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Plants

Achyranthes mutica

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net Species

IUCN Red List Ranking - CR B1ab(i,ii,iii)

Endemism – Kaua'i and Hawai'i

Critical Habitat - Designated

SPECIES INFORMATION: *Achyranthes mutica*, a member of the amaranth family (Amaranthaceae), is a many-branched shrub, with stems 30-60 cm long. Flowers are arranged on spikes. Prior to its rediscovery in 1992, this species was known from only three collections from 1700-1800s. One of the collections is from Kaua'i, and the other two from the Island of Hawai'i.

DISTRIBUTION: Known historically from leeward side of Kaua'i and Hawai'i. The only known current occurrence is on the island of Hawai'i.

ABUNDANCE: Currently this species is known only from the Keawewai Stream area in the Kohala Mountains of Hawai'i on private land. Between 20 and 50 plants are growing at an elevation of about 920 m (3,030 ft). Four plants were recorded at Kawaihae in 2004.

LOCATION AND CONDITION OF KEY HABITAT: Habitat for *A. mutica* is located on the leeward side of the island of Hawai'i, in *Acacia koaia* (koa'i'a) lowland dry forest with *Dodonaea viscosaa*, *Myoporum sandwicense* (naio), *Nestegis sandwicensis* (olopua), *Osteomeles anthyllidifolia* ('ulei), and *Sophora chrysophylla* (mamane). The area is also invaded by alien plants such as *Opuntia* sp., *Melinis minutiflora*, *Ageratina riperia*, *Pennisetum clandestinum*.

MONITORING:

- Continue surveys of population and distribution in known and likely habitats;
- Monitor exclosure fence for damage and inside exclosure for signs of ungulate ingress;
- Monitor plants for insect damage and plant diseases.

RESEARCH PRIORITIES:

- Develop proper horticultural and pest management protocols;
- 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:

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