

Tepezcohuite

Common names in Spanish:

Cabrera, Carbón Colorado, Carbonal (Quattrocchi, 2012; Wieresma and León, 2012; Ratsch, 2005).

Where is it found?

This large shrub or thorny medium to large sized tree is native to South America (principally Brazil), but is also found in various countries of Latin America (Wieresma and León, 2012; Mabberley, 2008; Mors et al., 2002). In Mexico, the plant is found in the states of Oaxaca, and Chiapas, among others (Camargo-Ricalde, 2000; Argueta, 1994; Martínez, 1994)..

How is it used?

In Mexico and other countries of Latin America, the bark of the tree and root is dried, pulverized, and applied topically against burns or wounds (Adame and Adame, 2000). The powdered bark is sometimes taken internally as capsules to heal stomach ulcers.

What is it used for?

Against bronchitis and coughs, a handful of stem-bark and leaves are boiled (decocted) in a liter of water to make a tea or syrup that is taken until the symptoms abate (Cruz et al., 2016; Mors et al., 2002). The leaves and stem bark are decocted in water and applied externally as a wash against skin ulcers as well as to treat vaginal infections (Mendoza-Castelán and Lugo-Pérez, 2011; de Fatima et al., 2007). In some cases, the powdered bark is mixed with aloe vera gel in order to improve its effectiveness, especially first-degree burns (Adame and Adame, 2000).

Research in Mexico has shown the bark possess antimicrobial action against a wide variety of bacteria, as well as wound healing properties (Rivera-Arce et al., 2007; Mendoza-Castelán and Lugo-Pérez, 2011; Argueta, 1994; Camargo-Ricalde et al., 1994, 2000). However, an extract obtained from this plant showed poor antifungal effects against various pathogenic species, including *Alternaria alternata* and *Botrytis cinerea* (LaTorre et al., 2014).

Capsules containing the pulverized tree bark are sold in markets in Mexico for the treatment of gastrointestinal ulcers. However, there are no known clinical trials to ascertain its effectiveness or safety.

A comprehensive study by Cruz et al. (2016) evaluated the antinociceptive (against pain) and anti-inflammatory effects of an alcohol-based extract from *M. tenuiflora* on laboratory mice. The results showed that the extracts obtained for the bark of the tree possessed important anti-inflammatory as well as antinociceptive activities.

The dried root bark contains a hallucinogenic compound known as DMT (Dimethyltryptamine) at about 1-1.7% (Ratsch, 2005). In

Northeastern Brazil, the bark of the roots and tree are used to make an intoxicating and psychoactive drink as part of a traditional religious ceremony known as yurema (Quattrocchi, 2012; Mabberley, 2008; Ratsch, 2005; Johnson, 1999).

Propolis is a product made by bees from botanical sources that is used seal their hives, but also has important applications in human medicine. The characteristics of propolis vary according to the plants visited by bees to collect nectar and other products. A Brazilian study of propolis from *Mimosa tenuiflora* found that it possessed important antioxidant properties (Ferreira et al., 2017).

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