w*iliwili* (Erythrina sandwicensis)

FABACEAE, Pea Family

This species is endemic to the main Hawaiian Islands (Wagner et al. 1990).

Throughout the Hawaiian Islands, most *wiliwili* have flowers with petals and stamens that are dark orange colored. On leeward Haleakalā, the flower color, though constant within individuals is highly variable within populations, ranging from entirely orange to a very pale yellow green and all combinations between.

Summary statement of uses: The pale, buoyant wood of this species was used as part of the canoe (hull, *wa'a* and outrigger, *'ama*), surfboards, fishing net floats, charcoal for dye-making, and medicinally. The seeds were strung in *lei* (Handy and Handy 1972:236).

Wiliwili was known for its ability to float no matter how much the wind blew (Kalokuokamaile in Holmes 1981). The wood of *wiliwili* when fresh is heavy and filled with water. However, after dying it is extremely light and buoyant somewhat like balsa. One disadvantage of *wiliwili* wood is that it lacks strength and durability.

Wiliwili was the preferred wood for the *'ama* (float) of the Hawaiian canoe, but *hau* (Hibiscus tiliaceus) was used if *wiliwili* was not available (Buck 1957). Shaping the float was done with an *alahe'e* or *walahe'e* (Canthium) adze (Malo 1903; Kamakau 1976). Abbott (1992) also stated that in modern trials, charcoal from *wiliwili* or *hala* (Pandanus) mixed with the liquid from the inner bark of *kukui* (Aleurites) produced the best paints for canoes. The wood was also used as floats for fish nets (Degener 1945).

Wiliwili was sometimes used in making the main hull of canoes apparently intended for near-shore, play, or training purposes (Holmes 1981).

Wiliwili wood was used for surfboards (*papa he'e nalu*). Some experts say *wiliwili* was used especially in the longer boards, approximately 15 feet long called *olo* versus the shorter (6 to 9 feet long) *alaia* boards which were often made of *koa* or breadfruit (Buck 1957h:384-386). Buck (1957h) raises the question of the difficulty of procuring wiliwili tree of "sufficient size to make the large olo boards", but continues, "But doubtless a few were made, and such were the property of chiefs."

Buck cites Ellis's 1839 description of surfboards on Hawai'i island writing, "'generally five or six feet long, and rather more than a foot wide, sometimes flat, but more frequently convex on both sides… usually made of the wood of the erythrina (*wiliwili*), stained quite black, and preserved with great care.' He adds that after use they were left in the sun until perfectly dry, rubbed with coconut oil, and hung up in the dwelling house. Not infrequently they were wrapped in cloth."

Chun (1994:171,173) noted that the bark of the *wiliwili* was used in making medicine. Buck (1957a) notes the use of *wiliwili* or *hau* wood rubbed with *kukui* (Aleurites) nut oil to rekindle a fire as they burned without smoldering. Buck (1957a) writes, "Light woods such as *hau* and *wiliwili* were suitable for fishing gear containers, as they floated well if a canoe upset."

Wiliwili as well as other dryland forest trees *'ahakea*, *alahe'e*, *'iliahi* (as *'aoa*), *kauila, naio*, *neneleau* and 'ūlei, are mentioned in the Hawaiian creation chant, Kumulipo (Beckwith 1972). The *wiliwili* tree is matched with the sea borer (*wili*) (Beckwith 1972)

Status at Auwahi: Though common throughout lower Auwahi, *wiliwili* is most abundant farther east in lower Kahikinui before reaching Kaupo where groves of hundreds of trees still occur.