Plants

Popolo ku mai
Solanum incompletum

SPECIES STATUS:
Federally Listed as Endangered
Genetic Safety Net Species
Hawai‘i Natural Heritage Ranking - Critically Imperiled (G1)
Endemism – Lana‘i, Maui, Island of Hawai‘i
Critical Habitat - Designated

SPECIES INFORMATION: A woody shrub up to 3 m tall with prominent reddish prickles scattered to abundant on stems and leaves. The oval leaves measure 10 to 15 cm long by about 7 cm wide. The leaf margins are lobed with one to four lobes on each side. Numerous flowers grow on loose branching clusters with each flower on a stalk about 9 mm long. The star-shaped flowers are white.

DISTRIBUTION: Maui, Lana‘i, and the island of Hawai‘i.

ABUNDANCE: Six individuals were recently rediscovered on the island of Hawai‘i. Previous to this, the species was last seen in 1949 and thought extinct.

LOCATION AND CONDITION OF KEY HABITAT: Dry and mesic shrublands and forests on ridges and in gulches. On Hawai‘i island, on cinder cones or on older lava flows.

THREATS:
- Habitat degradation caused by feral sheep, goats, pigs and alien plants;
- Fire;
- Stochastic extinction;
- Decreased reproductive vigor due to small number of remaining individuals.

CONSERVATION ACTIONS: The goals of conservation actions are to not only protect current populations, but to also 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;
- Conduct pollination biology and seed dispersal studies;
- Map genetic diversity in the surviving populations to guide future re-introduction and augmentation efforts.

References:

