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## Plants

### *Schiedea jacobii*

#### SPECIES STATUS:

Genetic Safety Net Species

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

Endemism - Maui

**SPECIES INFORMATION:** Ascending to sprawling when longer. Leaves opposite. Leaf blades 4.5-10.5 cm long, 1.4-2.6 cm wide, lanceolate to oblong-elliptic. Inflorescence panicle-like, 40-50 cm long. Capsules ovoid, 3.7-4.2 mm long. Perennial herbs or subshrubs, pale yellowish green throughout. Stems 4.0-7.6 dm long.

**DISTRIBUTION:** *Schiedea jacobii* is endemic to the island of Maui. It was discovered at a location on the north flank of Haleakalā in the Hanawi Natural Area Reserve.

**ABUNDANCE:** Very rare. In 1995, it was known from only 2-4 large plants with eight possible seedlings.

**LOCATION AND CONDITION OF KEY HABITAT:** Wet cliffs in *Metrosideros* montane wet forest.

#### THREATS:

- Habitat degradation by feral pigs;
- Competition from alien plant species;
- Stochastic extinction;
- Reduced reproductive vigor due to the small number of remaining individuals.

**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 historical 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/printpage.asp?spp=PDMAL0H0A0>.

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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].