



Plants

Kopiko

Psychotria grandiflora

SPECIES STATUS:

Federally Listed as a Candidate Species

Genetic Safety Net Species

IUCN Red List Status - EN C2a

Hawai'i Natural Heritage Ranking - Critically Imperiled

Endemism – Kaua'i

SPECIES INFORMATION: *Psychotria grandiflora*, a member of the coffee family (Rubiaceae) is a tree or shrub, up to 5 m tall. Flower corollas are white and tubular.

DISTRIBUTION: Endemic to Kaua'i Island, in Kokee and Alaka'i Swamp.

ABUNDANCE: Fewer than 15 individuals are known.

LOCATION AND CONDITION OF KEY HABITAT: Wet forest, 1,040 and 1,230 m.

THREATS:

- Habitat degradation by feral pigs;
- Fruit predation by rats;
- 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. 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:

Carr, G. 2005. Hawaiian Native Plant Genera, University of Hawaii Botany Department, <http://www.botany.hawaii.edu/faculty/carr/images>.

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