'Uala (*Ipomoea batatas*) Working Group Collections Manager/Researcher Guiding Principles

Out of the lessons from kalo research in Hawai'i, the 'Uala Working Group (UWG) was formed in order to encourage proactive and collaborative approaches to the study of Hawaiian 'uala in a culturally and community appropriate manner within and outside a university setting.¹

The UWG believes that indigenous communities and farmers should guide and define research needs of relevance. Returning Hawaiian 'uala varieties to people's tables is also an essential component of rekindling and perpetuating this important food crop cultivar diversity and increasing Hawaii's food security. The UWG sees an important role as collections managers, researchers and organizations for positive experiences that benefit local communities, bring more integrity to the field, build mutual trust, enrich agricultural inquiry and move past the patriarchal histories and practices of agriculture in Hawai'i.

Purpose: To improve management and stewardship of Hawaiian and Pacific 'uala collections through pono practices and collaborative learning, and to encourage mindful, rigorous science and practice among collections managers, researchers, and students who may seek to work with Hawaiian 'uala (sweet potato; *Ipomoea batatas*) varieties.

Objectives:

- Provide proactive guidance for pono ways in which to proceed with or engage in 'uala collections management, research or work in 'uala as an indigenous crop in Hawai'i.
- Develop collection and identification protocols for 'uala varieties.
- Identify new and ongoing needs and activities related to 'uala
- Assist researchers in connecting with the questions and needs of the community.
- Reintroduce people to the tastes, aromas and versatility of Hawaiian 'uala varieties and revitalize the production of Hawaiian 'uala by local growers for local markets.
- Support and coordinate 'uala research efforts that align with the guidelines and principles of the UWG, including but not limited to the study and identification of traditional Hawaiian 'uala varieties, agriculture or horticultural management strategies, models and ecological patterns.

The goal of this protocol is to address Hawaiian community concerns surrounding traditional food plants, identify and engage in ethical best practices in our relationships with the Hawaiian community and Hawaiian food crop plants. At the global level this approach aligns with the Aichi 2020 Biodiversity Targets 12, 16 and 18 under the United Nations Convention on Biological Diversity.

The UWG is an advisory body with no legal authority to prevent or halt research, development, distribution or patenting of hybrid or genetically engineered 'uala (as planting material or food). We feel it is important to the collections managers, farmers, students and researchers who may seek guidance or partnership with UWG members that our principles in this regard are clear and transparent.

The signatories of the UWG uphold the following:

- 1. We recognize that indigenous knowledge is strong, multi-generational science that is also often 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.
- 3. We acknowledge we know little at this time and have much to learn about the unique characteristics, behaviors, yields and ecological/climatic preferences of indigenous crop cultivars.
- 4. 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 in research that rebuilds crop and 'āina resilience long term.
- 5. As we strive to awaken, expand and deepen our knowledge through meaningful, high caliber science (indigenous and conventional) at all levels of inquiry, we recognize that learning, reciprocity, sharing of knowledge, and protecting indigenous knowledge at various levels comes with kuleana:
 - a. We will safeguard the cultural identity of each 'uala cultivar through collection, accession records, and field protocols that retain varietal names, where they are still known, along with clear site and chain of origin data wherever possible.
 - b. We will describe, document and photograph all cultivars in our work using the standards developed in the study of Hawaiian kalo (taro; *Colocasia esculenta*) varieties, as demonstrated in *Bulletin 84 Revised Edition: Taro Varieties in Hawaii*, to provide a clear identification trail going forward.
 - c. We support participatory learning and research, and acknowledge the need to make our work both understandable and accessible to kupuna, families, students, farmers and local communities in Hawai'i and the Pacific Islands from where indigenous cultivars may have traveled.
 - d. 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 sweet potato from outside Hawai'i, where prior careful documentation and identification has not occurred. Records of distribution, as well as, observation of such cultivars under a range of ecological conditions should be carefully documented to avoid the introduction of aggressive or invasive traits into farms, gardens and natural ecosystems, and to facilitate rapid recall if any such traits begin to manifest.

- e. In recognition of the collective rights of Indigenous Peoples to their heritage crops and cultivars, we will 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 outside of Hawai'i where indigenous rights may be lost.
- f. 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 for projects that seek to develop new cultivars outside these standards.
- g. We will seek to act guided by the wisdom of the kupuna of this place.

The UWG is an independent body. Its members are unpaid. The individuals who have signed this agreement agree to conduct their work in accordance with the principles above. For signatory organizations, their department, boards or governing bodies have reviewed, approved and adopted the principles herein.

Signatories:

Maui Nui Botanical Gardens E kūpaku ka 'āina University of Hawaii College of Tropical Agriculture Sustainable Organic Agriculture Program Waimea Valley

Resources

Kūlana Noi'i research guidelines https://seagrant.soest.hawaii.edu/kulana-noii/
Waimānalo Pono Research Hui: A Community-Academic Partnership to Promote Native Hawaiian Wellness through Culturally Grounded and Community-Driven Research and Programming