

Plants

Melicope cruciata

SPECIES STATUS:

Genetic Safety Net Species
IUCN Red List Ranking - EX
Hawai'i Natural Heritage Ranking – Critically Imperiled
Endemism – Kaua'i

SPECIES INFORMATION: Small trees 3-4.5 m tall. Leaves opposite, elliptic to oblong-elliptic or elliptic-ovate, 8-17 cm long, 4-9 cm wide. Cymes axillary, usually with 5-9 flowers. Capsules ca. 24-34 mm wide, carpels connate 1/4 their length, 12-17 mm long.

DISTRIBUTION: *Melicope cruciata* is endemic to the island of Kaua'i. All specimens of *M. cruciata* have been collected on the west side of the island and on the high central plateau.

ABUNDANCE: Rare. There are about 20 or 30 known plants on the plateau. However, the estimates are tentative due to difficulty in distinguishing *M. cruciata* from related species.

LOCATION AND CONDITION OF KEY HABITAT: Wet forests and shrublands above 1,000 m.

THREATS:

- Direct damage and habitat degradation by feral pigs and goats;
- Competition with invasive alien plant taxa.

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 historic 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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