

## CAJUEIRO

**Scientific name:** *Anacardium occidentale* Linné <sup>(1)</sup>



<http://www.brasilescola.com/frutas/caju.htm>

**Family:** Anacardiaceae <sup>(1)</sup>.

**Popular names:** cajueiro, acajuiba, caju-manso, anacardo, salsaparrilha-dos-pobres, casca antidiabética, acauba, acaju-açú, acaju-piranga, acaju-pakoba <sup>(1)</sup>.

**Used parts:** bark <sup>(1)</sup>, fruits, flowers <sup>(4)</sup>.

**Botanical characteristics:** The cashew is a broad evergreen tree from 6 to 10 m high with smooth glabrous branches, densely leafed toward the tops. Has short-petioled leaves that are alternate, coriaceous and entire-margined. The leaf blade is obovate, 12 to 14 cm by 6 to 8 cm with a prominent midrib and 10 to 14 veins that are almost parallel. Flowers are in terminal, cyme-like, 10 to 20 cm long panicle and the polygamous. The pedicles are 2 to 3 mm long. The calyx is deeply divided into five sepals, which are lanceolat, erect, imbricate, glabrous inside and covered on the outside with short, thick, gray hairs. The corolla is 5-petaled. The petals are lineal-lanceolate, 7 to 8 mm long by 1 mm wide, acute, soft and yellow with a red stripe on the inside that curls outward in the later stages. Seven to 10 stamens are fused at base, but only one 8 to 9 mm long stamen is fertile; the steriles are one shorter.

Anthers are yellowish-white, oblong-ovate and burst open along a vertical slit. The flowers are followed by a fleshy, edible receptacle, which partly encloses the fruit. The fruit is reniform, with a smooth, pale grayish-brown drupe, about 2 to 3 cm long and 1 cm thick <sup>(2)</sup>.

**Habitat:** North and Northeast Brazil, east Africa, India, Sri Lanka, Malaysia <sup>(4)</sup>, Tanzania, Kenya <sup>(6)</sup>

**Chemical composition:** flavonoids, glucosides, glucose <sup>(2)</sup>, tannins <sup>(3)</sup>, galactose, arabinose, rhamnose, mannose, glucuronic acid <sup>(6)</sup>, Lkyl phenoles, anacardic acid, methyl cardol, cardol, fatty oil, oleic acid and linoleic acid, proteins, starch <sup>(2)</sup>.

**Indications:** diabetes mellitus <sup>(2)</sup>, toothache, dysentery, diarrhea piles, pellagra <sup>(3)</sup>, moluscicide and for medical purpose as a rubefacient and vesicant in treating various skin diseases in tropical medicine <sup>(5)</sup>, adhesive properties, insecticidal activity <sup>(6)</sup>, anti-inflammatory, astringent <sup>(7)</sup> **Others informations:**

- *A. occidentale* bark extract, at the concentration of 20 mg / ml, showed a wide spectrum of antibacterial activity being effective also against *K. pneumoniae* strain to streptomycin. <sup>(3)</sup>
- There are two food products from cashew fruits: the peduncle or pseudo-fruit which is yellow or red, used natural fresh fruit or as jelly, compote, syrup or dried, either alone or "crystallized" with sugar, and the nut, that is considered more important due to its widespread acceptance and demand in the international market <sup>(4)</sup>.
- Cashew produce a gum resin that exsudes from the trunk. It has properties similar to gum arabic, for which it is a perfect substitute in book-binding <sup>(4)</sup>.
- The flowers of cashew apple are considered

and the whole plant has a number of medicinal properties<sup>(4)</sup>.

- The alkyl phenoles contained in the seed case of the nut are strong skin irritants. Contact between the seed case and skin can lead to erythemas with nodule and blister formation. Frequent contact can lead to rimose exanthemas. The roasted seeds eaten as cashew nuts are free of alkyl phenoles, as in the plant stalk<sup>(2)</sup>.

#### References:

1. OLIVEIRA, F. de.; AKISUE, G.; AKISUE, M. K. **Farmacognosia**. São Paulo: Atheneu, 1991.
2. MEDICAL ECONOMICS COMPANY. **PDR for herbal medicines**. 2. ed. Montvale: Copyright, 2000.
3. KAMTCHOUING, P. et al. Protective role of *Anacardium occidentale* extract against streptozotocin-induced diabetes in rats. **Journal of Ethnopharmacology**, v. 62, p. 95-99, 1998.
4. AKINPELU, D. A. Antimicrobial activity of *Anacardium occidentale* bark. **Fitoterapia**, v. 72, p. 286-287, 2001.
5. MAIA, J. G. S.; ANDRADE, E. H. A.; ZOGHBI, M. G. B. Volatile constituents of the leaves, fruits and flowers of cashew (*Anacardium occidentale*). **Journal of Food Composition and Analysis**, v. 13, p. 227-232, 2000.
6. GEORGE, J.; KUTTAN, R. Mutagenic, carcinogenic and cocarcinogenic activity of cashewnut shell liquid. **Cancer Letters**, v. 112, p. 11-16, 1997.
7. PAULA, R. C. M. de; RODRIGUES, J. F. Composition and rheological properties of cashew tree gum, the exsudate polysaccharide from *Anacardium occidentale*. **Carbohydrate Polymers**, v. 26, p. 177-181, 1995.
8. MOTA, M. L. R.; THOMAS, G.; BARBOSA, J. M. Anti-inflammatory actions of tannins isolated from the bark of *Anacardium occidentale* L. **Journal of Ethnopharmacology**, v. 13, p. 289-300, 1985.

