

# Miconia calvescens

## Velvet tree, miconia, purple plague

*Miconia calvescens* DC

Family: Melastomataceae

**Description:** Tall, branched tree, to 45 ft tall. Leaves large, opposite, to 3 ft long, ovate, appear velvety, green on upper surface, purple below, 3 longitudinal veins connected by many lateral veins give a checked appearance. Flowers in upright terminal clusters, tan, not showy. Fruits small, dark blue with many seeds. *Miconia*, meaning not known; *calvescens*, without hairs<sup>(5, 70)</sup>.

**Distribution:** Native to tropical America. Occurs in wetter forests and disturbed sites in Hāmākua, Puna, and Kona, Hawai‘i; East Maui; O‘ahu; and Wailua, Kaua‘i.

**Environmental impact:** *Miconia* is considered by many natural area managers as being Hawai‘i’s most threatening weed. Brought to Hawai‘i from Central America in the late 1950s as an ornamental, this highly invasive tree rapidly naturalized and spread. Nearly all mesic and wet Hawaiian forests (>60 inches of rain per year) are potentially threatened if invasion is left unchecked. A single mature plant can produce millions of seeds per year that are spread by birds or in soil on shoes, equipment, or the hooves of ungulates. *Miconia* tolerates shade and forms dense stands with heavy shade that replace native species, alter habitats, and may contribute to soil erosion. A serious forest pest in Tahiti and Sri Lanka, where it forms dense stands that displace other plants.



**Management:** Smaller saplings easy to grub out by hand. Sensitive to triclopyr ester in foliar applications (E. Tamura, HDOA), applied to cut surfaces and as basal bark treatments, and also to glyphosate applied to cut surfaces<sup>(50)</sup>. Thin-line application of undiluted triclopyr ester effective. Biocontrol agents from Latin America are being evaluated for control of velvet tree. A fungus (*Colletotrichum gloesporioides* f. sp. *miconiae*) has been established on Hawai‘i and Maui, where it has caused leaf spotting and early leaf drop (Pat Conant, HDOA).