

GUARANÁ

Scientific name: *Paullina cupana* Kunth

Family: Sapindaceae

Popular names: guarana, guarana kletterstrauch, guaranastruik, quarana, quarane, cupana, Brazilian cocoa, uabano, uaranzeiro.^(4,6)

Used parts: Seeds

Botanical characteristics: The plant is a wood, evergreen perennial vine up to 10 m long. The leaves are large, palmate, coriaceous, distinctly ribbed and roughly crenate-serrate. The usually unisexual flowers are inconspicuous, yellow to whitish and fragrant. The fruit is a hazelnut-sized, deep yellow to red-orange 3-sectioned capsule, which bursts open when ripe and releases one purple-brown to black seed in a cup-like aril⁽⁵⁾.

Habitat: Brazil

Chemical composition: Tannins, theobromine, theophylline⁽¹⁾, saponines, organic acid, caffeine (guaranine)⁽⁸⁾, essential oil⁽⁹⁾, catechin, *steroids and triterpenes*, starch, phenol, aminogroups, gum and mucilage⁽¹⁰⁾.

Indications: Anorectic effect, antioxidant effect, stimulant⁽¹⁾, astringent cardi tonic, diuretic, nervine, purgative, tonic, vasodilatador, analgesic, antiobesity⁽⁴⁾.

Dose: 1–2 g of powdered seed in tablets or capsules (or stirred into water or juice) 1–3 times daily. Therapeutic dosages are reported to be 4–5 g daily. Relatively new to the U.S. market are guaraná extracts that are concentrated and standardized to the caffeine content. Follow the labeled instructions and dosages for these product⁽⁴⁾.

Others informations: The uses of guaraná by the Amerindians predate the discovery of Brazil. South American Indian tribes (especially the Guaranis, from whence the plant's name is derived) dry and roast the seeds and mix them into a paste with water. They then use it much the same way as chocolate—to prepare various foods, drinks, and medicines. The rainforest tribes have used guaraná mainly as a stimulant and astringent, and in treating chronic diarrhea^(8,4).

The stimulant effects of guaraná go beyond its anorectic effect. In fact, administered chronically, it increased the physical capacity of mice subjected to stressful situations such as forced swimming and partially reversed the amnesic effect of scopolamine, as measured through a passive avoidance test in rats and mice⁽²⁾.

An antioxidant effect was also shown since, even at low concentrations, guaraná inhibited the process of lipid peroxidation probably due to its tannin and saponins content⁽³⁾.

According to UEPAE researchers (Unit of Execution and Research in the State Environment), caffeine, together with the other substances associated in guarana, doesn't produce side effects like synthetic caffeine does⁽⁷⁾.

References:

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