`*ākia* (Wikstroemia monticola)

THYMELEACEAE

Wikestroemia monticola Skottsb.
This species is endemic to East Maui (Wagner et al. 1990).

Other Hawaiian names for local species are `*ākia pehu,* `*ākia lau nui,* `*ākia mānalo,* and *kauhi* (Pukui and Elbert 1986). Hillebrand (1888) states the Hawaiian names for the genus are "*akia*" or "*akea*". Hillebrand (1888) also states the root of the word may be in the Fijian name for the genus *mati* and that the native name for the genus in Tahiti is *ovao.*

Summary statement of uses: The primary uses of `*ākia* appear to have been for cordage (Summers 1990) and as an agent of narcotizing fish.

In an excellent discussion of the Hawaiian ethnobotany of Wikestroemia, Peterson (1990) wrote, "Species of Wikstroemia have furnished one of the strongest Hawaiian fibers, used in making ropes and braids. It is also said to have been used in making *kapa*….Measurements made from fibers of branches desiccated for 6 months demonstrated that the density of Wikstroemia fibers was about the same as that of New Zealand flax (Phormium tenax) and ramie (Boehmeria nivea)…. `*Ākia* was used medicinally by Hawaiians in several ways, including as a laxative and as a treatment for asthma.  Alkaloids can be extracted from various parts of the plants, and `*ākia* has an old reputation for being poisonous; the plants were used for stupefying fish, a method called *hola* by the Hawaiians (Stokes 1912). Degener (1945) mentions that criminals were executed by means of a deadly drink prepared from roots and bark of `*ākia* together with parts of other plants.  It is possible that not all species of Wikstroemia are poisonous, judging by experiments where `*ākia* has been shown to be nontoxic (Arnold 1944; Baldwin 1979). The fruit is slightly bitter but is eaten by birds. Ethanol extracts of Wikestroemia oahuensis and W. uva-ursi have shown antitumor activity (Torrance, Hoffmann & Cole 1979). *Aoaoa* is a vernacular name that may refer to W. oahuensis or W. uva-ursi."

Pukui and Elbert (1986) stated, "The bark yields a fiber; the bark, roots, and leaves (as <u>W</u>. <u>oahuensis</u>) a narcotic used for fish poisoning."

Hillebrand (1888) stated, "Like many other plants of this Order, the Hawaiian *Akeas* contain an acrid-narcotic principle, and are employed by the natives, in common with *Awa* and *Auhuhu* for narcotizing fish. Their strong and flexible bast-fibres serve for many useful purposes and are of the best which the islands produce. A Japanese species furnishes the material for the finest paper made in that country".

Lennox (1967) wrote of this species, "Poisonous - used for stupefying fish. Tough fibers of bark used for cord and rope - almost as strong as olona."

Handy and Handy (1972:239) distinguished two types of `ākia, a bitter `ākia (`ākia 'awa) and a 'mild' `ākia (`ākia manalo).  The bitter `ākia is described as a shrub that bears orange-red fruits, a description that matches that of most Hawaiian <u>Wikestroemia</u> species. Of this type they write that decoctions of the bark and roots are deadly poisonous and were used for killing and suicide. The other mild type of `ākia, of which no description is given is described as not being poisonous but rather whose bark and leaves were used as a narcotic.

Rock (1913:317) stated, "The trunk and branches are clothed in a black, very tough, fibrous bark, which, owing to its strength, was employed by the natives for ropes and other purposes where strong fiber was needed: it almost equals the *olona* in strength." Chun (1994:172, 233, 265, 156) noted that this species was used as medicine.

The wood of 'akia was also used as a type of ceremonial firewood in 'ana'ana magic (Kamakau 1991). See quote under for *hō`awa* (<u>Pittosporum</u> spp.).

<u>Status at Auwahi</u>: Ā*kia* is a very common shrub-tree on much of leeward Haleakalā, even in pasture-like area that are heavily grazed by cattle. The foliage may be poisonous or at least unpalatable to cattle as it is almost never browsed.