

MYRRH

Synonyms

Gum-resin Myrrh; Gum Myrrh; Arabian or Somali Myrrh; Myrrha.

Biological Source

Myrrh is an oleo gum-resin obtained from the stem of *Commiphora molmol* Eng. or *C. abyssinica* or other species of *Commiphora*, belonging to family *Burscraceae*.

Chemical Constituents

Myrrh contains resin (25–40%), gum (57–61%), and volatile oil (7–17%). Large portion of the resin is ether-soluble containing α -, β -, and γ -commiphoric acids, resenes, the esters of another resin acid and two phenolic compounds. The volatile oil is a mixture of cuminic aldehyde, eugenol, cresol, pinene, limonene, dipentene, and two sesquiterpenes. The disagreeable odour of the oil is due to mainly the disulphide. The gum contains proteins (18%) and carbohydrate (64%) which is a mixture of galactose, arabinose, glucuronic acid, and an oxidase enzyme.

Chemical Tests

1. A yellow brown emulsion is produced on trituration with water.
2. Ethereal solution of Myrrh turns red on treatment with bromine vapours. The solution becomes purple with nitric acid.

Uses

Myrrh is used as carminative and in incense and perfumes. It has local stimulant and antiseptic properties and is utilized in tooth powder and as mouth wash. Topically it is astringent to mucous membranes. It is used in a tincture, paint, gargle and rinse due to its disinfecting, deodourizing, and in inflammatory conditions of the mouth and throat. Alcoholic extracts are used as fixatives in the perfumery industry.