



Bishop Museum

## Plants

# Ala ala wai nui

*Peperomia subpetiolata*

### SPECIES STATUS:

Federally Listed as a Candidate Species

Genetic Safety Net Species

Hawai'i Natural Heritage Ranking - Critically Imperiled (G1)

Endemism - Maui

**SPECIES INFORMATION:** A perennial, succulent herb with unbranched or few-branched stems about 6-15 dm long. Leaves whorled, 5-8 per node, 12-20 cm long and very narrow. Flower spikes one to several, terminal and axillary. Genus pantropical, species endemic to east Maui.

**DISTRIBUTION:** Known from a single occurrence about 0.5 km in diameter on east Maui.

**ABUNDANCE:** Fewer than 50 plants are known.

**LOCATION AND CONDITION OF KEY HABITAT:** Mesic forest extensively planted with alien tree species.

### THREATS:

- Alien plants;
- Feral pigs.

**CONSERVATION ACTIONS:** The goals of conservation actions are not only to protect current populations, but also to establish new populations to reduce the risk of extinction. In addition to common statewide and island conservation actions, specific actions include:

- Survey historic range for surviving populations;
- Establish secure *ex-situ* stocks with complete representation of remaining individuals;
- Augment wild population and establish new populations in safe harbors.

### MONITORING:

- Continue surveys of population and distribution in known and likely habitats;
- Monitor plants for insect damage and plant diseases.

**RESEARCH PRIORITIES:**

- Develop proper horticultural protocols and pest management;
- Survey *ex-situ* holdings and conduct molecular fingerprinting;
- Conduct pollination biology and seed dispersal studies;
- Map genetic diversity in the surviving populations to guide future re-introduction and augmentation efforts.

**References:**

Hawai'i Natural Heritage Program. 2005. Hawaii Natural Heritage Program Search, <http://www.hinhp.org>.

International Union for Conservation of Nature and Natural Resources, 2004, IUCN Red List of Threatened Species: Data Base Search, <http://www.redlist.org/search/search-basic.html>.

Wagner, W. L., D. R. Herbst, and D. H. Lorence. 2005. Flora of the Hawaiian Islands website. <http://ravenel.si.edu/botany/pacificislandbiodiversity/hawaiianflora/index.htm> [August, 2005].

Wagner, W.L., Herbst, D.R., and Sohmer, S.H., 1999. Manual of the Flowering Plants of Hawai'i-- Revised Edition. Honolulu, HI: University of Hawaii Press and Bishop Museum Press. 1853p.