

Olea europaea

Olive

Olea europaea L.

Family: Oleaceae

Description: Forest and pasture weed. Trees to 30 ft tall, branched, dense canopy. Leaves narrow, up to 4 inches long by 0.6 inches wide, opposite with each pair at right angle to the next pair, upper surface smooth, lower scaly, grayish, green, or golden. Flowers small, white, in axillary panicles. Fruits small (although this is the same species as the commercial olive), green turning to brown or black. Fails to set seed at some point below 3000 ft elevation (Roy Nishimoto, Univ. Hawai'i). Olive trees in Kona at 1500 ft do not seed. Seeds profusely at Waimea, Hawai'i, and Kōke'e, Kaua'i, at least 3000 ft. Two subspecies occur in Hawai'i: *africana* with fruits 0.25 inch long, and *europaea* with fruits 0.75 inch long. Olive has been developed into many varieties for food and for ornamental purposes. *Olea* is derived from the Greek name for the plant, *elaia*⁽⁷⁰⁾; *europaea*, of Europe; *africana*, of Africa⁽⁶⁹⁾.

Distribution: Cultivated for 4000 years in the Old World. Common in the Kamuela area of Hawai'i, where it was planted as an ornamental and is now a pasture pest, and in Kōke'e, where it was planted in reforestation programs. Occurs on all islands except Ni'ihau. It was first collected in the 1960s. It is commonly planted in Hawai'i as an ornamental and hedge plant, and its seeds are spread by birds and pigs⁽⁷⁰⁾.

Environmental impact: Prolific seeder, forms dense canopies that shade out the understory.



Management: Large olive trees injured by cut-surface applications of triclopyr, glyphosate, and 2,4-D, in descending order of severity, although the kill rate was low at 1 year after treatment. Continuous ring cut-surface applications or drilling should provide effective kill. Saplings very sensitive to basal bark application of triclopyr at 4% product in diesel oil. Mature trees have proven tolerant of soil applications of hexazinone and tebuthiuron. Crown and root sprouting of herbicide-treated trees should be expected and retreatment planned. Grazing reduces new seedling volunteering⁽⁶¹⁾.