Benzoin Gum (Styrax benzoin)

Benzoin Gum Profile

Also known as

Styrax benzoin, benjamin gum, barley gum, styrax gum

Introduction

If you can remember visiting the family doctor 40 or more years ago, you may remember the ubiquitous jar of "tincture of benzoin" kept on an office shelf for treating upper respiratory infections. The benzoin tree is native to the tropical reaches of Southeastern Asia, China, and Indonesia. The resin, also called gum benjamin, has a vanilla like aroma and ranges in color from pale yellow to red brown and is harvested by making triangular incisions into the tree's bark to establish a flow, which then hardens into lumps when exposed to air and sunlight. Benzoin is used in the perfume industry as an antioxidant, stabilizer, and fixative. It will sometimes harden under fluctuations in humidity.

Constituents

Benzaldehyde, benzoic acid, cinnamic acid, styrene, vanillic acid.

Parts Used

The gum, dissolved in tinctures of alcohol. Or for manufactured products it may be applied to cosmetic creations as directed.

Typical Preparations

Benzoin tincture, used in cosmetics and some herbal compounds. Also used in vaporizer fluids for inhalation to relieve respiratory discomfort.

Summary

Tincture of benzoin is antiseptic, antispasmodic, astringent, carminative, diuretic, expectorant, and mildly stimulant, used to treat bronchitis, colds, coughs, ulcers, and wounds. Benzoin is used to complement mayapple for treatment of warts. There are essentially two types of Benzoin Gum, Sumatra and Siam. Although geographically named, they are not necessarily produced in these locals. Sumatra Benzoin is customarily used for medicinal and pharmaceutical preparations, while Siam Benzoin is customarily used for flavors and fragrances. Benzoin gum is considered by the FDA as a natural flavor and is used in most categories of foods including beverages, dairy deserts, candy, baked goods, gelatins and puddings. Tincture of benzoin is antiseptic, antispasmodic, astringent, carminative, diuretic, expectorant, and mildly stimulant, used to treat bronchitis, colds, coughs, ulcers, and wounds. Benzoin is used to complement mayapple for treatment of warts. The benzoin currently offered by Mountain Rose Herbs is of the Sumatran variety.

Precautions

Store benzoin in a tightly closed container that is no more than half full. Open only in a room with good ventilation.

Benzoin

Botanical: Styrax benzoin (DRY.) Family: N.O. Styraceae

- Description
- <u>Constituents</u>
- Medicinal Action and Uses

Dosages and Preparations

---Synonyms---Gum Benzoin. Gun Benjamin. Siam Benzoin. Sumatra Benzoin. ---Part Used---Resin. ---Habitat---Siam, Sumatra and Java.

---Description---Benzoin is a balsamic resin. Normally the trees do not produce it or any substance analogous to it, but the infliction of a wound sufficiently severe to injure the cambium results in the formation of numerous oleoresin ducts in which the secretion is produced, it is, therefore, a pathological product. The trunk of the tree is hacked with an axe, and after a time the liquid Benzoin either accumulates beneath the bark or exudes from the incisions. When it has sufficiently hardened it is collected and exported, either in the form of loose pieces (tears) or in masses packed in oblong boxes or in tins; several varieties are known, but Siam and Sumatra Benzoins are the most important. The incisions are made when the tree is seven years old, and in Sumatra each tree yields about 3 lb. annually for ten or twelve years. The first three years' collections give the finest Benzoin; after that the runnings are known as the 'belly,' and finally the tree is cut down and the resin scraped out, this being termed the 'foot.' Siam Benzoin externally is reddish yellow, internally milky white, has an agreeable odour, recalling vanilla, contains benzoic acid but not cinnamic acid. Sumatra Benzoin is always in blocks of a dull reddish or greyish-brown colour. Fine qualities have a strong storax-like odour, quite distinct from the vanilla odour of the Siamese variety. Sumatra Benzoin contains cinnamic acid.

---Constituents---The chief constituent of Siam Benzoin is benzoic acid (up to 38 per cent.), partly free and partly combined with benzoresinol and siaresinotannol; it also contains vanillin and an oily aromatic liquid. When quite pure it should be entirely soluble in alcohol and yield only traces of ash. Sumatra benzoin contains 18 per cent. or more of benzoic acid and about 20 per cent. of cinnamic acid the latter partly free and partly combined with benzoresinol and sumarisinotannol; it also contains 1, styrol, styracin, phenyl-prophyl cinnamate and benzaldehyde, all of which combine to produce its characteristic odour.

---Medicinal Action and Uses---It is used externally in the form of a tincture, diluted with water as a mild stimulant and antiseptic in irritable conditions of the skin. It acts as a carminative when taken internally is rapidly absorbed, and mildly expectorant diuretic and antiseptic to the urinary passages. In the form of Compound Tincture of Benzoin, it is used as an inhalant with steam in laryngitis and bronchitis. It is a preservative of fats, and is used for that purpose in Adips Benzoatus.

---Dosages and Preparations---Benzoic Acid B.P., 5 to 15 grains. Compound Tincture of Benzoin, B.P. and U.S.P., 1/2 to 1 drachm. Compound Tincture of Camphor, B.P. (paregoric) *poison*, 1/2 to 1 drachm. Tincture of Benzoin, B.P.C. 1/2 to 1 drachm. Tincture of Benzoin, U.S.P., 15 minims.

Benzoin (Styrax benzoin): Sun, Air. Used in purification incenses. A few drops of tincture of benzoin helps to preserve oils and preparations