Clove (Syzgium aromaticum)

Location: This herb is grown in the Molucca Islands and cultivated in Indonesia, Madagascar and Tanzania.

Description: The flower buds are dried, and the flowers and leaves of the cloves produce oil, which is used medicinally.

Properties: This herb is antifungal, anti-inflammatory, antimicrobrial and analgesic.

Uses: Clove can be used to treat food poisoning, Bell's palsy, herpes, chronic fatigue syndrome, periodonta l disease, toothache and peptic ulcers.

Doses: It is recommended that you dilute clove oil in water or some type of oil before ingesting it. Warnings: This herb should not be taken by young children or infants.

# **Cloves and Powder Profile**

#### Also known as

Syzygium aromaticum and Eugenia aromaticum,

#### Introduction

The aromatic flowers and oil of clove has been used for culinary and medicinal uses for centuries. They are native to the Malucca Islands (also called the Spice Islands) but now are certainly cultivated worldwide. Cloves were actually one of the first globally traded spices in the world, going as far back as 1721 B.C.E. They were highly prized by the Romans and the Chinese. The Chinese were known to chew them before an audience with the emperor to make sure their breath was fresh. By the 16th and 17th century they had, along with nutmeg, become the most precious spice on the market. In 1605, the Dutch tried to gain a monopoly on the trade by going to the Maluccas and controlling as much land containing cloves as they could. They went so far as to burn any trees that were not under their control. This did not fair well with the natives as many clove trees were planted when a child was born, and according to their traditions, the life of the tree and the child were directly tied together. Over the course of centuries, cloves have been used to alleviate pain, prevent and treat bacterial infection, ease toothaches, treat worms and relieve congestion. Long before they were used to flavor apple pie, cloves were used to sweeten bad breath and settle upset stomachs. Clove is the active ingredient in many over the counter toothache remedies because it has both anesthetic and antiseptic properties.

### Constituents

Volatile oil, gallotannic acid; Caryophyllin; Eugenin; gum, resin, fibre

## **Parts Used**

Dried flower buds (this is the clove bud) powdered, whole or chopped.

### **Typical Preparations**

Essential oil, teas, chai, baked goods and other food items, and sometimes the extract.

#### Summary

Oil of cloves has been pronounced the safest and most effective ingredient in most over the counter toothache remedies. It is also a strong germicide, and has been used for its antiseptic properties to treat wounds and infections. Oil of cloves can relieve nausea and indigestion, and may relieve diarrhea caused by intestinal bacteria.

#### Precautions

Clove oil and clove preparations are generally considered safe in the United States, though people who are allergic to balsam may also be allergic to cloves. When taken undiluted in large doses, clove oil can cause vomiting, sore throat, seizures, kidney and liver damage, fluid in the lungs and tissue damage. People who have kidney or liver disorders and those with a history of seizures should avoid the use of cloves.

#### Botanical: Eugenia caryophyllata (THUMB.) Family: N.O. Myrtaceae

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

---Synonym---Eugenia Aromatica.

- ---Part Used----Undeveloped flowers.
- ---Habitat---Molucca Islands, Southern Philippines.

---Description---A small evergreen tree, pyramidal, trunk soon divides into large branches covered with a smooth greyish bark; leaves large, entire, oblong, lanceolate (always bright green colour), which stand in pairs on short foot-stalks, when bruised very fragrant. Flowers grow in bunches at end of branches.

At the start of the rainy season long greenish buds appear; from the extremity of these the corolla comes which is of a lovely rosy peach colour; as the corolla fades the calyx turns yellow, then red. The calyces, with the embryo seed, are at this stage beaten from the tree and when dried are the cloves of commerce. The flowers have a strong refreshing odour. If the seeds are allowed to mature, most of the pungency is lost. Each berry has only one seed. The trees fruit usually about eight or nine years after planting. The whole tree is highly aromatic. The spice was introduced into Europe from the fourth to the sixth century.

The finest cloves come from Molucca and Pemba, where the trees grow better than anywhere else, but they are also imported from the East and West Indies, Mauritius and Brazil.

In commerce the varieties are known by the names of the localities in which they are grown. Formerly Cloves were often adulterated, but as production increased the price lowered and fraud has decreased. Cloves contain a large amount of essential oil which is much used in medicine. When of good quality they are fat, oily, and dark brown in colour, and give out their oil when squeezed with the finger-nail. When pale colour and dry, they are of inferior quality and yield little oil. Clove stalks are some times imported, and are said to be strongerand more pungent even than the Cloves.

Clove trees absorb an enormous amount of moisture, and if placed near water their weight is visibly increased after a few hours; dishonest dealers often make use of this knowledge in their dealings, and the powdered stems are often sold as pure powdered Cloves.

#### [Top]

---Constituents---Volatile oil, gallotannic acid; two crystalline principles - Caryophyllin, which is odourless and appears to be a phylosterol, Eugenin; gum, resin, fibre.

---Medicinal Action and Uses---The most stimulating and carminative of all aromatics; given in powder or infusion for nausea emesis, flatulence, languid indigestion and dyspepsia, and used chiefly to assist the action of other medicines. The medicinal properties reside in the volatile oil. The oil must be kept in dark bottles in a cool place. If distilled with water, salt must be added to raise the temperature of ebullition and the same Cloves must be distilled over and over again to get their full essence.

The oil is frequently adulterated with fixed oil and oil of Pimento and Copaiba. As a local irritant it stimulates peristalsis. It is a strong germicide, a powerful antiseptic, a feeble local anaesthetic applied to decayed teeth, and has been used with success as a stimulating expectorant in phthisis and bronchial troubles. Fresh infusion of Cloves contains astringent matter as well as the volatile oil. The infusion and Clove water are good vehicles for alkalies and aromatics.

---Dosages---Fluid extract, 5 to 30 drops. Oil extract, 1 to 5 drops. Infusion, B.P., 1/2 to 1 OZ.