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Plants

Hedyotis haupuensis

SPECIES STATUS:

Genetic Safety Net Species

Endemism – Kaua'i

SPECIES INFORMATION: *Hedyotis haupuensis*, a member of the coffee family (Rubiaceae), is a shrubby plant 1-1.5m tall with 5 - 15 stems and many very brittle branches with shiny green leaves. The plants start to bloom in mid December and continue until late April. Flowers are generally white, with a 1 to 2 cm long corolla and appear in clusters of 10 - 20 on terminal branchlets and persist for 5 -10 days. A mature plant will produce several thousand flowers each season, and if it is a female plant upwards of 1,000 capsules. Each capsule has about 100 tiny seeds.

DISTRIBUTION: Mt. Ha'upu, Kaua'i.

ABUNDANCE: In November 2002 there were 11 *Hedyotis haupuensis* plants grown in the National Tropical Botanical Gardens (NTBG) nursery from wild seed that was collected in 1998 from Ha'upu Mountain on Kaua'i. Cuttings of the original 11 plants have produced 38 more plants. Using seed of capsules obtained in 2002 from 8 of the original 11 plants there are now about 120 seedlings. The status of this species in the wild is unknown.

LOCATION AND CONDITION OF KEY HABITAT: Mt. Ha'upu, on the south shore of Kaua'i.

THREATS:

- Competition from alien plant species;
- Stochastic extinction and reduced reproductive vigor due to the small number of remaining individuals.

CONSERVATION ACTIONS: The goals of conservation actions are to not only protect current populations, but also establish new populations to reduce the risk of extinction. 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:

- 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:

Hawai'i Natural Heritage Program. 2005. Hawaii Natural Heritage Program Search, <http://www.hinhp.org/printpage.asp?spp=PDMALOH0A0>.

International Union for Conservation of Nature and Natural Resources. 2004. IUCN Red List of Threatened Species: Data Base Search, <http://www.redlist.org/search/search-basic.html>.

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