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Plants

kamakahala

Labordia lydgatei

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: *Labordia lydgatei* is a member of the strychnine family (Loganiaceae) and is a many-branched shrub or small tree with sparsely hairy, square stems. The leaves are elliptic, often widening toward the tip, smooth above but with fine hairs on the lower surface; they are 2 to 4 in (5 to 10 cm) long and 0.8 to 2.8 in (2 to 7cm) wide. The inflorescence comprises 6 to 21 small, slender, funnel-shaped, pale yellow flowers, each about 0.3 in (0.7 cm) long. The fruit is a small, two-parted, ovoid, woody capsule with a short, blunt beak at its tip. This species can be separated from *L. tinifolia*, the only other member of the genus on this part of Kaua'i, by its sessile cymes.

DISTRIBUTION: The species presently is known from a single population located at the end of the valley above one of the tributaries of Wahiawa Stream on Kaua'i.

ABUNDANCE: Currently 28 plants known.

LOCATION AND CONDITION OF KEY HABITAT: Wet forests on ridge slopes.

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 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:

- Survey for populations and distribution in known and likely habitats;
- Monitor exclosure fences for damage and inside exclosures 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:

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