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## Plants

### *Remya montgomeryi*

#### SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

Hawai'i Natural Heritage Ranking -

Critically Imperiled (G1)

Endemism – Kaua'i

Critical Habitat - Designated

**SPECIES INFORMATION:** A sprawling, many-branched shrub 1-2 m tall, forming loosely tangled clumps that sprawl on or among the branches of other vegetation. The flower heads are dark yellow. The lower surface is green in *R. montgomeryi*, while in the other two species it is covered with a dense mat of fine white hairs. The flowers are small, about 0.7 cm (0.3 in) in diameter, dark yellow, and densely clustered at the ends of their stems. It was described as a new species in 1987, and can be distinguished from the other two species of the genus by its glabrous branch tips and undersides of its leaves.

**DISTRIBUTION:** *Remya montgomeryi* was discovered in 1985 on the sheer, virtually inaccessible cliffs below the upper rim of Kalalau Valley, Kaua'i, and presently is known from that population as well populations in Kuia Valley and Koaie Canyon.

**ABUNDANCE:** *Remya montgomeryi* exact population size is unknown, but it consists of fewer than 50 plants.

**LOCATION AND CONDITION OF KEY HABITAT:** *Remya* grows on steep, north or northeast-facing steep cliff slopes between 850 to 1,250 meters (2,800 to 4,100 feet) in elevation, on state owned land, in mesic to wet forests.

#### THREATS:

- Habitat degradation by feral pigs;
- Competition from alien plant species;
- Landslides and rockfall;
- 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. A USFWS recovery plan details specific tasks needed to recover this species.

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:**

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>.

United States Fish and Wildlife Service. 1991. Final rule: Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for Three Species of Remya, a Genus of Hawaiian Plants; Federal Register, (14-JAN-91), 56 FR 1450.

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.