

Plants

Phyllostegia parviflora var. *glabriuscula*

SPECIES STATUS:

Federally Listed as Endangered
Genetic Safety Net Species
Hawai'i Natural Heritage Ranking - Critically Imperiled;
Subspecies Possibly Extinct (G1TH)
Endemism – Island of Hawai'i
Critical Habitat - Designated

SPECIES INFORMATION: *Phyllostegia parviflora*, a member of the mint family (Lamiaceae), is a perennial herb. The egg-shaped to broadly egg-shaped, wrinkled leaves are usually 19 to 33 cm (7.5 to 13 in.) long and 7.5 to 15.3 cm (3 to 6 in.) wide. The leaf stalks are typically 6 to 13.5 cm (2.4 to 5.3 in.) long. Usually six flowers are arranged along a flowering stalk. The corolla is white, sometimes tinged with purple, and about 9 to 13 mm (0.4 to 0.5 in.) long. The upper corolla lip is about 3 mm (0.1 in.) long while the lower lip is about 6 to 9 mm (0.2 to 0.4 in.) long. The fruits are nutlets. The species is distinguished from others of the genus by the leaf shape and length of the leaf stalk and lower corolla lip. *P. p.* var. *glabriuscula* has fewer glandular hairs in the inflorescence, less pubescent leaves, and usually unbranched inflorescences, as compared to *P. p.* var. *parviflora*.

DISTRIBUTION: Historically *Phyllostegia parviflora* var. *glabriuscula* was known only from the island of Hawai'i, on private land and has not been observed since the 1800's.

ABUNDANCE: If this species is still extant, the number of living individuals is unknown.

LOCATION AND CONDITION OF KEY HABITAT: *Phyllostegia parviflora* is typically found on moderate to steep slopes in diverse wet forest from 500 to 830 m (1,640 to 2,700 ft) elevation. Native taxa associated with *Phyllostegia parviflora* include 'ōhi'a, *Broussaisia arguta* (kanawao), *Myrsine* sp. (kolea), *Pipturus albidus* (mamaki), and *Cyrtandra* sp. (ha'iwale).

THREATS:

- Habitat degradation and/or destruction by feral pigs;
- Competition with several alien plant taxa;
- Risk of extinction from naturally occurring events and/or reduced reproductive vigor due to the small number of remaining individuals and populations.

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. The USFWS has developed a recovery plan that details specific tasks needed to recover this species. 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:

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US Fish and Wildlife Service. 1996. Final Listing, Endangered ETWP; Determination of Endangered or Threatened Status for Fourteen Plant Taxa From the Hawaiian Islands; Federal Register, Vol. 61, No. 198, (10-OCT-96), 61 FR 53108 53124, 9 pp.

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