

PLATE 33

Koa

Acacia koa A. Gray

(endemic)

Koa is a chiefly high-altitude forest tree, preferring altitudes between 1,500 and 6,000 feet, although it will grow at lower altitudes, almost to sea level. When it grows singly, it has wide-spreading branches beginning low on the trunk and reaches heights of fifty feet. When growing closely together, as these trees do in the high forests, under ideal conditions (which includes the higher altitudes), the trunks are often tall and straight for a height of sixty feet before any branches begin; some trees of that height have diameters as great as ten feet. The bark is light gray, and smooth when the tree is young, but deeply furrowed longitudinally in mature trees. Upon germination of the seed and for a short time thereafter, the first true leaves are light green, finely divided, consisting of five to seven pairs of pinnae, each pinna with twelve to twenty-four pairs of leaflets. These are then replaced, as the tree grows, by dark green, smooth, stiff, crescent-shaped so-called leaves, which are actually broad, flattened petioles (leaf stems); these are called phyllodes and function as leaves. The trees bloom in late winter to early spring; the flowers appear as axillary clusters of small cream-colored "balls." Pods about three inches long follow; they are flat and contain small, flattened brown seeds. The wood resembles mahogany and, when polished, is a beautiful brownish red, through which the wavy lines of the grain show.

PLATE 98

Wiliwili

Erythrina sandwicensis Degener

(endemic)

Wiliwili is a native Hawaiian leguminous tree found primarily in dry areas, on dry coral plains, and on lava flows, from sea level to 2,000 feet. Trees are eighteen to thirty feet high, wide spreading; the trunk is sometimes short and thick. The branches are somewhat spiny, gnarled, and yellowish hairy at their tips. The leaves are long-stemmed, with three ovate, leathery leaflets, hairy on the lower surface, each about two to 2-1/2 inches long and three to 3-1/2 inches wide. The leaves of some fall late in the season, with new ones appearing in spring when or after the flowers open. The wood is very light when dry and is often compared to balsa wood. Flowers are borne in clusters near the tip of branches. They have the general form of leguminous flowers and range in color from pale red through oranges and deep reds to white, with yellow, chartreuse, and pale green as variations. The pod ordinarily contains one to three red or orange oblong seeds.

SOURCES FOR DESCRIPTION OF PLANTS

Degener (and Degener) (1932-1980); Handy (1940); Handy and Handy (1972); Hillebrand (1888); Kimura and Nagata (1980); Lamoureux (1976); Neal (1948); Rock (1913); Wagner et al. (1990).