

E kūpaku ka ‘āina Hawaiian kalo varieties and other Hawaiian food crops protocol

The vision of E kūpaku ka ‘āina (EKKA) is *bringing severely degraded lands back to ecological health and abundance*. Our *He Pili Wehena Ole O Na Kalo* program uses the transformative power of kalo to inspire new practitioners to the perpetuation of Hawaiian kalo varieties and to the landscapes, traditions, science, art, practice, hard work, ecological and economic vitality of taro farming and other Hawaiian food crops through collaboration with a diversity of individuals and organizations, including botanical gardens and the Lyon Arboretum Hawaii Rare Plants Program (HRPP) micropropagation lab. The HRPP lab aids Hawai‘i in the rescue and recovery of the Island’s most critically endangered native plant species, as well as, partnering with EKKA to conserve and recovery traditional Hawaiian kalo cultivars and other Polynesian-introduced/Hawaiian-developed varieties of food and use crops. We partner with botanical gardens in support of ex-situ crop cultivar collections for educational and seed bank purposes. Collectively, we strive to awaken, expand and deepen our knowledge of Hawaiian food crop cultivars through meaningful, high caliber science (indigenous and conventional) at all levels. Returning Hawaiian kalo varieties to people’s tables is an essential component of our work to rekindle and perpetuate Hawaiian food crop cultivar diversity and increase local food sovereignty.

Over the years, many of the historically documented Hawaiian varieties of kalo (taro), ‘uala (sweet potato), mai‘a (banana), ‘awa (kava) kō (sugarcane), and niu (coconut) have been lost or compromised due to severe declines in cultivation, loss of cultural knowledge, increased pests and diseases, and modern hybridization practices. Acknowledging the development of Hawaiian crop plant cultivar diversity by Hawaiian mahi‘ai (farmers) and farmers throughout the Pacific over thousands of years, we celebrate this diversity and recognize their vital role in local/island food security and resilience in the face of climate change.

Out of an abundance of caution from the hard lessons of past Hawaiian crop plants research in Hawai‘i, as well as a recognized need to preserve and protect this important diversity and their unique characteristics, behaviors, and ecological/climatic preferences for the future, and, because we work with a diversity of partners, EKKA has adopted this protocol to articulate our kuleana in our own work. We invite other organizations to adopt similar protocols, and encourage proactive, collaborative, and culturally and community appropriate approaches to the study of Hawaiian food crop plants that move past the patriarchal histories and practices of agriculture in Hawai‘i.¹

Our commitments.

1. We recognize that indigenous knowledge is strong, multi-generational science that is also multi-disciplinary and fully integrated with keen observations of the natural world in all its forms.
2. We honor and acknowledge the origins, genealogies, mo‘olelo (legends, histories, stories) and insight embedded within indigenous crop cultivars as cultural identity and part of a cherished library to learn from, and, that we have much to learn about the unique

¹ This approach aligns with the Aichi 2020 Biodiversity Targets 12, 16 and 18 under the United Nations Convention on Biological Diversity.

characteristics, behaviors, yields and ecological/climatic preferences of indigenous crop cultivars.

3. We acknowledge that crop varieties, practices and place are intimately connected. Attention solely to yields and new cultivar development will not resolve future food security challenges. We have kuleana (responsibility) to relearn and reintegrate regenerative soil and water practices that rebuilds crop and 'āina resilience long term.
4. We will safeguard the cultural identity of each Hawaiian crop plant cultivar we grow through collection, ascension and field protocols that retain Hawaiian varietal names where they are still known, along with clear site and chain of origin data wherever possible. Regular rotation and reverification of cultivars is a critically important part of maintaining accuracy among Hawaiian crop plants collections.
5. EKKA will not send plant material from its' Hawaiian crop plants collections to individuals, businesses, organizations outside of Hawai'i. Pacific Island-specific varietal plant material may be returned to their islands of origin, if known and documented, through our partnership with the HRPP for the purpose of recovering indigenous crop cultivars to their homes.
6. In order to prevent the misidentification of new hybrid or introduced cultivars as Hawaiian, we will not support, promote, or encourage the distribution of hybrids, or cultivars from outside Hawai'i, where prior careful documentation and identification and extensive observation of invasiveness under a range of conditions has not occurred.
7. In recognition of the collective rights of Indigenous Peoples to their heritage crops and cultivars, we will not, and do not, support, promote, engage in or encourage the licensing or patenting of indigenous varieties or hybrids derived, in part or in whole, from indigenous crop cultivars, nor their use in breeding programs in or outside of Hawai'i where indigenous rights may be lost.
8. More refined DNA investigation capabilities are helping to tease apart the unique genetic characteristics of indigenous cultivars and landraces in agriculture worldwide; however, similar technologies/research that are used in the development of genetically engineered cultivars are fraught with challenging issues that have yet to be resolved between Indigenous Peoples and researchers and may not be for years to come. We choose at this time to respect the relationships between Hawaiians and kupuna (ancestral) food crop varieties, as well as those from other cultures/countries by following practices as outlined in the Organic Standards and not participating in or providing plant materials, or its genomic material in part or in whole, for projects that seek to develop new cultivars outside these standards.
9. We will seek to act guided by the wisdom of the kupuna of this place.


Penny Levin, Executive Director
E kūpaku ka 'āina

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