

## A Review Black Cardamon - A good Therapeutic Agent

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### Abstract -

Black Cardamon also known as badi elaichi belongs to family zingiberaceae possesses a good therapeutic value. 1,8 cineol, *p*-cymene,  $\gamma$ -terpeneol are the major constituents of its essential oil. It shows good carminative, digestive, analgesic, anti microbial and anti-asthamatic property.

**Key Words :**  $\alpha$ -Terpeneol, Cineole, *p*-cymene.

### Introduction -

Black cardamon (*Amomum subulatum*)<sup>1,2</sup> is a perennial herbaceous plant belong to family zingiberaceae. It is native of eastern Himalayas region viz- Nepal, Bhutan and India. It is a queen of spices, also popular as Nepali or Bengali elaichi, a major ingredient of Indian spices. It is 1-2 meter tall plant. Spring is the flowering season. Plants grow on hilly slopes. Due to presence of essential oil it acts as a mouth freshner. It's usage in Ayurveda are well known from prehistoric time. It shows analgesic, anti microbial, anti-inflammatory anti-cancer, anti-asthamatic and anti-oxidant property. But in Ayurveda, it is frequently used in gastric upset and in asthma or whooping cough<sup>3</sup>.

### Chemical Composition -

Fruits and seeds contain Volatile oil, Alkaloids, Flavonoids, Terpenoids, Calcium, Potassium & Magnesium. It's pungent nature is due to the presence of 1,8 cineole and pleasant aroma is due to terpenyl acetate. Various constituents present have been tabulated as follow.

#### Volatile components of black cardamon essential oil<sup>4-5</sup>

S.No.	Compound	Percentage
1	$\alpha$ -Pinene	5.88
2	$\beta$ -Pinene	8.55
3	$\beta$ -myrcene	1.7
4	Geraniol	2.02
5	1,8 cineole	36.6
6	$\alpha$ -Terpeneol	8.4
7	Limonene	4.5

**Therapeutic Value -**

1. **Digestive/Carminative** : Large cardamon is widely used in spices. It is highly useful in gastric upset, indigestion, dyspepsia. It improves gastric juice secretion thus promotes digestion. It releases gas easily and relieves from bloating.
2. **Respiratory relief** : It shows remarkable effect in sore throat, bronchitis, lung congestion and pulmonary tuberculosis. This activity is due to high content of 1,8 cineole and  $\alpha$ -terpenole. Presence of natural products like alkaloids, flavonoids, tannin exert as anti-microbial property against various G(+) and G(-) pathogens like, staphylococcus aureus, E.Coli, Pseudomonas and Bacillus cerus. It dialates air passage of bronchioles thus provides relief in asthma and whooping cough. It also releases mucous easily.
3. **Anti hyper tensive** : As it contains potassium hence useful in regulating myocardial function. It acts as blood thinner thus lowers the blood pressure. Also strenthens heart muscle and maintains heart rhythm.
4. **Anti-Cancer** : By virtue of its bio-active components, glutathione, It shows anti-cancer activity. It helps in combating breast, colon, ovarian and prostate cancer. Glutathione prevents the cancerous cell growth.
5. **Anti-oxidant** : It's seed extract exhibits scavenging activity against lipid peroxidation, due to the presence of 1,8 cineole,  $\alpha$ -terpencol<sup>6</sup> and due to it's anti oxidant property it lowers the blood glucose level thus acts as anti diabetic, agent.
6. **Analgesic / Anti inflammatory** : It also exhibits analgesic as well as anti-inflammatory action. It is useful in the ailment of toothache, swelling gums and joints pain. It minimises pain and inflammation.<sup>7</sup>
7. Paste of seeds can be applied to cure skin diseases like eczema, ringworm and itchlig.

**Popular health formula**

1.  $\frac{1}{4}$  tsp. black cardamon power boiled in a cup of water used as anti-emetic agent, prevents vomiting.
2. It's aromatic oil is used as nasal drops to treat sinusitis.
3.  $\frac{1}{2}$  tsp. sugar with 4gm b.cardamon can provide ease in ulcer.



4. Take seeds in mouth squeeze, chew and swallow. It reduces cough and cures bronchitis.
5. Seed oil can be applied in case of swelling & inflammation.
6. Taking 3-4 seeds in mouth after meal thrice, helpful in releasing gas, also useful in anorexia.
7. Seeds power is chewed to reduce foul breath.

### **Conclusion -**

Black cardamom or badi elaichi has good Therapeutic value. Ayurveda discloses its medicinal value. It is an excellent indigenous medicine in gastric disorder like, constipation, gastritis, nausea-vomiting and highly useful in release of gas and bloating sensation.

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