Kava-Kava

Family Name: Pepper Family Name: Piperaceae

Latin Name: Piper methysticum

Common Names: Kava; Kawa; Awa; Waka; Lawena; Sakau; Yaqona

Indigenous Names: 'awa (Hawaii), 'ava (Samoa), yaqona (Fiji), sakau (Pohnpei), ka (Admiralty Islands), ayuw (Jacob Island), kial, keu, karangimi, kurar, ten, tta, gamada, wariki, irka, tokarabu, sagainya, waki, kewato, sika (all New Guinea), nigui, naga, gwie, maloku, sini, amaloku, bir, hae, nikava, namaloku (all Vanuatu) [2, 214-217]

Related Species: Black pepper (Piper nigrum), Piper witchmanii

Body System Affiliations:

1. Nervine

Botanical Description:

Habit: Shrub

Size: 1 – 4 m [8, 170] Arrangement: Alternate

Leaves: Thin, single, whole, cordate (heart shaped), petiolate, 8-25 cm

Flowers: Few flowers, mostly male, possess neither calyx or corolla; dioecious

[8-171]

Fruit: No collected specimens existing in herbaria throughout the world has seeds, female plants uncommon, female inflorescences fall off before the produce

fruit. [2,13]

Bark: Knotty, thick stump **Twigs:** Fleshy stems

Underground Parts: Rhizomes which extend 3 to 10 feet [1,189], alternate source states: pithy rootstalk with a fringe of lateral roots up to 3 meters long, not

true rhizomes, but monopodial stems with sympodial branches [2,11]

Ecology:

Habitat: Thrives in shade, deep, well drained soils rich in organic matter **Range:** Various islands throughout the tropical Pacific [8, 169-198]. It is cultivated on some, was formerly cultivated on others but is not any longer, and is completely absent from other islands.

Native Where: The presumed origin is in northern Vanuatu [8, 196], which is deduced from anthropological and linguistic research. Kava is found on many islands in Melanesia, Micronesia, and Polynesia, although not all of them.

Propagation:

Technique: Cuttings from existing stems/cloning. The cuttings are made two joints long if the branch is 1" in diameter, and four joints long if less. They are planted about 1 yard apart, with one node buried, placed in the ground diagonally. They are planted the same day cut, or bound in bundles and soaked by day and left in dewy grass at night. [2, 84] Another technique, used in Tanna, Vanuatu, is that they are planted in hollow tree fern trunks, which protects them from nematodes. [2, 85-87]

Harvest:

Plant Part: Root

Method of Harvest: The plant is uprooted, and stem cuttings are used to propagate new plants, and the roots are collected. [8, 189]

Ecological Considerations of Harvest: Kava is endangered in the Cooks, Tahiti, the Marquesas, Hawai'i, and Papua New Guinea

Cultural Considerations of Harvest: Kava is a cultivar of *Piper witchmanii* [8,56] which is a wild species originating in Vanuatu

Indigenous and Non-Western Use/Significance/Relationships: Medicine:

Indigenous Group: Groups in the Pacific Islands in Polynesia, Micronesia, Melanesia; in: Hawaii, Vanuatu, Pohnpei, Samoa, Fiji, Tahiti

Part Used: Rootstalk/rhizome

Medicinal Actions: aphrodisiac, narcotic, antiseptic, analgesic, soporific, diuretic, laxative, galactagogue, anesthetic, diaphoretic [8, 184-186] Indications: arthritis, pain, sleeplessness [7, 17-19], inflammation of urogenital system, gonorrhea and chronic cystitis, difficulties in urinating, female puberty symptoms and weakness, menstrual problems, vaginal prolapsus, to provoke abortion, migraines related to women's sicknesses, headaches, general weakness, chills, sleeping problems, infection prevention, rheumatism, weight gain, gastrointestinal upsets, irritation of respiratory tract, pulmonary pains, tuberculosis.

Preparation: Pounding, mashing, chewing rhizome and soaking in cold water. Mastication of the roots is typically used in Vanuatu and Papua New Guinea [8, 181]. One method is to chew the root, add water to four or five mouthfuls of the chewed root, and to strain it. Another method is to dry the root, wash it, chop it, then either chew or pound it, and then add it to water and heat it. [2, 113]

Applications: Infusion – hot or cold

Parts Used: Rootstalk/rhizome

Medicinal Actions: Leprosy, skin diseases

Preparation: Masticated stump **Application:** Poultice [2, 113]

Parts Used: Juice obtained from fresh leaves

Medicinal Actions: Otitis, Abscess **Application:** Taken orally [8, 185]

Cautions: Excessive overconsumption will cause photophobia and diplopia, temporary oculomotor paralysis, skin lesions, and exanthema. Skin lesions will go away with the reduced or discontinued use of kava. [2, 58-60]

Other: Social beverage, also used in ceremonies, rituals, and for spiritual purposes. It was offered to gods and the spirits of ancestors, and the plant is seen as a link to ancestors. Rats and pigs have been often seen chewing kava roots. It is a symbol of forgiveness in Futuna and Samoa. There are many myths about the origin of kava, and they often include women, death, and animals.

Western (European-American) Uses/Relationships:

Medicine:

Part Used: Root

Medicinal Actions: analgesic, anesthetic, antispasmodic, depressant, intoxicant [6, 244-247]; diuretic, soporific, anticonvulsant, spasmolytic, antimycotic, narcotic, hypnotic [8, 184-186].

Indications: Anxiety, muscle tension, headaches, mild insomnia, pain, stress, restlessness, urinary tract infections, arthritis, dental pain, cankersores

Constituents: Kavalactones: kavain, dihydrokavain, methysticin, dihydromethysticin, hangonin; alkaloids: cepharadione A, pipmethystine; flavanoids, and benzyl-ketones.

Preparation: Available in capsule, tablets, and liquid forms. [6, 246 **Pharmacy:** Extract: 100 mg 2-3 times daily; dried rhizome: 1.5-3 g daily in divided doses; alcoholic extract: 3-6 mL daily in divided doses [6, 246] **Cautions:** There are concerns about kava related liver toxicity. Excessive consumption can result in disturbances of vision, yellowing of skin, problems with equilibrium, dizziness, and stupor.

Personal Experience:

Medicine:

Part Used: Powdered root

Application/Preparation/Pharmacy:

Applications Tea

Preparation Boiled water, added 1/2 tsp of powdered kava root into water, stirred

Pharmacy: 1 tsp of powdered kava root, 1x/day, in the evening

Reason/Purpose Wanted to see how it would make me feel, and if I would feel calmed.

Experience It made my tongue numb. I did feel very relaxed after drinking it, although I hadn't felt stressed prior to drinking it. **Cautions based on experience:**

Other Notes of Interest: Available botanical data indicates that kava is a sterile plant, and a form of the fertile wild species *Piper witchmanii*. There is no supported taxonomic distinction between the two species by isozyme analysis or chromosome counts [2,51]. There are many varieties of cultivars of varying desirability and potency. Many islands which formerly cultivated kava were forced to stop with the European invasion and Christian conversion.

Kava is also an important cash crop because of its early maturation and simple processing.

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