## Kamani

Calophyllum inophyllum L

Mangosteen family (Guttiferae)

Polynesian introduction

This handsome tree found along or near seashores is identified by cream-colored resinous sap or latex in bark, paired thick and stiff, elliptical shiny dark green leaves with closely spaced parallel veins, white flowers clustered among leaves, and round ball fruits 1–1½ inches (2.5–4 cm) in diameter. Apparently introduced by the early Hawaiians, rather than native.

Medium-sized to large evergreen tree 40–60 ft (12–18 m) high and 1–1½ ft (0.3–45 m) in trunk diameter or larger, with broad spreading crown of irregular branches. Bark light gray or brown, smoothish, becoming slightly cracked into shallow broad furrows and long flat ridges. Inner bark pink, fibrous, and bitter. Twigs stout, green, turning to brown, hairless, with cream-colored or light yellow resinous sap or latex. Bud about ¼ inch (6 mm) long, narrow and pointed, dark brown, composed of minute leaves without scales.

Leaves opposite in four vertical rows on twig, hairless, with light green leafstalks \(^{5}\mathbb{8}\)-\(^{3}\mathbb{4}\) inch (1.5-2 cm) long, stout and flattened above. Blades elliptical, 4-8 inches (10-20 cm) long and 2\(^{1}\mathbb{2}\)-3\(^{1}\mathbb{2}\) inches (6-9 cm) wide, slightly notched at rounded apex, rounded at base, slightly turned up from yellow green midvein and concave, with narrow whitish line along straight border; thick and stiff, with numerous very fine straight parallel side veins scarcely visible until dried, upper surface shiny dark green, lower surface yellow green and slightly shiny.

Flower clusters (racemes) 2–6 inches (5–15 cm) long at leaf base, with 4–15 fragrant white flowers about 1 inch (25 mm) across on long stout stalks to 1½ inches (4 cm). Calyx of four rounded concave white sepals ½–3% inch (6–10 mm) long, in two pairs; corolla of 4–8 elliptical to oblong concave spreading petals ½–5% inch (13–15 mm) long; many stamens about ½6 inch (8 mm) long, with orange anthers and white filaments slightly united at base; and pistil with round red single-celled ovary containing one ovule, slightly curved style, and disk stigma.

Fruits (drupes) few in cluster, round balls, light green, becoming yellow or brown, with thin pulp. Seed single, large, brown, round,  $\frac{3}{4}-1\frac{1}{4}$  inches (2–3 cm) in diameter, including shell and kernel.

The sapwood is white and heartwood reddish brown. When fresh cut, the heartwood is distinctly white and red. The wood has a pronounced figure on tangential faces imparted by parenchyma tissue and interlocked grain. It is of moderate density (sp. gr. 0:6), with a relatively large shrinkage in drying which can result in considerable warping of lumber. It is subject to tearouts in machining due to its irregular grain, but turns well except for a peculiar tendency to snag chisels. It is not resistant to decay or termites and is currently used in Hawaii only occasionally for carved and turned craftwood products. Elsewhere, it is used for general construction, cabinetmaking, boat-building, railroad crossties, and similar purposes. Hawaiians made bowls from the wood. The doors of the main floor of Iolani Palace in Honolulu have panels of kamani veneer.

The aromatic latex or resin has served in folk remedies and as tacamahaca resin of commerce.

The thick dark green oil extracted from the seeds has been employed medicinally. Formerly, it was used as ointment for skin and hair and for burning in lamps. Reportedly, the seeds are poisonous.

Regarded as sacred, this tree was grown around temples in the South Sea Islands. Planted in the tropics as an ornamental or shade tree for the dense shiny dark green foliage and fragrant flowers. The species is slow growing. It is a common street tree in Puerto Rico and has been introduced into southern Florida.

Large groves occur near the coasts through the Hawaiian Islands. One in Halawa Valley, Molokai, was noted by early explorers and apparently has been replaced by younger trees. This species is utilized as an ornamental along coasts because of its resistance to salt spray. It is planted along Dillingham Boulevard, near the Dole Pineapple Cannery, along Kailua Road, along Lunalilo Home Road at Koko Marina, and many other places on Oahu as a street tree. Particularly common between Isaac Hale Beach Park and Opihikao in the Puna District of Hawaii.

Special areas: Waimea Arboretum, Iolani

## Champion

Height 59 ft (18.0 m), c.b.h. 18.5 inches (5.6 m), spread 81 ft (24.7 m). Malama-ki Forest Reserve, Puna, Hawaii (1968).

## Range

Native of East Indian region of southeast Asia and Pacific islands but widely planted through the tropics.

## Other common names

kamanu, Alexandrian-laurel, beautyleaf; daog (Guam, N. Marianas); btaches (Palau); biyuch (Yap); rakich

(Truk); isou (Pohnpei); eet (Kosrae); lueg (Marshalls); fetau (Am. Samoa)

True kamani sometimes has been confused with an introduced tree of shores, false kamani or tropical-almond, *Terminalia catappa*, with which it is usually

planted. The two species are rather distinctive in leaf size, leaf color, and general appearance. A large kamani tree with a name tag grows in Iolani Palace grounds near the gazebo (bandstand). Next to it is a false kamani, also labeled.

