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Plants

'Ohai

Sesbania tomentosa

SPECIES STATUS:

Federally Listed as Endangered

Genetic Safety Net

Endemism – All of the Main Islands of Hawai'i

Hawai'i Natural Heritage Ranking- Imperiled (G2)

Critical Habitat - Designated

SPECIES INFORMATION: Usually an erect to prostrate shrub; sometimes a small, erect tree. When prostrate, the branches are up to 14 m long. Trees are 2.5-6 m tall. Flowers are salmon tinged with yellow, orange red, scarlet, or (rarely) pure yellow.

DISTRIBUTION: Current populations from O'ahu, Moloka'i, Maui, Kaua'i, Kaho'olawe, Hawai'i, Nihoa & Necker; historical records from Lana'i & Ni'ihau.

ABUNDANCE: There is an estimated total of 2,000-3,000 plants in Hawai'i. However, some of the populations and forms are reduced to just a few to 30 individuals.

LOCATION AND CONDITION OF KEY HABITAT: Dry shrublands or (rarely) dry forests. Often coastal, less often inland. Found on calcareous beaches and sand dunes, rocky ridges and slopes, deep red soil, and on soil pockets on lava. Basaltic and calcareous substrates.

THREATS:

- Off-road vehicles at many sites;
- Habitat disturbance;
- Development in coastal areas;
- Cattle & goats.

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. The National Tropical Botanical Garden has planted 40 of the 'Polihale type' of *Sesbania tomentosa* into a managed coastal restoration site as a safe harbor for this form of the 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:

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