

## Lama

*Diospyros sandwicensis* (A. DC.) Fosberg

Ebony family (Ebenaceae)

Native species (endemic)

Lama is widespread through the islands, especially in dry forests, and one of the most common trees. It has thick oblong or elliptical dull green leaves spreading alternate in two rows on nearly horizontal twigs, small whitish flowers mostly single and almost stalkless at leaf bases, and yellow to orange egg-shaped or elliptical fruits  $\frac{5}{8}$ – $\frac{3}{4}$  inch (15–20 mm) long.

A handsome evergreen small to medium-sized tree of 20–40 ft (6–12 m) in height and 1 ft (0.3 m) in trunk diameter. Bark blackish or dark gray, thick, from smoothish becoming rough and furrowed into irregular squares. Inner bark pink streaked, astringent and bitter. Twigs gray, finely hairy when young, with raised dots, becoming cracked and rough. Buds less than  $\frac{5}{16}$  inch (5 mm) long, covered by finely hairy overlapping scales.

Leaves alternate in two rows, with short brown hairy leafstalks of  $\frac{1}{4}$  inch (6 mm). Blades oblong or elliptical,  $1\frac{1}{4}$ – $2\frac{1}{2}$  inches (3–6 cm) long and  $\frac{5}{8}$ – $1\frac{1}{4}$  inches (1.5–3 cm) wide, blunt or short-pointed at apex, rounded at base, slightly turned under at edges, thick and stiff, slightly curved up on sides from midvein, with side veins fine and not visible, red with pink flushes and hairy when young, above dull green, beneath dull light green.

Flowers male and female on different plants (dioecious), single and almost stalkless at leaf bases, about  $\frac{1}{4}$  inch (6 mm) long. Male flowers have hairy greenish tubular calyx with 3–4 blunt lobes, tubular bell-shaped whitish corolla with three spreading lobes, and 12–18 stamens. Female flowers have calyx, corolla, and pistil with hairy three-celled ovary and three-forked style.

Fruits (berries) egg-shaped or elliptical,  $\frac{5}{8}$ – $\frac{3}{4}$  inch (15–20 mm) long, slightly curved on one side to blunt apex with point from style; at base is the enlarged cupshaped finely hairy light green calyx  $\frac{1}{4}$  inch (6 mm) long with 3–4 blunt or rounded lobes; yellow flesh or dry. Seeds single or sometimes two, elliptical and flattened,  $\frac{5}{8}$  inch (15 mm) long, brown.

Fruits often are abundant at maturity in late winter, especially February. Mature fruits are sweetish and eaten by birds and people. Immature fruits, however, are slightly astringent, like those of their close relatives on

the continental United States, persimmons (*Diospyros virginiana* L.).

The sapwood is wide and white. The heartwood is described as rich reddish-brown with redder and yellower zones, very hard, fine-textured, and straightgrained. Hawaiians used the white wood as blocks in their altars to symbolize the goddess Laka, and to fence sacred enclosures. The place name Kapalama in Honolulu means lama fence and referred to a former fence around the school for the chief's children there. The wood is not presently used.

Widespread and common in dry and wet regions through the islands down to sea level.

### **Special areas**

Kokee, Waimea Arboretum, Wahiawa, Volcanoes

### **Champion**

Height 35 ft (10.7 m), c.b.h. 2.8 ft (0.9 m), spread 17 ft (5.2 m). Puuwaawaa Ranch, Kailua-Kona, Hawaii (1968).

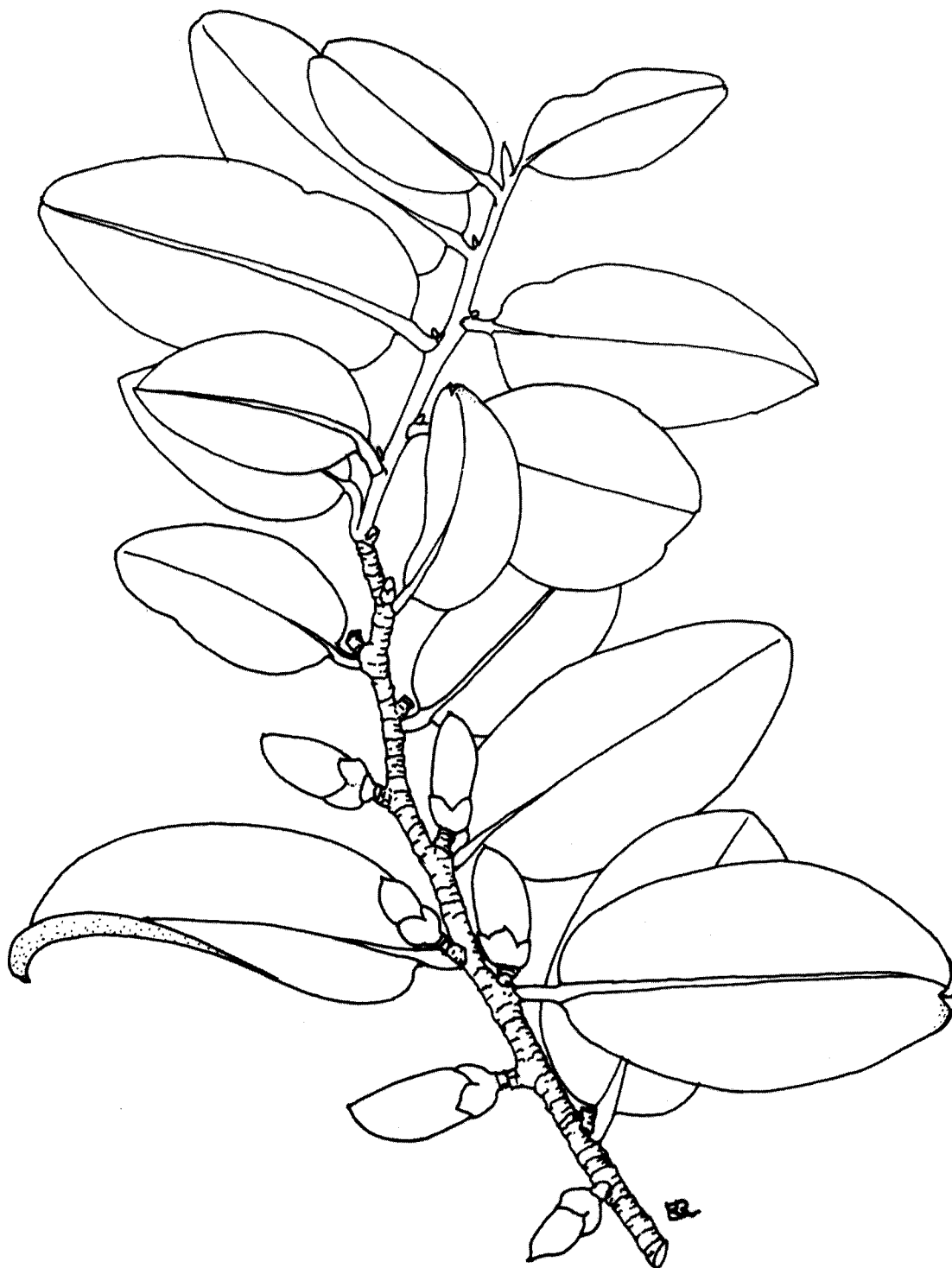
### **Range**

All main Hawaiian Islands

### **Botanical synonyms**

*Maba sandwicensis* A. DC., *Diospyros ferrea* var. *sandwicensis* (A. DC.) Bakh.

This variable species has many varieties. The common name lama means enlightenment.



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*Diospyros sandwicensis* (A. DC.) Fosberg  
Twig with fruits, 1 X.