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A REVIEW ON QARANFAL (CLOVE)

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ABSTRACT

Cloves are the aromatic dried flower buds of a tree in the family Myrtaceae. The clove tree is small and evergreen. Its flowers grow in bunches at the end of the branches. The dried flower buds of the tree, which are pungent and aromatic, are used in cooking and for therapeutic purposes. Cloves have many medicinal virtues. In the Indian system of medicine cloves are used in various conditions either in the form of powder or a decoction made of them.

INTRODUCTION

The clove tree is an evergreen which grows to a height ranging from 8-12 m, having large square leaves and sanguine flowers in numerous groups of terminal clusters. The flower buds are at first of a pale colour and gradually become green, after which they develop into a bright red, when they are ready for collecting. Cloves are harvested when 1.5-2 cm long, and consist of a long calyx, terminating in four spreading sepals, and four unopened petals which form a small ball in the centre.

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NOMENCLATURE

Botanical Name: Eugenia caryophyllata Thumb. 3, 4, 5, 6

Vernaculars: 3, 5, 7, 6, 8, 9, 10, 11, 12, 13

English: Clove

Arabic: Karanphul

Persian: Mekhaka, Kharanfal

Hindi: Laung

Sanskrit and Bengali: Lavanga

DESCRIPTION

The dried unripe fruits are known as mother cloves. It is an evergreen tree with straight trunk upto 10m high. The flower buds have a slightly cylindrical base and are surrounded by plump ball like unopened cardla which is surrounded by the four toothed calyx. The flowers are fleshy purplish in colour¹⁴. Flowers are found between January-June and fruits later³. The flowers of this plant yield the cloves of commerce. These are picked when the fleshy receptacle, which is at first green, has acquired a crimson colour. At this period of its growth, the clove is richest in oil⁷.

DISTRIBUTION

Eugenia Caryophyllus is a native of the Molucca islands and is cultivated in Zanzibar, Pemba, the Amboyna islands, Penang, Madagascar and to a lesser degree in the Seychelles, Reumin, Mauritius and Ceylon^{5, 7.} In India, it is cultivated mainly in Tamilnadu and Kerala^{3, 14.}

PARTS USED^{3, 5, 6, 8, 11, 13}

The fruit, dried flower buds and Oil

TEMPERAMENT

Hot
$$3^0$$
 and Dry $3^{0.8,9,10,11,13}$
Hot 2^0 and Dry $2^{0.15}$

MEDICINAL PROPERTIES

Dried flower buds^{3, 14, 5, 7}

Aromatic, Stimulant, Carminative, Anti-emetic, Antispasmodic and Expectorant Clove oil 3, 14

Antiseptic, Local anaesthetic, Counter irritant, Rubefacient and Antibacterial.

The following actions have been mentioned in Unani literature

- Muqqavi Aza-e-Raisa (Tonic for vital organs)^{8, 10, 12, 15, 13}
- Muqqavi-e- Dimagh (Brain tonic) 8
- Muggavi-e- Maidi (Stmachic)^{10, 12}
- *Muqqavi-e- Hazma* (Digestive)^{8, 9}
- Mussakhin (Calorific)⁸
- Dafe Qai wa Ghasiyan (Antiemetic)⁸
- *Muhallil* (Antiinflammatory)⁸
- Dafe Fuwaq (Antihiccup)⁸
- Dafe Sual (Antitussive)⁹
- Munnafis Balgham (Expectorant)^{10, 12}
- $Dafe\ Tashannu\ j\ (Antispasmodic)^{10,\ 12}$
- Kasire Riyah (Carrminative)^{10, 12}
- Muhallil Riyah wa Warm (Antiflatulance and Antiinflammatory)¹³
- Dafe Zeequn Nafas (Antiasthamatic)⁹
- Mumsik wa Muqqavi-e- Bah (Avasicious and Aphrodisiac)^{10, 12}

DOSAGE

$$500 mg\text{-}2gm^{10,\,11,\,12},\,2gm\text{-}4.5gm^{13}\text{ and }4.5gm^{9}$$

CHEMICAL CONSTITUENTS

Clove contains 14 to 21 percent of volatile oil, 10 to 13 percent of tannin and a crystalline substance called caryophyllin. Clove stalk also yield 5-6 percent of volatile oil. The fresh roots collected in the spring gave as much as 2.12 percent volatile oil; lower yield has obtained from the autumn gathered rhizome⁷. The clove buds contain volatile oil (15%), protein, carbohydrate, minerals and vitamins A, B and C. The essential oil of dried flower buds contains eugenol (90%) and also eugenol acetate, careophyllin, acetyleugenol, vanillin and furfural¹⁴.

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