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Plants

Phyllostegia renovans

SPECIES STATUS:
Genetic Safety Net Species
Hawai'i Natural Heritage Ranking – Critically Imperiled (G1)
Endemism – Kaua'i

SPECIES INFORMATION: Erect subshrubs when young, becoming scandent and the stems up to 3-4 m long. The leaves are narrowly ovate to ovate, sometimes broadly so, 12.5-20 cm long, 5.0-8.8 cm wide. Inflorescences racemose, 18-34 cm long, apparently the stem resuming vegetative growth after flowering. Corollas white, ca. 19-22 mm long. Nutlets ca. 8-9 mm long, greenish black.

DISTRIBUTION: *Phyllostegia renovans* is known only from the island of Kaua'i. This recently discovered species is now known from the wet valleys on the northern, eastern, and southern portions of the island.

ABUNDANCE: Fewer than 50 plants remain in the wild. Five to ten plants are known from Limahuli Valley.

LOCATION AND CONDITION OF KEY HABITAT: 'Ōhi'a dominated wet forests, often near streams.

THREATS:

- Habitat degradation by feral pigs;
- Fruit predation by rats;
- Competition from alien plant species;
- Reduced reproductive vigor due to isolation of remaining individuals in small sub-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 National Tropical Botanical Garden has planted over 100 plants in managed restoration areas in Limahuli Preserve. 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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