

CTAHR QUARTERLY

# Impact Report

2019 Q1 & Q2

*PARTNERSHIPS AND COLLABORATION*

## Academic

programs that prepare students to solve real-world challenges.



## Research

that advances scientific understanding at local and global levels.



## Extension

that delivers practical knowledge to Hawai'i communities.



COLLEGE OF TROPICAL AGRICULTURE  
AND HUMAN RESOURCES  
UNIVERSITY OF HAWAII AT MĀNOA



# SWEET ESCAPE

University of Hawaii at Mānoa's 53 Annual Fashion Show

## SWEET ESCAPE LINEUP:

Dreamy Botanicals - Swimwear

Midnight Edge - Swimwear

Rustic Round Up - Menswear

Met Gala - Dress Design

Underexposed Exposé - Jessica Arista

Bloom Where You Are Planted - April Joy Garcia

Celestial Bodies - Kimmy Diaz

Many hours of collaboration between students, models, and the faculty of our **Fashion Design and Merchandising** program paid off in a dazzling display of clothing design and event production.

Against the exquisite backdrop of the Hawai'i State Art Museum, the 53rd Annual Fashion Show featured **47 distinct creations** by **CTAHR students** in dresswear, swimwear, menswear, and the individual collections of three junior designers.



Design and with the knowledge -related fields.

With the fashion show we are featuring year's production 019.

## TICKET INFORMATION

One year after a devastating flood, the Kaua'i community exemplifies the Hawaiian spirit of working together to solve big problems.

CTAHR is doing what we can to support Kaua'i, but the state of our research facilities presents a significant challenge, when roof panels are literally falling on heads.

Despite these limited resources, our Kaua'i Extension staff continue to help, and get things done. They have forged partnerships across industries, agencies and nonprofits on the Garden Isle.



A few outstanding individuals must be mentioned: County administrator Russell Messing; Extension agents Emilie Kirk, Roshan Manandhar, and Savannah Katulski; retired (and still missed) Farm manager Frankie Matsuno; and Ag techs Michael Carle, Tyrus Moises, Lou Nishida

(a second-generation Ag worker!), and Randall Yokoyama. Mahalo for your above-and-beyond efforts to create positive change.

At CTAHR, our primary goal (going back more than 100 years in Hawai'i) has always been the same: to strengthen families and communities, food and agricultural systems, the economy and environment of Hawai'i.

To be effective, we need partnerships and collaboration. Across the islands, our faculty, staff, and students are working with federal and state agencies, industry, nonprofits, volunteers, and other stakeholders. We share ideas and resources. We lend each other a hand. We have each other's backs.

Mahalo for partnering and collaborating with the CTAHR 'ohana.

Across the islands, our faculty, staff and students are working with federal and state agencies, industry, nonprofits, volunteers, and other stakeholders.

Aloha,

**Nicholas Comerford, PhD**

Dean and Director for Research and Cooperative Extension

College of Tropical Agriculture and Human Resources

The University of Hawai'i at Mānoa



A photograph of three people standing in a greenhouse filled with red anthuriums. On the left is a man in a white shirt with green vertical stripes and blue jeans. In the center is a man in a pink and green floral shirt. On the right is a woman in a light green t-shirt with a 'UNIVERSITY OF HAWAII AT MĀNOA' logo and blue jeans. The greenhouse has a translucent plastic covering and rows of plants in the background.

## The Secret of Our Success? Our Relationship With CTAHR

*by Eric Tanouye, President  
Green Point Nurseries*

**M**y dad was a history major; he didn't know anything about tropical plants!

But when his host family in Iowa got a box of anthuriums sent from my grandmother in Hawai'i, they were so appreciative – and shocked. They had never before seen such an exotic, beautiful new flower. It inspired Dad to give up history and become a flower exporter.

In the early 1960s, very little research existed on anthuriums. But Dr. Tadashi Higaki in Cooperative Extension believed in CTAHR's mission to help the community, to teach a young farmer how to grow anthuriums commercially. He helped Dad learn practical entomology, how to control thrips, mites, beetles, and aphids.

Then anthracnose (fungus) began threatening local growers everywhere and causing big economic losses. Dr. Higaki did countless

**Eric with CTAHR Extension Agents  
Robert Cating and Joanne Lichty.**



## PARTNERSHIPS AND COLLABORATION

experiments with pesticides, he worked with numerous chemical companies, for many years.

Together, he and Dad figured out which pesticides were effective and safe. Those organophosphates became the industry standard pesticides for anthuriums, orchids, and tropical flowers all over Hawai'i.

Then came bacterial blight, our biggest epidemic of the last half-century. Everyone was losing plants.

The whole of CTAHR got involved and worked very hard to help growers. They came up with pre- and post-harvest recommendations on sanitation, and brought back the local anthurium industry from almost total annihilation.

Dad also knew, only a strong breeding program could keep Hawai'i's export flower industry sustainable. Under Dr. Haruyuki Kamemoto, CTAHR has produced more than 40 commercial cultivars of anthurium over the past 50 years. His student, Dr. Tessie Amore, is still releasing new varieties to share with local growers.

Dad was convinced that, with CTAHR support, we can overcome any problem and be successful. When he slowed down, and us kids stepped up, he told us, "Look upon the researchers and Extension agents, not as outsiders but as your business partners and educators."

But you know, when people help you solve problems for 50 years, it's more than just business. I feel we have a personal relationship with CTAHR faculty and staff.

Some growers don't want to 'share their secrets.' But Dad would tell them, "You don't have to be the smartest guy, just surround yourself with bright, talented people."

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And that's how I look at CTAHR. They solve problems, they help us chart our future, and they celebrate our successes. They want every one of my fellow growers in Hawai'i to be just as successful as Green Point.

# Revitalizing an Industry

**F**or more than 80 years, Kaua'i's Agricultural Research Station has maintained a living collection of the known taro cultivars in Hawai'i. Because taro grows from a perishable corm, this is not a matter of saving seeds. Each variety must be planted, watered, fertilized, weeded, protected from pests, grown out to maturity, harvested, and grown again—every year. It's a dynamic and never-ending process. Preserving the varieties, not only for their cultural and historical significance but also for their potential use for future hybrids, is an important service CTAHR provides for the people of Hawai'i.





## PARTNERSHIPS AND COLLABORATION

Like the life-cycle of a kalo plant, the taro industry on Kaua'i has undergone growth, flourishing, dying back, and regrowth. And every time it faltered, what revived it was working together, collaboration between community and university: growers, researchers, and Extension agents.

This fall and rise, decline and renewal, was shown most recently in the floods of April 2018, which caused extensive damage to the taro-growing region of Hanalei. CTAHR was there to help, from performing water and soil testing for contaminants to lending strong backs for cleanup. Now the industry is getting back on its feet again, thanks in part to the huli CTAHR is distributing to growers for replanting.

The taro variety they're distributing recalls the last time the industry faltered and the college helped to bring it back, stronger than before. In the 1990s, taro farming was in trouble. The most commonly grown variety, 'Maui Lehua', was being decimated by birds, pigs, and invasive snails. Even worse was the damaging taro leaf blight (TLB).

So CTAHR plant pathologist John Cho got together with then-county administrator Roy Yamakawa and grower collaborators like Wayne Tanji of Tanji Farm to breed a better taro.

Using the germplasm collections maintained at the research stations, 10 varieties were developed through conventional breeding from 2005 to 2010. Collaborators grew them out to test under different

conditions, and Hawaiian associations did taste tests of poi made from them.

One variety, eventually named 'Leihua Ho'ohua', was tolerant to TLB, out-yielded 'Maui Lehua', tasted good, and could be used by the major processor, Honolulu Poi Company. It was also far more resistant to snails, birds, and pigs.

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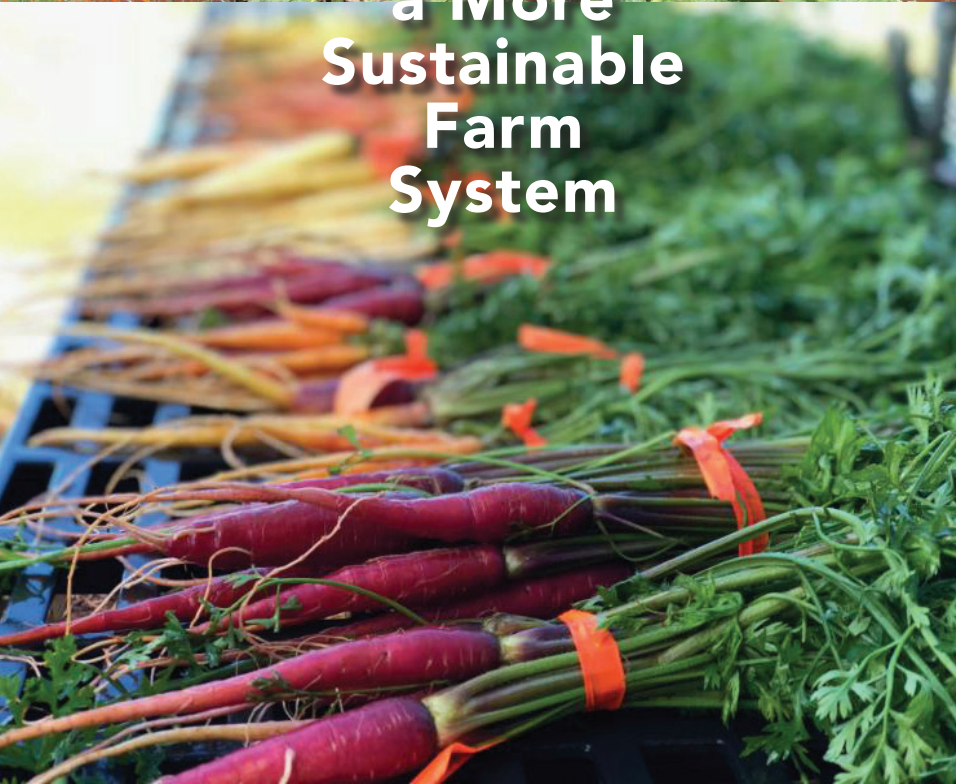
The project yielded another promising variety for Kaua'i, two varieties suitable for growing in Puerto Rico, and several ornamental forms for backyard enthusiasts. But 'Leihua Ho'ohua', which the college distributed free to growers, saved the industry, individuals' livelihoods, and the tradition of taro growing in Hanalei.

Today, 80% of the taro grown there is 'Leihua Ho'ohua', and it's being replanted now, in the next revitalization of the valley and the industry.





## Healthy Communities Through a More Sustainable Farm System



In my 41 years with the College of Tropical Agriculture and Human Resources, first as a horticulture student and then as Extension agent, I look back with great pride on CTAHR's longstanding efforts to improve the nutritional health of Hawai'i.

At first glance, one might not notice the connection between agriculture and family sciences.

But at the core of CTAHR's diversity and wide range of activities, we share the same mission, which is to strengthen the individuals, families and communities of Hawai'i.

This begins with good nutrition, and CTAHR has always been right in the middle of this effort. CTAHR started the Nutrition Education and Wellness (NEW) program and is a leader in the Expanded Food and Nutrition Education Program (EF-NEP), the Supplemental Nutrition



Kelvin Sewake, Interim Associate Dean & Associate Director for Cooperative Extension



## PARTNERSHIPS AND COLLABORATION

Assistance Program Education (SNAP-Ed), the Children's Healthy Living (CHL) Program for Remote Underserved Minority Populations in the Pacific Region, and 4-H nutrition education and intergenerational nutrition programs.

A few years ago, the agricultural side of CTAHR and the family/consumer side decided to team up for a more wholistic approach to human health. The result is a statewide Extension initiative called "Healthy Communities Through a More Sustainable Farm System."

The goal, within CTAHR and through partnerships, is to facilitate more locally produced food consumed by more local residents. How can we support farm-to-table, farm-to-school and similar ideas in the community, businesses, and legislature? How can we make local produce, dairy and meats – which are the freshest and most nutritious foods – more accessible to consumers and better fight the battle against obesity, diabetes, and other diseases?

CTAHR plans to roll out pilot programs in places like Wai'anae, O'ahu, and Ho'olehua, Moloka'i, where much of the food produced today is sold outside of the immediate communities. It would be preferable to have much of the food stay there, close to where it was produced, and have Mom and Dad cook up a fresh, healthy, delicious meal using local ingredients.

The Hawai'i Department of Health has agreed to match CTAHR's funds for two full-time positions for this initiative. More partnerships are expected with agencies, schools, foundations, and nonprofits

because we all want to make a significant impact on the nutrition of local families and health of our communities.

At the core of CTAHR's diversity and activities, we share the same mission, which is to strengthen the individuals, families and communities of Hawai'i.

As you read this, I will have already retired after four wonderful decades with CTAHR, but this initiative will continue under Sothy Eng, Monica Esquivel, Glenn Teves, Julia Zee, Noa Lincoln, Lynn Nakamura-Tengan, Jensen Uyeda, Christine Hanakawa, and others. I invite you to contact them and learn more about our partnerships to strengthen Hawai'i.

Aloha!



## Being the Tree

**G**lenn Teves has an unlikely formula for succeeding as a farmer in Moloka'i: think like a papaya.

The longtime Extension agent offered this surprising suggestion in a recent issue of the quarterly newsletter he sends out to his Native Hawaiian clientele. On a practical level, he means farmers should figure out what they would want if they were papaya plants, so they can help their trees flourish in the hot and dry,

sometimes inhospitable Ho'olehua region.



Agent Jennifer Hawkins is helping with that part of the equation, heading up a new project teaching organic papaya producers on Moloka'i to implement best management practices for increased market success.

Most papaya farmers in Hawai'i grow the 'Rainbow' papaya that is genetically modified for resistance to papaya ringspot virus, but Moloka'i doesn't have the disease. That means producers there have a greater choice of varieties and can more easily grow organic crops.

Just as important, though, Glenn's recommendation reflects a larger holistic philosophy of farming: being at one with the plants and the 'āina, a sense of farming that involves working with, not against, the crops, the soil, the precipitation, and the climate.

The web of interdependence also includes the community to which the agents are committed, the farmers who grow and harvest and sell.



## PARTNERSHIPS AND COLLABORATION

Working with the state is another critical aspect of that mutuality. The Beginning Farmer program, in which both agents serve, coordinates with the Department of Hawaiian Home Lands to foster new native Hawaiian farm families through a hands-on, experiential agriculture education program.

The Hawaiian Homes Act of 1920 set aside lands for native Hawaiians hoping to return to their agrarian roots, and today the Ho'olehua area has over 7,800 acres of these Hawaii Home Lands, complete with farm infrastructure, including dedicated water for irrigation.

All of our initiatives  
are based on priorities  
set by Moloka'i farmers.

Less than 5% of these lands were being farmed when the program began in 2009; ten years later, a whole new crop of families are farming here thanks to the training and support they have received.

This sense of cooperation is what makes Extension work on Moloka'i different not only from the Mainland but also from other islands, Glenn believes.

"All of our initiatives are based on priorities set by Moloka'i farmers," he explains, everyone working

together to maximize scarce resources. Because this sense of community means that when the farmers thrive, Moloka'i thrives.



Economic Impact  
of CTAHR's  
**Children's Healthy  
Living Program**

in Hawai'i and the U.S.-  
affiliated Pacific Basin\*

*\* not including the indirect savings  
from factors such as less worker  
replacement, work loss, or reduced  
productivity from illness and disease.*

**3.9%**

decrease in overweight  
or obese children

**\$15M+**

savings in lifetime  
medical costs

**\$16M+**

difference in  
lifetime earnings

**\$32M**

total long-term  
economic impact



We are the  
**Land-Grant  
College of the  
University  
of Hawai'i.**

CTAHR has 1+ million contacts with Hawai'i residents each year. We strengthen local families and communities, food and agricultural systems, the economy and environment across the Hawaiian Islands. Mahalo for partnering with us.



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