



NTBG Herbarium

Plants

'Oha wai

Clermontia oblongifolia ssp. *brevipes*

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

IUCN Red List Ranking – Critically Endangered

Hawai'i Natural Heritage Ranking - Subspecies Critically Imperiled (G3T1)

Endemism status – Moloka'i

Critical Habitat - Designated

SPECIES INFORMATION: *Clermontia oblongifolia* ssp. *brevipes*, a member of the bellflower family, is a terrestrial shrub or tree which reaches a height of 6.6 to 23 ft (2 to 7 m). The leaves, on petioles 0.7 to 1.2 in (1.8 to 3 cm) long, are lance-shaped; have thickened, rounded teeth; and reach a length of 2.8 to 4.3 in (7 to 11 cm) and a width of 0.8 to 2 in (2 to 5 cm). Two or sometimes three flowers are grouped together on a stalk 0.2 to 0.4 in (5 to 10 mm) long, each flower having a stalk 0.4 to 1.8 in (1 to 4.5 cm) long. The flower is 2.4 to 3.1 in (6 to 7.8 cm) long; the calyx and corolla are similar in size and appearance, and each forms an arched tube which is greenish-white or purplish on the outside and white or cream colored on the inside. The nearly spherical, orange fruit is a berry, 0.7 to 1.2 in (17 to 30 mm) long. This species is distinguished from others in the genus by the structure of its calyx and corolla as well as by the lengths of the flower, the floral lobes, and the green hypanthium. This subspecies differs from others of the species by the shape of its leaves and the lengths of its leaves, leaf stalks, and flower stalks.

DISTRIBUTION: *C. oblongifolia* ssp. *brevipes* is known only from two populations occurring in the Kamakou area on the island of Moloka'i. Other than these two populations, the historical range is not known.

ABUNDANCE: Currently, *C. oblongifolia* ssp. *brevipes* is known from a single population located in the southeastern part of Kamakou Preserve, East Moloka'i, where it occurs on private land. The population was last seen in 1982, and its size is unknown. The other known population, also from the Kamakou area, has not been seen for over 40 years and may have been extirpated.

LOCATION AND CONDITION OF KEY HABITAT: This taxon typically grows in shallow soil on gulch slopes in wet 'ohi'a-dominated forests at elevations between 3,500

and 3,900 ft (1,100 and 1,200 m). Associated plant species include *Cheirodendron trigynum* ('olapa).

THREATS:

- Feral pigs are an immediate threat to the habitat of the single remaining population;
- Limited number makes the taxon vulnerable to extinction by a single stochastic event;
- Predation on related species suggests that rats may possibly feed on the fruit or plant parts of this taxon.

CONSERVATION ACTIONS: The goals of conservation actions are to not only protect current populations, but also establish further 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 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 re-introduction and augmentation efforts.

References:

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