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Plants

Schiedea hawaiiensis

SPECIES STATUS:

Genetic Safety Net Species
Hawai'i Natural Heritage Ranking - Critically Imperiled (G1)
Endemism - Island of Hawai'i

SPECIES INFORMATION: Perennial herbs or subshrubs, pale yellowish green throughout or stems purple-tinged in lower portion of the plant. Stems 3-7 dm long or perhaps longer, ascending to sprawling when longer. Leaves opposite, leaf blades 4-5.8 cm long, 1.7-2.8 cm wide, ovate to elliptic-ovate. Inflorescences panicle-like, 30-40 cm long, capsules broadly ovoid, 3.5-4 mm long.

DISTRIBUTION: *Schiedea hawaiiensis* is endemic to the island of Hawai'i. It has been recorded from only two locations, both in the northern part of the island. There is only a single plant known to be extant in the wild. It is on the Pohakuloa training area in the saddle between Mauna Kea and Mauna Loa.

ABUNDANCE: Only one mature plant is now known in the wild. There were two mature plants when first discovered at Pohakuloa training area in 1996, along with a number of seedlings. The species is otherwise known from only a single specimen collected in the 1800's at another location far to the north, near Waimea.

LOCATION AND CONDITION OF KEY HABITAT: The only precisely located site for this species (the site of the remaining individual) is vegetated with sparse dry subalpine *Metrosideros* forest on a lava flow.

THREATS:

- Goats, pigs, sheep;
- Alien plants;
- Military training is a potential threat if any plants of this species remain in areas on the Pohakuloa training area;
- Fire is another potential threat if plants survive in the more thickly vegetated areas of the training area.

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=PDMALOH0A0>.

Wagner, W.L.; Herbst, D.R.; 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.