

Alani, clusia-leaf pelea

Pelea clusiifolia Gray

Rue or citrus family (Rutaceae)

Native species (endemic)

Shrubs and small trees known as alani are easily recognized. However, this variable genus, *Pelea*, is one of the largest of woody plants in Hawaii in number of species. The genus is characterized by leaves alternate, paired, or in whorls of three or four, rarely five or six, with gland dots visible under a lens; small flowers at leaf bases, mostly greenish, four-parted; and seed capsules four-lobed or splitting into four parts. One species will serve as an example, though a distinctive second is mokihana, *Pelea anisata* Mann.

This species with several varieties is one of the most common and is widely distributed through the islands. It is characterized by short-stalked thick leathery elliptical leaves broadest beyond middle, attached mostly four at a node. A shrub or small tree to 30 ft (9 m) tall, hairless nearly throughout. Twigs gray, with ringed nodes, ending in narrow bud of very young hairy leaves.

Leaves whorled, usually with four at a node, rarely three to six, with short leafstalk of $\frac{3}{8}$ – $\frac{3}{4}$ inch (1–2 cm). Blades elliptical or obovate, mostly 2–4½ inches (5–11 cm) long and 1¼–2 inches (3–5 cm) wide, stiff and brittle, rounded or slightly notched at apex, blunt or short-pointed at base, turned under at edges, above very shiny green, beneath shiny light green with purplish black midvein, many fine parallel side veins with network of smaller veins, and with tiny gland dots visible under a lens.

Flower clusters (cymes) on twigs mostly back of leaves, less than $\frac{3}{4}$ inch (2 cm) long. Flowers of one or both sexes (polygamous), short-stalked, few, nearly $\frac{1}{4}$ inch (6 mm) long. Male flowers consist of four blunt sepals less than $\frac{1}{8}$ inch (3 mm) long, four narrow petals nearly $\frac{1}{4}$ inch (6 mm) long, eight stamens, and rudimentary pistil. Female flowers similar, with eight minute sterile stamens and on a disk the pistil with four-lobed ovary, short style, and four-lobed stigma.

Fruits (capsules) clustered on twigs back of leaves, shallowly four-lobed, $\frac{3}{8}$ – $\frac{5}{8}$ inch (10–15 mm) in diameter, hard, wrinkled, greenish, the rounded lobes splitting on a line. Seeds 1–2 in each lobe, $\frac{1}{8}$ inch (3 mm) long, rounded, shiny black.

The wood of all species is yellowish white, finetextured, tough, but rather soft. It was used by the Hawaiians for kapa beaters and for canoe trim and rigging.

This species with several varieties is widespread and common in wet forests through the islands.

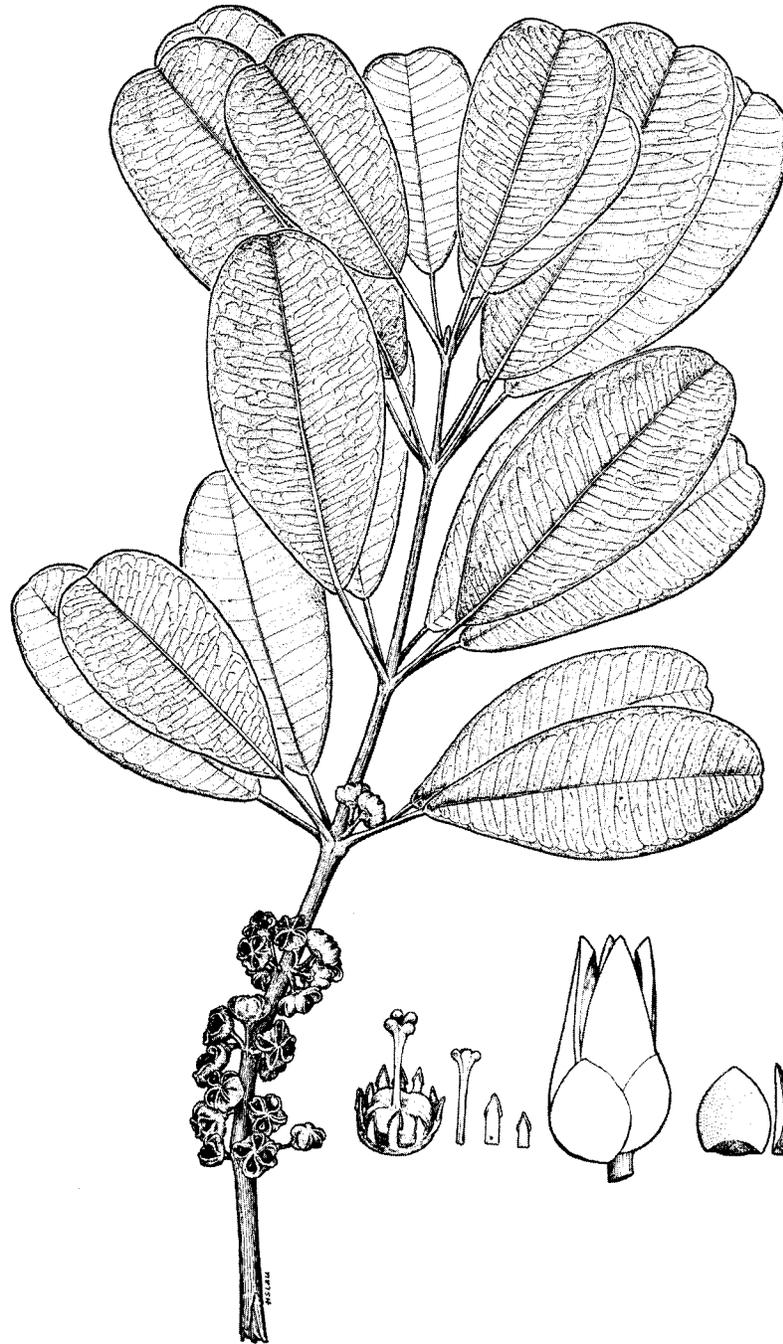
Special areas

Kokee, Haleakala, Volcanoes

Range

Through the six large islands of Hawaii only.

This genus was named in honor of the Hawaiian goddess of fire and volcanoes, Pele, in 1854, by Asa Gray, U.S. botanist. It was based upon a specimen of this species collected on Oahu by the U.S. Exploring Expedition under Captain Charles Wilkes. Today, about 50 species are known (more than 80 have been named), several doubtfully distinct. All are from Hawaii except two in the Marquesas Islands. The monograph by Stone (1969) serves for identification of species.



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Twig with fruits, 1/2 X; female flowers and parts (lower right), 3 X (Degener).