

Chá de bugre

Scientific name: Cordia salicifolia Cham., Cordia ecalyculata (Lorenzi & Matos, 2002)

Family: Boraginaceae (Lorenzi & Matos, 2002)

Popular names: Café de bugre, café do mato, cafezinho, chá de bugre, chá de frade, claraiba, louro mole, louro salgueiro, porangaba (Lorenzi & Matos, 2002)

Used parts: leaves (Lorenzi & Matos, 2002)

Botanical characteristics: chá de bugre is small tree growing 8-12 meters in height with a trunk 30-40 cm in diameter. ⁽²⁾ Small and white flowers and red fruits. (Lorenzi & Matos, 2002)

Habitat: *C. salicifolia* can be found in large quantities in Brazilian states of Minas Gerais, Bahia, Acre and Goiás. It is also found in tropical forest areas of Argentina and Paraguay.

(www.rain-tree.com/chadebugre.html)

Chemical composition: chá de bugre berries contain caffeine like coffee. (Lorenzi & Matos, 2002)

Main plant chemicals may include allantoin, allantoic acid, potassium.

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Posology

Internal use - This plant is best prepared as an infusion (tea). Use one teaspoon of powder for each cup of water. Pour boiling water over herb in cup and allow to steep 10 minutes. Strain tea (or allow settled powder to remain in the bottom of cup) and drink warm. It is traditionally taken in 1 cup amounts, ½ to 1 hour before meals.

External use - Externally the plant has been used traditionally to treat skin wounds and infections.

Caparroz-Assef et al. (2005) shown the oral LD50 value of the extract was higher than 2000 mg/kg while the LD₅₀ by intraperitoneal injections was about 920 mg/kg.

A daily oral administration of extracts at 20, 100, 200 and 400 mg/kg doses for 90 days did not cause significant changes in the body weight gain, organs weight or biochemical assays and hematology in the animals.

The results showed that the administration of the extract for a prolonged period did not produce toxic effects in the animals (Caparroz-Assef et al., 2005).

Indications: *C. salicifolia* is used for weight loss (as a appetite suppressant); as a mild diuretic; for cellulite; to tone, balance, and strengthen heart function; for herpes simplex (Cruz, 1995)

Pharmacological studies: Some pharmacological actions of *C. salicifolia* could be observed:

- **Wound Healing Actions:** Externally the porangaba has been used traditionally to treat skin wounds and infections (Pio Correia, 1952 and Saito & Oliveira, 1986).
- **Antiviral action:** The partially purified extract from whole plant of *C. salicifolia* showed an inhibitory effect on herpes simplex virus type 1 (Hayashi et al., 1990). The activity of COL 1-6 on different steps of HSV-1 replication in HeLa cells was investigated. Under single-cycle replication conditions, COL 1-6 exerted a greater than 99.9% inhibition in virus yield when added to the cells 3 h or 1.5 h before infection, and even when added 8 h after infection the extract still caused a greater than 99% inhibition. The extract has been shown to have a direct virucidal activity. And also, analysis of early events following infection showed that COL 1-6 affected viral penetration in HeLa cells but did not interfere with adsorption to the cells.
- **Cytotoxic Actions:** The methanolic extract of the branches and leaves showed cytotoxic activity against cancer cells (Arisawa et al., 1994).
- **Cardiotonic Actions:** In addition, research with rabbits and guinea pigs studies indicated cardiotonic properties (Matsunaga et al., 1997).

The anti-obesity, appetite suppressant, diuretic and hipolipidemic effect: *C. ecalyculata* Vell. and *C. salicifolia*, known as porangaba, have been used as diuretic and in the treatment of obesity (Saito & Oliveira, 1986 and Saito, 1984, Caminhua, 1887, Barroso et al., 2002). Pio Correia (1952) and Saito & Oliveira (1986) indicated porangaba as anti-reumathic. Also observations were described in Brazil, *C. salicifolia* is a very popular herb, used by the Brazilian population as diuretic, appetite suppressant and weight loss product (Cruz, 1995).

Therefore the anti-obesity, appetite suppressant, diuretic and hipolipidemic effect related in literature a study of Siqueira et al. (2006) with dried powdered leaves of *C. salicifolia* (in a dose of 20 m/kg/day, in water was daily administered by gavage during 13 days) indicated no effect were detected for this plant in mice. However, hipolipidemic effect was observed in normal and alloxan-diabetic rats (Siqueira et al., 2005).

However, there is no research in humans or animal models showing the putative diuretic, appetite suppressant and/or anti-obesity effect of *C. salicifolia*.

Side effects: None reported

Drug interactions: None reported

Contraindications: None reported



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