

62100 Copaiva Balsam

Part of a genus consisting of 35 to 40 species of tender, evergreen trees, reaching a height of up to 60 feet and native to tropical America and Africa. The *Copaifera* comes from the native American Tupi word 'copai' meaning the tree and its resin. The bark is aromatic. The leaves are pinnate, up to 5" long, and have 3 to 5 pairs of ovate leaflets. It produces small yellow flowers which are followed by yellow-brown to dark red fruits with black seeds. It is found mainly in the Brazilian rainforests.

The balsam is obtained by drilling holes in the trunk with each yielding up to 12 gallons. The first yield is colorless and very thin, being the consistency of olive oil, pale yellow, and with a peculiar odor and a bitter taste described as hot and nauseous. It is said to resemble turpentine. But once in contact with air, its consistency becomes thicker and yellower. The product varies in color, viscosity and odor according to the source with some having an unpleasant odor and taste (ie. *C. reticula*), and others having a pleasant coumarin-like odor (ie *C. multijuga*).

The hydrocarbons in copaiba are terpenes, which are made by plants from isoprene, a five-carbon-atom building block, so they always contain carbon atoms in multiples of five. Pinene is one of several useful 10-carbon terpenes. It is commonly known as turpentine. Heated up, terpenes break down into methanol (CH₃OH) and other simple compounds useful for fuel and as raw materials in the chemical industry.

In 1625 a Portuguese monk (Manuel Tristaon) learned of copaiba from Brazilian Indians, recording that it was valued by them for its use with healing wounds with minimal scarring. Copaiba balsam is an oleoresin which is commonly used in perfumery. Besides *C. lansdorffi*, it is also taken from a number of different species including *C. guyanensis*, *C. martii*, *C. multijuga*, *C. officinalis* and *C. reticula*.

At one time large quantities were exported from Para and Maranhao in Brazil, and then transported in casks and barrels. Other areas of export were Maracaibo in Venezuela, Angostura, Cayenne, Rio de Janeiro and some West Indian islands. The Venezuelan product was more viscid and darker in color.

Uses:

- Various medical uses
- Perfumery
- A main source of copal (a resin used in lacquers and varnishes)
- Making varnishes and lacquers
- Also able to be used direct from the tree as a substitute for diesel oil

Sources: wikipedia.org, and earthnotes.tripod.com/balmcopaiba.htm (©2000 by Ernestina Parziale, CH)