

No Photo Available

Plants

Dryopteris podosorus var. *podosorus*

SPECIES STATUS:

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

SPECIES INFORMATION: Terrestrial fern. Stems short and upright. Fronds upright and spreading. Blades elongate deltate, 12-35 cm long. Stipes and rachises with scattered brown hair-like scales. Sorus sits on raised stalk above the frond.

DISTRIBUTION: Kaua'i.

ABUNDANCE: Fewer than 200 plants currently known.

LOCATION AND CONDITION OF KEY HABITAT: Steep dark mossy walls alongside streams in wet forests, 1,050-1,625 m.

THREATS:

- Habitat degradation by feral pigs;
- Competition from alien plant species;
- Stochastic extinction due to flooding;
- 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;

- 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>.

Palmer, Daniel D., 2003, Hawaii's Ferns and Fern Allies, Honolulu, HI: University of Hawaii Press, 324p.

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].

Wagner, W.L., Herbst, D.R., and Sohmer, S.H., 1999. Manual of the Flowering Plants of Hawai'i-- Revised Edition. Honolulu, HI: University of Hawaii Press and Bishop Museum Press. 1853p.