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Plants

Ha‘iwale

Cyrtandra paliku

SPECIES STATUS:
Genetic Safety Net Species
Hawai‘i Natural Heritage Ranking - Critically Imperiled (G1)
Endemism - Endemic to Kaua‘i

SPECIES INFORMATION: *Cyrtandra paliku* is a subshrub, 30-75 cm tall, conspicuously shaggy with dark reddish brown trichomes. Leaves opposite, clustered at upper three to seven nodes, thick. Flowers in cymes, petals white. A newly discovered species. *Cyrtandra paliku* was discovered in 1993, and published as a distinct species in 2001.

DISTRIBUTION: Known only from northeastern Kaua‘i, where it occurs only on Kekoiki summit area of Mount Namahana. The population extends for 0.1 km.

ABUNDANCE: Known from a single population of about 70 plants.

LOCATION AND CONDITION OF KEY HABITAT: Known only from vertical, shaded, north-facing basalt rock faces, which are windswept and often mist-shrouded. Occurs with S*elaginella arbuscula*. Population surrounded by patches of lowland wet forest dominated by *Metrosideros polymorpha.*

THREATS:

- Habitat degradation by feral pigs;
- Fruit predation by rats;
- 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=PDMAL0H0A0.

Wagner, W. L., D. R. Herbst, and D. H. Lorence. 2005-. Flora of the Hawaiian Islands website. http://ravenel.si.edu/botany/pacificislandbiodiversity/hawaiianflora/index.htm [August, 2005].