



K A M A H I ' A I



AGRICULTURAL NEWS FOR KAMEHAMEHA SCHOOLS 'OHANA & FARMERS

ISSUE NO. 5

2013

As a private trust founded and endowed by the legacy of Princess Bernice Pauahi Bishop, Kamehameha Schools (KS) is dedicated to improving the capability and well-being of native Hawaiians. Whether educating people or caring for the land, KS' mission is much the same.

We take our kuleana to steward 363,000 acres of land very seriously. We manage these lands - 98 percent of which is designated as agriculture and conservation - to optimize the balance of educational, cultural, economic, environmental, and community returns.

Kamehameha Schools' 2009 Strategic Agricultural Plan lays a vision and strategy for the optimal management and use of the schools' agricultural lands across the state. Much of this vision is dependent on you, the nā mahi'ai (farmers), who are committed to the long-term cultivation of locally grown produce, meats, traditional crops and renewable energy projects such as solar and wind energy.

We hope you find this newsletter relevant and useful to your operations. If you have any questions or feedback, please contact us at land@ksbe.edu.

Mahalo!



Make your agricultural dreams a reality with Mahi'ai Match-Up

Hawai'i was once a sustainable island where food was grown locally and communities were self-sufficient. Today, 80 percent of our food is imported. To decrease our dependence on

leasehold interest in, some of KS' most valuable agricultural lands," said Thomas Kaeko Duarte, Kamehameha's director of West Hawai'i strategic initiatives. "It's been three years since we

(waived rent up to five years) and cash prizes to help make their agricultural business plan a reality.

"Mahi'ai Match-up is an exciting way for Ke

Ali'i Pauahi Foundation and Kamehameha Schools to partner with other generous supporters of the sustainable agricultural movement in Hawai'i, such as the Ulupono Initiative, to move our community closer to food security," said Keawe Liu, Ke Ali'i Pauahi Foundation's executive director. "We look forward to being able to extend our reach and benefit



ENTER THE **MAHI'AI MATCH-UP** TODAY!

AGRICULTURAL BUSINESS PLAN CONTEST

MAKE YOUR AGRICULTURAL DREAMS A REALITY

imports and move Hawai'i one step closer to food self-sufficiency, Kamehameha Schools and Ke Ali'i Pauahi Foundation have launched an agricultural business plan contest. Coined Mahi'ai Match-up, the contest is dedicated to celebrating innovative agricultural ideas to create a sustainable Hawai'i.

"Mahi'ai Match-up is a fun, competitive venue for talented farmers and entrepreneurs to compete for access to, and

began implementation on our strategic agricultural plan and we've invested millions of dollars toward infrastructure improvements such as roads, irrigation, fencing and security gates in order to prepare our priority agricultural areas for the success of new farmers."

All farmers, entrepreneurs, aspiring farmers or anyone with a new, innovative agricultural idea are encouraged to apply by July 1, 2013. Contest winners will receive an agricultural lease

the entire state of Hawai'i by providing agricultural scholarships and grants."

Business plans should be tailored to one of the six available land parcels. Preference will be given to plans that demonstrate food and/or organic crops. For more information visit www.pauahi.org. Deadline to apply is July 1, 2013.





Featured Farm: Sumida Farm

"Farming is not just about digging dirt and planting seeds, it's a real science".



Barbara and David Sumida

Situated next to the hustle and bustle of cars zipping along Kamehameha Highway is a 10-acre oasis known as Sumida Farm. With roots dating back to 1928, Sumida Farm currently produces 70 percent of Hawai'i's watercress. Third generation brother and sister owners, David and Barbara Sumida, took over the farm in 1982 and recently signed a 20 year lease with Kamehameha Schools to continue their 85-year-old legacy.

"My parents never groomed us to take over the farm," said David Sumida. "It was more of a sense of pride to hang onto this farm despite the development that went on around us."

Nestled between Pearlridge Shopping Center and hundreds of commercial and residential buildings, this area was highly prized by Hawaiians for growing kalo and raising fish. Fed by fresh and abundantly flowing spring water from Pearl Harbor, this location is ideal for growing watercress.

Grown in water and not soil, watercress reaches maturity in eight weeks. Once harvested, the clippings are effortlessly

thrown back into the water to reconnect its roots to the loose gravel below.

"Farming is not just about digging dirt and planting seeds, it's a real science," said Mr. Sumida. "With watercress, we had more pests and challenges than in our parents' generation."

Kalua Pork and Watercress with Hoisin Sauce

Ingredients:

- 1 tub (12 ounces) k  lua pork
- 1 teaspoon oil
- 1 medium Maui onion or sweet onion, halved and sliced
- Freshly ground pepper
- 1 tablespoon hoisin sauce
- 1 bunch of watercress, cut into 1-1.5 inch pieces

Instructions: In a large pan or wok, heat oil over medium high heat and stir-fry onion for about 1 minute. Add k  lua pork and cook for about 3-5 minutes until heated through, breaking it up with a wooden spoon. Add freshly ground pepper, hoisin sauce and watercress. Cover and cook for about 1 minute until watercress is wilted.

To address some of these concerns, the Sumida's hired an entomologist to check for bugs and diseases. They also installed sprinkler systems that used recycled water to remove diamond back moth eggs from the leaves and contracted the Board of Water Supply to double check the water quality.

Producing five tons of watercress every week the Sumida's invested in a vacuum chilling machine to extend the shelf life from three days to one week. Cooling up to a 1,000 pounds of watercress at 36 degrees in under an hour, the Sumida's are able to keep up with the local demand. Next time you are shopping for watercress at your neighborhood Foodland, Safeway or Times Supermarket - look for the red and white Sumida Farm twist tie.

Coffee reminders from UH's College of Tropical Agriculture and Human Resources

Submitted by UH CTAHR Kona Extension Agents, Andrea Kawabata and Ryan Tsutsui

With the first Kona snow having bloomed roughly six months ago, it's important to monitor, sample and treat coffee trees for Coffee Berry Borer (CBB) beetle infestation. When increased activity or "swarming" of beetles is noticed, begin spraying *Beauveria*. Waiting mid-to late-season to control this coffee pest will be too late.

In addition to pruning, trees must be stripped of last season's cherry and raisins. Consider conducting a first round sanitation to remove all color-break, red, over-ripe, raisin and infested green cherry resulting from your first blossoms. Process or destroy the first round of picked coffee cherry. If cherry are left on the trees, they will host and potentially release multiple generations of CBB larvae that will damage late season crops.

Coffee Workshops and Updates

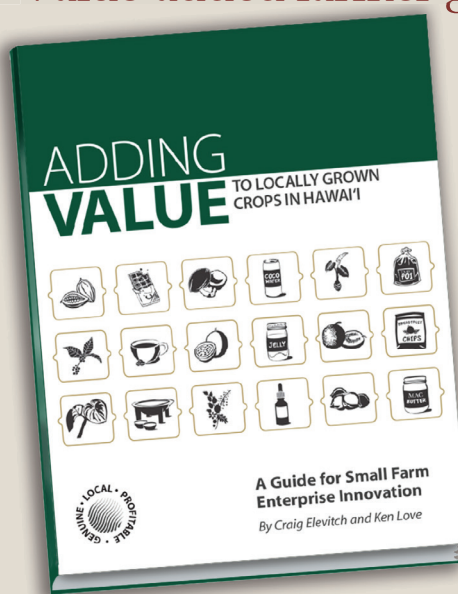
In March, coffee growers attended a coffee and CBB seminar presented by Hilo researchers and representatives from the USDA Pacific Basin Agricultural Research Center. For more information on the topics below, please contact each researcher.

- Use of ProGibb® and Protone® (plant growth regulators) to suspend or induce coffee blooms in conjunction with heavy rainfall to synchronize flowering and condense harvests to assist field sanitation practices. – Dr. Tracie Matsumoto-Brower
- Detection of molecular compounds significantly attractive to CBB for use in developing better CBB lures and attractants for baiting and trapping. – Dr. Matthew Siderhurst
- Importance of high humidity and low sun UV for better efficacy and longevity of *Beauveria* fungal spores and the importance of reapplication of *Beauveria*. – Dr. Lisa Keith (and Dr. Robert Hollingworth)
- Use of Surround WP (kaolin) to prevent CBB infestation with bi-weekly sprays. – Dr. Elsie Greco of UH's College of Tropical Agriculture and Human Resources (CTAHR) and Shawn Steiman of Coffee Consulting.

For more information regarding a series of upcoming Integrated Pest Management (IPM) and CBB Sampling Method workshops, visit <http://www.lifectahr.blogspot.com/>.



Value-added farmer guide released



Adding value to products and practices while controlling risk is at the heart of any financially sustainable Hawai'i farm enterprise. To highlight the importance of value-added products, a new publication entitled "Adding Value to Locally Grown Crops in Hawai'i: A Guide for Small Farm Enterprise Innovation" has been released.

The illustrated guide was written by Kona farmers and educators, Craig Elevitch and Ken Love, to present the

primary concepts to encourage research and product development in order to build or improve a successful value added farm enterprise. To download the guide or request a free copy, visit www.valueadded.info.

PUNALU'U AHUPUA'A FARMS **OPEN** FOR POSSIBILITIES

Since Kamehameha Schools opened the Punalu'u Ahupua'a Farms – a 220-acre ag park dedicated to niche farming – only half a dozen parcels remain open for cultivation.

Identified as the first goal in Kamehameha's Strategic Agricultural Plan, increasing food production in Hawai'i remains a top priority for Kamehameha's Punalu'u land asset manager, Kawika Burgess.

"Our sights are set on increasing food production and food sustainability on Kamehameha lands statewide which we know requires working together with local growers," Burgess said.

And with the necessary infrastructure provided by landowner Kamehameha Schools – access to waterlines, common area maintenance and necessary security – organic farmers, Joshua and Rachel Jackson, are able to expand their production of tropical fruits to include kalo and row crop vegetables for local distribution.

Agricultural units ranging in size from 2 to 10 acres and to date, a total of 45 new farming acres are under active agricultural production. For details on the Punalu'u Ahupua'a Farms, contact Burgess at (808) 534-8189.





KAMEHAMEHA SCHOOLS®

567 South King Street, Suite 200
Honolulu, Hawai'i 96813

Non-Profit Org.
U.S. POSTAGE
PA ID
Honolulu, HI
Permit NO. 1449

Online professional development opportunities available

The Hawai'i Agri-Tourism Association (HATA) is launching a distance-learning network to provide online training and educational opportunities for farmers, ranchers and agricultural producers in the state.

Internet courses will be geared towards leadership, business development, entrepreneurship, marketing, value-added and strategic planning designed to diversify income and increase profitability.

"The benefit of signing up for HATA's distance learning network is that students can receive greater flexibility to achieve their educational goals through audio, video and computer technologies," said HATA's special project manager, Benson Medina. "We hope to free them from the constraints of travel or relocation to provide greater control over their own learning and professional development."

A unique feature of this program is the use of Any Meeting™ technology that will allow HATA to bring a high level of professional development to the participants. The software program allows the facilitators to deliver information in various ways and also creates forums where students can interact with other participants and subject matter experts.

The use of this internet platform will allow HATA to create a "continuous learning" environment that will foster better retention, more relevant experiences and ultimately, more economic development for the district.

All Kamehameha Schools' farmers, and others, are encouraged to sign up at www.hiagtourism.org. For more information, contact Medina at benson@hiagtoursim.org or (808) 286-6559.

Kamehameha Schools' mission is to create educational opportunities in perpetuity to improve the capability and well-being of Native Hawaiian people. The schools were founded through the will of Hawaiian Princess Bernice Pauahi Bishop (1831-1884), the last direct descendant of King Kamehameha I who united the Hawaiian Islands. Kamehameha Schools is the largest private funder of education in Hawaii, serving 7,000 students in three K-12 campuses and 30 preschools. An additional 40,000 are served through scholarships, community-based programs, and collaborations with other educational organizations.