

CARDAMOM

Synonyms

Cardamom fruit, Cardamom seed, Cardamomi semina, Malabar cardamums, Capalaga, Gujatatti elachi, Ilachi, Ailum.

Biological Source

Cardamom consists of the dried ripe seeds of *Elettaria car-damomum* Maton., belonging to family Zingiberaceae.

Chemical Constituents

The seeds contain 3 to 6% of volatile oil along with fixed oil, salts of potassium, a colouring principle, nitrogenous mucilage, an acrid resin, starch, ligneous fibre, and ash. The active constituent of the volatile oil is cineole. Other aromatic compounds present are terpinyl acetate, terpineol, borneol, terpinene, etc. The oil is colourless when fresh, but becomes thicker, more yellow and less aromatic on storage. It is soluble in alcohol and readily in four volumes of 70% alcohol, producing a clear solution. Its specific gravity at 25°C is 0.924 to 0.927.

Uses

Cardamom is used as an aromatic, carminative, stimulant, stomachic, expectorant, diaphoretic, digestive, appetizer, and flavouring agent. It is used in the treatment of respiratory disorders like asthma, bronchitis, cough, nausea, vomiting, indigestion, headache, diarrhea, colds, for flatulence, also used as a spice in cooking.

Marketed Products

It is one of the ingredients of the preparations known as Koflet, Renalka syrup, Mentat and Anxocare (Himalaya Drug Company).

GINGER

Synonyms: Zingiber, Zingiberis, Sonth

Biological Source: Ginger consists of rhizomes of *Zingiber officinale* Roscoe, belongs to family: Zingiberaceae, scrapped to remove outer skin and dried in sun. It contains not less than 0.8% of total gingerols on dried basis.

Geographical Distribution: It is said to be native of South East Asia, but is cultivated in West Indies, Africa, Australia, Mauritius, Jamaica, Taiwan and India. More than 50 % of the world's production is from India.

Chemical Constituents:

- Ginger contains about 1 to 2% of volatile oil, an acrid resinous matter (5-8%) and starch.
- Zingiberene is the principal constituent of the ginger oil.
- The pungent principle of ginger is gingerol, which is yellowish oily substance, while shogaol is another constituent of the oil.
- The pungency of gingerol is destroyed by boiling with 2% potassium hydroxide.

Standards:

Water soluble extractive: Not less than 10 %

(90 %) Alcohol-soluble extractive: Not less than 4.5 %

Total ash: Not more than 6 %

Water-soluble ash: Not less than 1.7 %

Uses: Ginger is used as a stomachic, an aromatic, a carminative, stimulant and flavouring agent.

Ginger oil is used in mouth washes, ginger-beverages and liquors.

Storage: Ginger is coated with lime to improve its colour and quality and hence, this particular variety is known as limed ginger.