

74. *CATHA EDULIS* Vahl (CELASTRACEAE) — Khat

Source of a stimulant which predates coffee in Arabia by more than a century. Like cocoa, it allows the user to go without food for extended periods. Yemen and Aden tribes retire every evening for khat breaks, sometimes rather extended. Daily export of khat to Aden lies behind the founding of the Ethiopian Airlines.⁵⁴ Tradition says its use as a social stimulant originated in the Harar region of Ethiopia.¹²² The wood is pale yellow to dark brown in color, moderately hard and strong, and suitable for cabinetry. It is also useful for making high-class blotting paper.¹

Reported to be anorexiac, aphrodisiac, astringent, CNS-stimulant, narcotic, poison, and stimulant, khat is a folk remedy for asthma, chest ailments, cough, debility, diabetes, flu, lethargy, and stomach ailments.³² Cathine is said to open the bronchial passages, curb the appetite, and raise the blood pressure.

Per 100 g, the leaves are reported to contain 5.2 g protein, 2.7 g fiber, 1.6 g ash, 290 mg Ca, 18.5 mg Fe, 1800 µg β-carotene equivalent, 0.05 mg thiamine, 0.05 mg riboflavin, 14.8 mg niacin, and 161 mg ascorbic acid.¹²² Leaves contain three alkaloids, d-nor-isoephedrine, formerly called cathine (0.27%), cathinine (0.15%), and cathidine (0.32%), besides reducing sugars, tannin, and a volatile oil.¹ Myricitin resins, mannitol, dulcitol, caoutchouc, up to 14% catechins, vitamins B and C are also reported from the plant. Seeds contain 50% oil.³³ Krikorian and Getacun gives a historical tabulation of the compounds in khat.¹²³ Emboden states that scopolamine is the active principle.⁵⁴ Elsewhere he lists the following “euphoriant”: dextrine (I thought that was synthetic), ephedrine, d-norpseudoephedrine, and pervitin.⁵⁴

Toxicity — Emboden classifies the plant as a narcotic stimulant leading to hallucinations, ending in somnolence,⁵⁴ stupidity, laziness, mindlessness, even insanity.³³ Addition of 0.1% khat extract to a rooster’s diet decreased semen output and sperm concentration. Semen production stopped completely after 63 days treatment, but the testis regained normal function after withdrawal of khat extracts.¹²⁷ The *Bulletin on Narcotics*¹²⁵ devoted an entire issue of 99 pages to khat with emphasis on chemistry and pharmacology. Khat in humans induces mydriasis, tachycardia, extrasystoles, elevated blood pressure, transient facial and conjunctival congestion, headache, hyperthermia, increased respiration (through central stimulation, bronchodilation, and counterregulation of hyperthermia), inhibition of micturition, yet increased diuresis (from intake of large quantities of fluids together with khat). Reinforcing effects include euphoria, logorrhea, improvement of association, excitement, and insomnia. “Toxic psychosis occurs very rarely, if at all.”¹²⁵ Would that the obese Jim Duke could chew khat and coca, dare I call it “coca cata” instead of lunch!