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## A Review On Clove: Exploring The Benefit Of Clove From Their Essential Substance

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**Abstract:** Cloves is the aromatic flower buds of a tree with family like (Myrtaceae). The popularity of Clove in Indonesia

Country. Commonly used in Pain of teeth and Generally used in Spice Flavoring. Clove in spice that are culinary.

Clove are Anti-inflammatory, Eugenol and Flavonoids are the part of Clove. Clove involve in Anti-Cancer and Anti-Infective Activity. Clove are Anti-inflammatory, Analgesic, anesthetic, Antinociceptive.

Clove are Aromatic Plant Cutting arrangement in Topical And Subtropical Countries.

Clove treat Premature Ejaculation, Applied on outer skin of male part. Clove essential oil inhibit mold growth On various types of food, Clove essential oil to be higher than a boron-based wood Preservative.

Cloves are found in throughout the year in every month By the harvest by different Countries.

Cloves are used in Village In Tea and used as addiction for addict people but it may cause side effect.

**Introduction:** Clove is seen like a flower ,Upper side are Width and Below side Narrow. It is mainly include in Ayurveda

And used in Ayurveda .In india Clove is Known for lavang. Clove (*Syzygium Aromaticum*) Precious spice, it is a member of Myrtaceae. Clove is mainly used for prepration of food, Clove oil is used for Antimicrobial,

Anti- Diabetes and Anti-Oxidant Properties. In Asia 1200 to approx.1800 species of flowering plant of clove are distributed.

Clove have a important Essential oil like Eugenol that are found in 80 to 90% of their own plant. Clove words are come from French word 'Clou'. It is based the no. of 5 petals. The role of Bioactive Compound (Clove) in Newly important Department like Nutraceutical and Pharmaceutical. Eugenol Inhibit cyclooxygenase-2.

Sesquiterpenes have divese Biological activities in plant ,In sesquiterpines class Caryophyllene Occur and It is Part of Clove.

Clove have show Synergistic antioxidant effect when Meet or Contact with Natural Antioxidant such as Vitamin-C and E and Carotenoids.



**Keywords:-** Cloves,Caryophyllus,Lavng,Grambu,Grampus,Krambu.

**Biological Source:-** It consist of a Dried Flower of Eugena Caryophyllus.

**Scientific Classification:-**

Kingdom-Plantae

Sub kingdom-Tracheobionta

Super Division-Spermatophyta

Class- Magnoliopsida

Subclass-Rosidae

Order-Myrtales

Family-Myrtaceae

Genus-Syzygium

Species-aromaticum

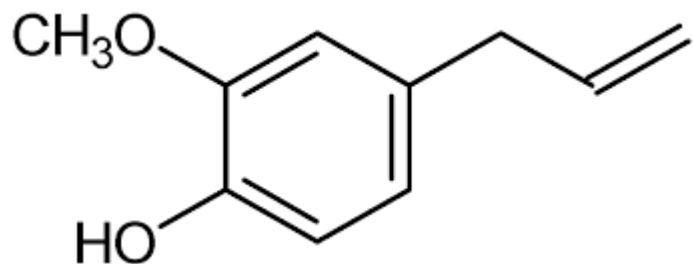
**Chemical Composition-**

1-Eugenol:-

\*It is a bioactive compound in Clove.

\*Volatile Phenolic Constituent of Clove Essential oil obtained from *Eugenia Caryophyllata* buds.

\*Eugenol is a  $C_{10}H_{12}O_2$ . And  $CH_3C_6H_3$ .



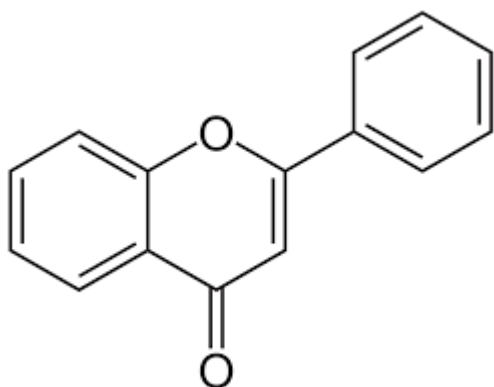
## 2-flavonoids:-

\*15-Carbon flavon skeleton

\*C6-C3-C6,

\*Six major Classes, flavones, Flavonoles ,flavonones, isoflavonones, and anthocyanins.

\*It are Secondary Metabolites that are very abundant in Plants.



## Pharmacological action of clove;-

### Analgesic:-

The Clove are helpful in Relief of pain of Tooth by using essential oil.

### Anti-Inflammatory:-

The clove are reducing the mucus and relief from inflame of Bronchial muscle.

### Anti Cancer:-

It is used in some Relief from Cancer.

### Insect Repellants:-

It is used as insect Repellants ,When apply on skin for discourage insects.

## Conclusion:-

It is found in India always, and every month with his own Its Anti-Cancerous and, Anti-oxidant Activity.

It treat sometime periodontal disease, used as specific Anti-Plaque.

The aromatic Flower Buds of *S.aromaticum*, a plant native to the Maluku Islands in Indonesia and used as spice, Harvested in Madagascar.

It is used in Gels most of the used as Chinese Person.

Search for Lowering blood sugar and Dental pain or tootheache Relief.

#### Reference:-

- 1-Hussain S.,Rahman R, Mushtaq A.,[...] : Clove: A Review of a precious with multiple uses :Int J. of Che & Bio Sci,2017.
- 2-Millind P. and Deepa k.: Clove : A Champion Spice,Int J. of Res Ayu & Pharm,2011,2(1) 47-54.
- 3-Merr.(L)& Perr.Myrtaceae, *Syzygium aromaticum* , Agroforestry Database 4.0 (Orwa et al.2009) Page No.1 to 5.
- 4-Hu Q, Zhou M., & Wei S.: Progress on the Antimicrobial activity research of clove oil and eugenol in the food antiseptis field:J. Of Food sci,Vol 83,Iss6,2018.
- 5-Cock I.E., CheesmanM.(2018),Plant of the genus *syzygium* (Myrtaceae): A review on ethnobotany, medicinal properties & Phytochemistry.Bioactive comps.Of.Med. Plant, Ed Goyal MR, Ayeleso A Apple Academic Press,USA.
- 6-Mittal m., Gupta N. ,[...] : Phytochemical evaluation and pharmacological activity of *Syzygium aromaticum*: A comprehensive review:Int JPharm
7. Hadidi M, Pouramin S, Adinepour F, Haghani S, Jafari SM. Chitosan nanoparticles loaded with clove essential oil: characterization, antioxidant and antibacterial activities. *Carbohydr Polym.* (2020) 236:116075. doi: 10.1016/j.carbpol.2020.116075
8. Asbahani A El, Miladi K, Badri W, Sala M, Addi EHA, Casabianca H, et al. Essential oils: from extraction to encapsulation. *Int J Pharm.* (2015) 483:220–43. doi: 10.1016/j.ijpharm.2014.12.069
3. Chen X, Ren L, Li M, Qian J, Fan J, Du B. Effects of clove essential oil and eugenol on quality and browning control of fresh-cut lettuce. *Food Chem.* (2017) 214:432–9. doi: 10.1016/j.foodchem.2016.07.101
9. Aguilar-González AE, Palou E, López-Malo A. Antifungal activity of essential oils of clove (*Syzygium aromaticum*) and/or mustard (*Brassica nigra*) in vapor phase against gray mold (*Botrytis cinerea*) in strawberries. *Innov Food Sci Emerg Technol.* (2015) 32:181–5. doi: 10.1016/j.ifset.2015.09.003
10. Donsì F, Annunziata M, Sessa M, Ferrari G. Nanoencapsulation of essential oils to enhance their antimicrobial activity in foods. *LWT Food Sci Technol.* (2011) 44:1908–14. doi: 10.1016/j.lwt.2011.03.003
11. Sebaaly C, Jraij A, Fessi H, Charcosset C, Greige-Gerges H. Preparation and characterization of clove essential oil-loaded liposomes. *Food Chem.* (2015) 178:52–62. doi: 10.1016/j.foodchem.2015.01.067

12. Vahedikia N, Garavand F, Tajeddin B, Cacciotti I, Jafari SM, Omidi T, et al. Biodegradable zein film composites reinforced with chitosan nanoparticles and cinnamon essential oil: physical, mechanical, structural and antimicrobial attributes. *Colloids Surf B Biointerfaces*. (2019) 177:25–32. doi: 10.1016/j.colsurfb.2019.01.045
13. Assadpour E, Mahdi Jafari S. A systematic review on nanoencapsulation of food bioactive ingredients and nutraceuticals by various nanocarriers. *Crit Rev Food Sci Nutr*. (2019) 59:3129–51. doi: 10.1080/10408398.2018.148468
14. Kamatou GP, Vermaak I, Viljoen AM. Eugenol—from the remote Maluku Islands to the international market place: a review of a remarkable and versatile molecule. *Molecules*. (2012) 17:6953–81. doi: 10.3390/molecules17066953
15. Cortés-Rojas DF, de Souza CRF, Oliveira WP. Clove (*Syzygium aromaticum*): a precious spice. *Asian Pac J Trop Biomed*. (2014) 4:90–6. doi: 10.1016/S2221-1691(14)60215-X

