



Plants

Stenogyne kanehoana

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

Hawai'i Natural Heritage Ranking - Possibly Extinct (GH)

Endemism – O'ahu

Critical Habitat - Designated

SPECIES INFORMATION: *Stenogyne kanehoana* is a climbing vine that is a member of the mint family, and so has stems that are square. These stems grow 1 to 2 meters long and have thin, densely hairy and oppositely arranged leaves on them. Flowers occur in clusters of 3-6 in leaf axils, and are 1 to 1.5 inches long with white to yellow lobes tipped in pink. Fruit consists of 4 fleshy, black nutlets.

DISTRIBUTION: Found in the Wai'anae Mountains on the island of O'ahu.

ABUNDANCE: This species was brought back from the "Extinct" list by the discovery of a single large plant in the latter part of 2000.

LOCATION AND CONDITION OF KEY HABITAT: The last known occurrence consists of one to six individual plants and is located on privately owned land. The remnant occurrence of *Stenogyne kanehoana* is found in lowland mesic forest between 559 and 1,168 m (1,834 and 3,831 ft) elevation. The habitat is at risk of degradation from feral pigs and invasive plant species. Associated native plant species include *Acacia koa*, *Alyxia oliviformis*, *Bidens* sp., *Chamaesyce* sp., *Cibotium* sp., *Freycinetia arborea*, *Metrosideros polymorpha*, *Psychotria* sp., or *Scaevola* sp.

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 to not only protect current populations, but to also establish further 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:

- Survey for populations and distribution in known and likely habitats;
- Monitor enclosure fences for damage and inside enclosures for signs of ungulate ingress;
- 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:

Carr, G. 2005. Hawaiian Native Plant Genera, University of Hawaii Botany Department, <http://www.botany.hawaii.edu/faculty/carr/images>.

Hawai'i Natural Heritage Program, 2005. Hawaii Natural Heritage Program Search, <http://www.hinhp.org/printpage.asp?spp=PDMAL0H0A0>.

US Fish and Wildlife Service. 1996. Final Listing, Endangered ETWP; Determination of End. Status for *Stenogyne kanehoana*, a Hawaiian Plant; Federal Register, Vol. 57, No. 93, (13-MAY-92), 57 FR 20592 20595, 10 pp.

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.