diagnostician, in 2003 I took on the additional responsibilities of taking over the Seed Program when the previous ADSC manager, Richard Sakuoka, passed away. Relying primarily on student help, we have been the stewards of more than 30 vegetable and papaya varieties over the decades.

Where do the seeds you sell come from?

The seeds we sell at the Seed Lab are UH varieties, and most are open pollinated plus a few hybrids that are hand pollinated. Historically the seed was grown at the CTAHR research and extension stations across the different islands, but in recent years this has been limited by reduced field staff at the stations. Some of the seed production has been contracted out to different seed companies over the years also; however, since Hawai'i is a relatively small market, it is sometimes difficult to find growers to contract to produce these varieties. We are concerned about running out of seed since it has been so difficult to find reliable sources recently, and demand remains high. During the COVID-19 pandemic in 2020 we saw demand skyrocket. At the time, many major seed companies either weren't filling orders or were focusing solely on commercial farmers. The UH Seed Lab really stepped up to take care of the community here, but this also depleted our seed reserves. We have a collection of seeds right now, but we cannot produce more without the labor support.

What makes the UH seeds so popular? Can you share some examples of the impact the seed lab has had in Hawaii and beyond?

UH was ahead of its time in terms of breeding for resistance. Many of the UH varieties have provided the foundation for vegetable breeding programs well beyond Hawai'i. Three examples are nematode resistance in 'Anahu' tomatoes, bacterial leaf spot resistance in 'Ka'ala' peppers, and powdery mildew resistance in 'Mānoa' snow peas, where the UH varieties are the parents that endowed this resistance to numerous varieties that have been developed by Oregon State University, Cornell University, and countless others, nationally and internationally. The heat tolerance of many UH varieties is increasingly important now in the context of climate change.



Locally the Seed Store is part of the public face of CTAHR. The gardening public and many farmers in Hawai'i rely on us for seed that is well-adapted to local growing conditions. The contribution to local food security is immeasurable since seed is critical to being able to grow food. Additionally, many other seed companies, locally and nationally, source their bulk seed from the Seed Lab and repackage it to diversify their offerings. The Seed Lab also provides support for faculty research by providing locally adapted and known high germination seed for trials. The UH varieties are also good checks in plantings or trials against commercial varieties from the mainland US.

What advice do you give to gardeners who are looking for seed that might not be available right now?

I have been encouraging and educating gardeners to grow and save their own seed. This is the best option to ensure they have access to varieties they like and know can survive the pressures of pests, disease, and climate in their area.

Take away:

Food security is linked to seed security. What do we need everyday in our life? Food and water? Where does the food come from? How does it get there? From the farmer? What does the farmer grow them from? From seeds. And where do the seeds come from?

Covid was eye-opening about what happens when food supply chains are interrupted. What will we do with the next major disaster?

Check out seed saving resources on the CTAHR GET Local website: https://manoa.hawaii.edu/ctahr/getlocal/2022/12/06/seed-saving-resources/