



'KAIMANA', AN IMPROVED NEW LYCHEE CULTIVAR FOR HAWAII

Richard A. Hamilton, Emeritus Professor of Horticulture
Philip J. Ito, Horticulturist
Herbert Rapoza, Farm Foreman



Fig. 1. 'Kaimana' tree.

Lychee (*Litchi chinensis* L.) 'Kaimana' was named in 1982 to commemorate the 75th ("diamond") anniversary of the establishment of the Hawaii Agricultural Experiment Station. 'Kaimana' means "diamond" in the Hawaiian language. This excellent new cultivar is a seedling of the Chinese cultivar named 'Hak Ip', the translation of which is "black leaf." The original seedling tree of 'Kaimana' grown at the Poamoho experimental farm on Oahu first produced fruit in 1965 at 10 years of age. This is truly a jewel of a lychee, producing excellent quality fruit. In addition, it has a more consistent bearing habit than any of the 14 Chinese lychee cultivars imported and tested in Hawaii during the past 110 years.

'Kaimana' was selected from a population of 'Hak Ip' seedlings planted at Poamoho experimental farm in 1955. Unlike its 'Hak Ip' parent, 'Kaimana' has fruited earlier and produced heavier crops than any other lychee cultivar presently grown in Hawaii. Before being named, 'Kaimana' was known as R10T2.



Fig. 2. 'Kaimana' fruit.

Description

Air-layered trees of 'Kaimana' are slow growing, with a spreading growth habit and closely spaced branches (Fig. 1). 'Kaimana' trees 14 years of age are about half the height of 'Kwai Mi'. 'Kaimana' has a strong branching habit with wide crotches. The bark is light grey, and the leaves are large, shiny, and dark green, with six leaflets.

Four-year-old air-layered trees often produce fruit. There is a tendency to produce predominantly male flowers on the earlier panicles but a higher proportion of female flowers later in the season. The flowering period may last as long as several weeks or a month.

Fruits are deep maroon with a smooth, leathery skin thicker than that of 'Kwai Mi' (Fig. 2). The oval fruits average 1.2 to 1.6 in (3 to 4 cm) in diameter and weigh 0.7 to 0.9 oz (20 to 26 g). The edible pulp is 71 to 75 percent of the total fruit weight. Usually about 40 percent of the seeds are abortive. The crop matures from June to July.

The fleshy, edible aril is firm and translucent, with a delicious subacid flavor. It is juicy and sweet, with 20 to 24 percent total soluble solids and a pH of 4.5.

Availability

'Kaimana' was distributed for testing in 1975. Air-layered trees are presently available and being sold in limited numbers by nurseries on Hawaii, Oahu, Maui, and Kauai.