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# **Plants**

# Stenogyne campanulata

# **SPECIES STATUS:**

Federally Listed as Endangered Genetic Safety Net Species Hawai'i Natural Heritage Ranking - Critically Imperiled (G1) Endemism - Kaua'i Critical Habitat - Designated

**SPECIES INFORMATION**: *Stenogyne campanulata* is a member of the mint family (Lamiaceae), described as a vine with four-angled, hairy stems. The hairy leaves are broadly oval, about 2 in (5 cm) long and 1 in (3 cm) wide. The flowers occur in clusters of about 6 per leaf axil. The very broadly bell-shaped, hairy calyces are about 0.5 in (13 mm) long, with teeth that are 0.1 in (3 mm) long and 0.2 in (5 mm) wide at the base. The petals are fused into a straight, hairy, white tube about 0.5 in (13 mm) long, with short purple lobes

**DISTRIBUTION**: Endemic to Kaua'i. One occurrence in Nā Pali Coast State Park.

**ABUNDANCE**: About 50 plants known.

**LOCATION AND CONDITION OF KEY HABITAT**: *Stenogyne campanulata* grows on the rock face of a nearly vertical, north-facing cliff at an elevation of 3,560 ft. (1,085 m). The habitat of this species has been seriously compromised, the only known plants are located out of the reach of goats and pigs. The potential range of this species could be much larger, but the plants are being killed off by feral ungulates before the plants can establish themselves.

#### THREATS:

- Direct damage from feral goats;
- Pigs have damaged known sites;
- Competition from alien plant species.

**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:**

- 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 reintroduction and augmentation efforts.

#### References:

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

US Fish and Wildlife Service. 1992. Final Listing, Endangered ETWP; Determination of End. Status for Six Plants from Kokee Region, Island of Kauai, Hawaii; Federal Register, (6-12-92), 50 CFR Part 17, RIN 1018-AB52, 57 FR 20580 20589, 10pp.

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.

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].