INTRODUCTION

Does your organization use native plant materials for conservation, reforestation, urban landscaping, education, or cultural use in Hawai'i? If so, you are part of the local native plant material supply chain and are invited to participate in the following survey developed by members of Laukahi: The Hawai'i Plant Conservation Network. As a practitioner, you probably already know that supply chain shortfalls exist for projects ranging from improving the functionality and sustainability of urban vegetation to landscape-scale reforestation. The purpose of this survey is to collect information about how native plant materials (NPM) are collected, produced, and used in Hawai'i. The information will be used to describe the size and scope native plant supply chain, identify organizations that are involved, and investigate some of the limiting factors. The results will be made available to all participants and summarized in a public report. If Hawai'i's need for native seeds and plants was better defined, then we as a community can do more to overcome gaps in the supply chain and meet the demand for NPM. Here are some examples of similar reports on the native seed supply: <u>The Australian Native Seed Survey Report</u>; <u>An Assessment of Native Seed Needs and the Capacity for Their Supply: Final Report</u>. A previous survey about native plant materials was conducted by Laukahi in 2018. Review some results of that survey here: <u>Laukahi 2018 Native Plant Material Survey RESULTS.pdf</u>

The survey has some initial questions about your organization, what kinds of reference materials it would help to have, and to identify which role(s) you have in the native plant supply chain as a Collector, Producer, or User. The definitions for each category are listed below. Please fill out all of the sections that apply to your organization. If your organization <u>collects</u> native seeds, <u>produces</u> plants in a nursery, and <u>uses</u> them for restoration projects, please fill out all three sections.

You can go back and forth between the pages and sections without losing any of your entries. Please note that there are two questions that ask for a list of the native plants you are using and would like to use, so you might want to have those handy before starting the survey.

DEFINITIONS

Native Plant Materials (NPM): Live plants and seeds of plant species that are naturally-found in Hawai'i, known as indigenous or endemic plants. NPM can be containerized plants grown in a nursery or seeds that are directly seeded at a restoration site. For a complete list of native species, please see <u>Flora of the Hawaiian Islands</u> or <u>Plants of Hawaii</u>. NPM may be used to repair ecosystem composition and functionality, generate ecosystem services such as water/soil retention, and/or provide cultural value for education and sense of place.

Native Plant Material Supply Chain: The entire system of people, resources, information, and activities that help transform raw materials (wild-collected seeds/cuttings) into a final product or service that will be consumed by end-users (native plants or seeds). Seed and plant material supply chains are unique because they involve living resources such as seeds or the tissues of plants that organizations transform into commodities.

Collector: Individual or organization that collects NPM, or holds NPM collected by others on consignment (i.e seedbank). The NPM can be available for sale/donation, or for use in your own projects by nursery production or direct seeding

Producer: Individual or organization that produces NPM as containerized plants in a nursery or produces seeds for direct seeding in a seed production area

User: Individual or organization that uses NPM

Direct Seedling: Sowing seeds directly onto the grounds of a restoration site

Containerized plants: Native plants grown in pots at a plant nursery

Workhorse Plant Species: Native plant species that have one or more of these characteristics: broad ecological range, high abundance, are relatively easy to propagate, establish quickly in restoration sites, or the ability to suppress invasive plant species.

Seed Production Area (SPA): Also called a "Seed Orchard", this is a site where native plants are grown to provide seeds for harvest. The cultivated plants are used to amplify small amounts of wild-collected seed to meet demands for the larger amount of seed needed for restoration projects. Using SPA will reduce the impact on wild populations while providing the quantities of locally-adapted native plant materials needed to meet restoration goals.

Seed Zone: An area within which native plant material can be transferred with little risk of being poorly adapted to their new location. Provisional Seed Zones have been developed for Hawai'i using local climate and biogeographic data and are available as a reference here: <u>Seed Zone Maps – Laukahi</u>.

Locally-Adapted NPM: Native Plant Material from an area geographically near a planting site that are environmentally adapted and likely to establish and persist. Locally-sourced plant material from within or nearby to the restoration site are known as local genotypes and are ideal. If local genotypes are not available, sourcing NPM from nearby sites with similar conditions, or at least from within the same Seed Zone would result in plants that are locally-adapted.