

**MEDICINAL BENEFITS OF ELAEOCARPUS GANITRUS  
(RUDRAKSHA) - A DIVINE HERB**

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**ABSTRACT**

Elaeocarpus ganitrus (syn: Elaeocarpus sphaericus) is a large evergreen big-leaved tree is prominent for its natural electromagnetic seed frequently known as Rudraksha. It is belonging to the family Elaeocarpaceae is popular in indigenous system of medicine including Ayurveda, Siddha and Unani. Rudraksha (Elaeocarpus Ganitrus Roxb.) shows multielemental composition by virtue of which it is used to make the medicines, cosmetics, spiritual gems etc. The use of Rudraksha is increasing with passage of time and its cultivation is started in plains. This plant is inhabitant to India, Nepal and Indonesia, Australia, Java and other countries. The species belong to genus

Elaeocarpus have been claimed to exhibit antiageing, antianxiety, antidepressant, antidiabetic, anti-inflammatory, sedative, anticonvulsive, antihypertensive and antifungal properties. Ethanolic extract of leaves contains gallic acid, ellagic acid & quercetin. This plant has also been proved to be a very good centre for researches for scientists. Present review has been focuses mainly on the botanical, ethnomedicinal, pharmacological information and therapeutic utility of Elaeocarpus ganitrus on the basis of current science.

**KEYWORDS:** Elaeocarpus ganitrus, Elaeocarpus sphaericus, Rudraksha, Pharmacological activity.

**INTRODUCTION**

Elaeocarpus Ganitrus is the beloved tree of lord Shiva. According to the hindu mythology it is origin of tears of lord Shiva.<sup>[1]</sup> The word Elaeocarpus is derived from greek word Elaeo means olive and carpus means fruit (referring to olive like fruits produced by the genus).<sup>[2,3]</sup>

“*Elaeocarpus ganitrus*” commonly called Rudraksha<sup>[4]</sup> is a dried herbal fruit obtained from rudraksha tree “*Elaeocarpus ganitrus roxb*”<sup>[5,6]</sup> belongs to the Elaeocarpaceae<sup>[7]</sup> family a large evergreen broad-leaved tree with a wide crown.<sup>[8]</sup> The stem of *Elaeocarpus Ganitrus* tree is cylindrical with an off white and coarse textured bark. The flowers of *Elaeocarpus Ganitrus* are white color and come into view in April-May.<sup>[1]</sup> The fruits of *Elaeocarpus Ganitrus Roxb* species are endowed with a very hard and highly ornamental stony endocarp.<sup>[9]</sup> Rudraksha (*Elaeocarpus Ganitrus Roxb.*) is considered as versatile material due to its use in numerous useful work. Presently, 38 varieties of Rudraksha is recognized and cultivated in Nepal, Indonesia, Java, Sri-Lanka, India and some other countries of south-east Asia, Japan, Australia, Malaysia, Southern China, New Zealand, Fiji and Hawaii in the east. In India it is cultivated in Assam, Bihar, Bengal, Himalayan Strips, and Garhwal region, Dehradun, Madhya Pradesh and Maharashtra, Sikkim.<sup>[10]</sup> The greatest concentration of species is found in the islands of Borneo and New Guinea.<sup>[11]</sup> The motherland or birth place of rudraksha is mountains of Himalayas.<sup>[12]</sup> There is wide distribution of *Elaeocarpus* in the world among the tropical and subtropical climatic zones.<sup>[13]</sup> Rudraksh bead is one sacred facet of Indian culture due to associated religious, ethno botanical<sup>[14]</sup> and medicinal values both as preventive and curative.<sup>[15]</sup> Traditionally rudraksha is used for the treatment of various ailments like stress, anxiety, depression, nerve pain, epilepsy migraine and lack of concentration etc.<sup>[16]</sup> In Ayurveda, it is used as cerebral sedative, expectorant, liver tonic and febrifuge and is useful in epileptic fits, melancholia, manic conditions, mental disorders, convulsions, insomania, cephalagia, hypertension and bronchitis, etc. The fruits of *Elaeocarpus sphaericus* imposes positive effect on stress, anxiety, depression, palpitation and lack of concentration, it cools down the body temperature and brings calm to mind.<sup>[16]</sup> It is used as Ratna in garland to medicinal drug due to its multi-elemental composition for curing several severe ailments like heart attack and cancer. It is also utilized for medicinal cosmetics to cure sinus and number of skin diseases. It is considered to have very high cosmic force due to its link with eye of Lord Shiva in various old literature of Hindu Mythology.<sup>[10]</sup>

## TAXONOMY

Kingdom: Plantae

Subkingdom: Tracheobionta

Superdivison; spermatophyta

Division: Magnoliophyta

Class: Magnoliopsida

Subclass: Dilleniidae

Order: Malvales

Family: Elaeocarpaceae

Genus: Elaeocarpus

Species: ganitrus.

Botanical Source: Elaeocarpus ganitrus Roxb.

### **Vernacular Name(s)**

English: Litrasum bead

Bengali: Rudrakaya

Hindi : Rudraksha

Kannada: Rudrakshi

Sanskrit: Rudraksha

Tamil : Aakkam

Telugu : Akkamrudrakai

Greek : Elaeocarpus<sup>[17]</sup>

### **RUDRAKSHA OIL**

100% pure oil can be extracted from rudraksha seeds by cold compression method. It is used as a dietary supplement. Two drops of oil once a day taken orally is used for internal healing. Externally it is also used as a hair oil daily, removes dandruff and acts as hair conditioner, reduces acne and pimples. It also pacify skin condition such as eczema, ringworm removes itching and helps to heal faster. It is also used as bodies massage oil.<sup>[18]</sup>

### **CONSTITUENTS**

Fruits of Rudraksha contain alkaloids, flavonoids, tannins and fatty acids. After development of advance techniques like HPTLC new flavanoid Quercetin have been determined. Rudraksha fruits are thermogenic, sedative and are useful in anorexia, bronchitis, neuralgia, cephalagia, migraine, manic conditions and other brain disorders. The pulp of stony fruit may be useful in epilepsy and other mental disorders.<sup>[11]</sup>

### **MEDICINAL AND SCIENTIFIC VALUE OF RUDRAKSHA**

Rudraksha beads have been used for thousands of years as an amazing aid to gain power and for healthy life. Different mukhis of Rudraksha beads possess electromagnetic and inductive properties send out equivalent signals to brain, activates certain brain chemicals and neuro-

transmitters thereby imposes positive impact on blood circulation, nervous system and various other organ systems.<sup>[8]</sup>

## USES OF RUDRAKSHA

Rudraksha beads possess various pharmacological activities which include analgesic and anti-inflammatory<sup>[19]</sup>, CNS activities, typical behavioral actions, sedative, tranquillizing, hypnosis potentiating, antidepressant, antiasthmatic, anti-diabetic, cardio stimulation, antihypertensive, anticonvulsant, etc.<sup>[20]</sup> Methanolic extract of *Elaeocarpus ganitrus* seeds possess potent hypoglycemic activity.<sup>[21]</sup>

### 1. Antiasthmatic activity

The chloroform, acetone, petroleum ether, benzene, and ethanolic extracts of *Elaeocarpus sphaericus* fruits were found to have mast-cell stabilizing activity, substantiating the effectiveness of *Elaeocarpus sphaericus* in bronchial asthma.

### 2. Antidepressant activity

Ethanol and Petroleum ether extracts of *Elaeocarpus sphaericus*'s fruit decreased the swim stress immobility in mice signifying some scale of antidepressant activity.

### 3. Antianxiety activity

*Elaeocarpus ganitrus* was evaluated for antianxiety activity in mice using elevated plus maze model. The chloroform and ethanol extractives were shown effective against anxiety at all doses, but a dose of 200 mg/kg of ethanol extractive was at equality with that of diazepam as clear from statistical equivalence between the results of this dose and that manifested by diazepam.

### 4. Antidiabetic activity

Chitosan based aqueous extract of *Elaeocarpus ganitrus* by producing hypoglycemic effect in normal rats. At 100 mg/kg body weight doses of given orally formed clinically significant hypoglycemia. In the study of aqueous extract of *Elaeocarpus ganitrus* showed potential antidiabetic effects.

### 5. Antihypertension activity

Aqueous seeds extract of *Elaeocarpus ganitrus* showed the antihypertensive effect in renal artery occluded hypertensive in male wistar rats.<sup>[22]</sup>

## 6. Anti-inflammatory activity

The benzene, chloroform, acetone, petroleum ether, and ethanol, fruits extracts of *Elaeocarpus sphaericus* at a dose level of 200 mg/kg body weight was studied in rat paw edema using different inflammogens. The ethanolic and petroleum ether fruit extracts are effective against carrageenan, bradykinin and PGE. The chloroform fruit extract of *Elaeocarpus sphaericus* showed effect against histamine. Chloroform extract, was essentially effective in 5-HT induced inflammation and ethanolic extract also inhibit histamine. In other study petroleum ether, benzene, acetone, chloroform, and ethanol fruit extracts showed significant antiinflammatory action against both acute and subacute models.

## 7. Antimicrobial activity

The petroleum ether, benzene, chloroform, acetone, and ethanol extracts of dried fruit of *Elaeocarpus sphaericus* was investigated against 28 gram-positive and gram-negative bacteria using the plate dilution and disc diffusion methods. The acetone fraction showed marked antimicrobial activity against ten organisms.

## 8. Antiulcerogenic activity

The benzene, petroleum ether, acetone, chloroform and ethanol, extracts of dried fruit of *Elaeocarpus sphaericus*, showed antiulcerogenic activities in rats.

## 9. Antioxidant activity

Ethanolic leaf extracts of *Elaeocarpus sphaericus* exhibited metal chelating, total antioxidant capacity.

## 10. Cytotoxic activity

Chloroform-soluble bark extract of *Elaeocarpus mastersii* was found to reveal significant cytotoxic activity when evaluated against a panel of human cancer cell line.

## 11. Other activities

Ethanolic extract of *Elaeocarpus ganitrus* fruits exhibit sedative, anticonvulsive, hypnotic, tranquillizing, and antiepileptic properties.<sup>[23]</sup>

**12. As a blood purifier:** Rudraksha shall be used for treating the blood impurities and strengthens the body substance.

**13. As antibacterial:** Rudraksha can be used for treating the burns and marks and it can also be used for curing cough and breathing problems.

**14. Controlling Epilepsy:** The pulp of Rudraksha fruit or bark of the tree or the bead itself is used to make a powder.

**15. For blood pressure:** Rudraksha can be used to treat high blood pressure, heart diseases etc.

**16. As cosmetic product:** Rudraksha can be used in cosmetics to bring skin glow, also brings in a charming face.

**17. For Tongue cracks and tastelessness:** Rudraksha decoction gargling is said to be very effective in heaviness, tongue cracks and tastelessness.<sup>[13]</sup>

**18. For improving memory power:** Rudraksha taken with milk can be used for improving memory power.

**19. For conceiving baby:** For this purpose, cooking of only one piece of Rudraksha and one karsa (10 gm) of Sarpa'kshi (*Ophiorrhiza mungos*) should be done.<sup>[4]</sup>

**20. Restlessness & Body Ache in Fever:** Rudraksha acting as an adjuvant to fight off infections because of its ameliorative effects.

**21. Chicken Pox:** Rudraksha helps in reducing severity of chickenpox symptoms, speeds up recovery process and prevents complications. It reduces malaise, tiredness and headache and decreases burning sensation and pain on chicken pox rashes.

**22. Acne & Pimples.** Because of Anti-inflammatory and antimicrobial properties, local application of rudraksha is more effective, reduces recurrence, and cures acne and pimples.<sup>[24]</sup>

## TRADITIONAL USES OF RUDRAKSHA

Different parts (beads, bark and leaves) of Rudraksha are used for the treatment of different ailments and it may be either worn on arm, wrist or other parts of the body.

**1. As blood purifier and general tonic:** Regular consumption as a decoction in conjunction with honey purifies blood and works as general tonic.

2. **Curing breathing problems:** A decoction was prepared by mixing beads of Rudraksha, bark of Vasa and Haritaki, in equal amounts, can be consumed with honey. The concoction of ten faced Rudraksha with milk mitigates recurrent cough.
3. **For getting good sleep:** Rudraksha bead preparation with milk shall be kept under pillow applied on the eye lid for getting better sleep.
4. **Rectifier of chicken pox or small pox:** Equal proportion of black pepper and Rudraksha should be crushed together and taken with stale water alleviate the problem of small pox.
5. **Burn Pox or Marks alleviator:** The five-faced Rudraksha is the useful remedy for burn or pox marks on face can be used as a panacea for skin diseases, ringworms, sores, pimples and boil also.
6. **Epilepsy management:** Pulverized bark of Rudraksha tree and pulp of fruit or the bead can be used for the management of epilepsy.
7. **For curing Piles:** Rudraksha bead along with combination of Triphala Churna and Guggul or with root of Kaneer is beneficial for treating piles.
8. **Counter measure for jaundice, liver related problems or stomach ache.** Rudraksha along with Chitraka, Haritaki, Devdaru, Giloy, Daruhaldi, Dharangi and Punarnava shall be taken in equal proportion and regular consumption of it as a decoction is used as a counter measure for jaundice, liver related problems or stomach ache.
9. **Nullifying poisonous effects caused by bites of insects:** Panchamukhi Rudraksha can be grinded with lemon juice on a stone and the application of this paste on the affected spot will subside pain.
10. **For improving memory power:** For mental disorders, four or six faced Rudraksha seed is boiled with milk is excellent remedy and it also assists in enhancing memory power.
11. **Sexual power improvement:** A recipe of Rudraksha applied over the forehead improves sexual power.
12. **For Blood Pressure:** Five mukhi Rudraksha keeps blood pressure normal. Rudraksha is a best medication for curing hypertension.
13. **Sure shot remedy for conceiving baby:** One Rudraksha and one karsa (10 gm) of Sarpakshi (*Ophiorrhiza mungos*) can be cooked together and pestled in the milk of one colored cow. Consumption of it during the menstrual period will bestow even a sterile woman conceive- Damara Tantra.
14. **Alleviator of heaviness, tongue cracks and tastelessness:** Gargling with Rudraksha decoction is beneficial in heaviness, tongue cracks and tastelessness.
15. **Curing all brain disease:** four faced Rudraksha remedy is useful for all brain disorders.

- 16. Neutralizer of brain fever:** Consumption of overnight kept water of Rudraksha in earthen pot on an empty stomach can get rid of brain fever.
- 17. For Hysteria and Coma:** Elaeocarpus ganitrus is also a good assistance for panic conditions of hysteria and coma in woman.
- 18. For Frequent fever:** Rudraksha is also good for children who suffers from frequent fever.
- 19. Imparts calmness to mind:** It cools down the body temperature and brings calm to mind.
- 20. Controlling anxiety:** Anxiety can be controlled by keeping a big size Panchamukhi Rudraksha during nervousness or by holding it tightly in the right palm for ten minutes. It will assist them to get back their confidence.
- 21. To ward off evil spirits and omens:** The Rudraksha fruits remove all evil spirits in traditional Indian medicinal system.

The medicinal uses of *Elaeocarpus sphaericus* are summarized in the below table-1.<sup>[2]</sup>

Extracts used	Properties
Petroleum/ether/benzene/chloroform/acetone/ethanol	Antiasthmatic
Petroleum/ether/methanol/chloroform/water	Analgesic
Petroleum/ether/benzene/chloroform/acetone/ethanol	Anticonvulsant
Petroleum ether/ethanol	Antidepressant
Water	Antidiabetic
Chloroform/ethanol/water	Antifungal
Petroleum ether/benzene/chloroform/acetone/ethanol	Antiinflammatory
Water/ethyl acetate	Antihypertensive
Petroleum/ether/benzene/chloroform/acetone/ethanol	Antimicrobial
Ethanol	Antioxidant
Petroleum ether/benzene/chloroform/acetone/ethanol	Antiulcerogenic
Methanol	Antixyolytic
Water	Cardiac stimulant
Water	Bronchodilatory
Methanol	Immunomodulatory

## RUDRAKSHA THERAPY

The health care by using Rudraksha is explained by 4 fold method.

- (1) For health maintenance;
- (2) Preventive (Resistance against diseases);
- (3) Curative and
- (4) Yoga Sadhana.



**Rudraksha Therapy Treatment Methods**

Darshan: (By looking like Thrataka in Yoga)

Sparshan: (By touch and inhalation)

(a) By wearing Rudraksha Mala;

(b) By doing Japam with Rudraksha mala;

(c) By Rudraksha Dhoopam;

(d) Rubbing on Rudraksha Plates (Acupressure) having magnets inside.

Sevana: Rudraksha Churan; rudraksha Hima (Cold infusion), Rudraksha decoction for Gargling; Rudraksha Milk; Rudraksha Bhasma; Rudraksha Vibhuti; Rudraksha Oil; Rudraksha Lehyam; Rudraksha eye drops and Rudraksha Paste.

Yoga Sadhana: Rudraksha Mandap; Rudraksha Kireetam; Rudraksha wearing below waist (in Yantra – Manthra – Thanthra – Kshudra Prayogas).<sup>[3,4]</sup>

**A few rudraksha remedies**

For the medicinal use of Rudraksha, honey coloured is the best one although they are available in white, black and in mixed colours.

Four different types of Rudraksha are available

(1) Rudraksha

(2) Bhadraksha

(3) Roudraksha

(4) Sadraksha or (Subhaksha).

Rudraksha with fifteen to twenty one faces are also available but very rare in therapy. In Puranas Rudrakshas are existed up to thirty-eight faces. Before medicinal use of rudraksha internally Rudraksha ayurvedic doctor's consultation is a must.

(i) Continuous wearing of Rudraksha malas or necklace relieves the depression, mental tension, activates the central nervous system, controls the blood pressure, builds up the self confidence and cures certain skin diseases.

(ii) Rudraksha mala wearing along with Tulasimala or Mala made of Rudraksha and Tulasi beads alternatively is found to be very much effective in T.B. and Lung diseases.<sup>[4]</sup>

(iii) For cracks on tongue, tastelessness and heaviness, Rudraksha decoction's gargling is found to be very effective.

(iv) Ten Rudraksha are boiled with 200 ml gingely oil and nine garlic pieces for 30 minutes is Rudraksha oil. This oil can be applied on chest for cure of Pneumonia and chest pains.

(v) Keep the Shanmukhi Rudraksha in a cup of boiled milk during night and drink before going to bed for 40 days. It corrects the mental weakness and improves memory power.<sup>[3]</sup>

The uses of different faced rudraksha is summarized in the below table-2.

Types of Rudraksha	Uses
One face Rudraksha	It improves the concentration and mental constitution of the wearer. Use for headache, heart disease, blood pressure and right eye defect
Two faces rudraksha	Good for mental peace and pregnancy. use for left eye defect, diseases of heart, lung, brain, kidney and intestine.
Three faces rudraksha	Recommended for : Blood defect, plague, small pox, digestive problems, blood pressure, weakness, disturbed menstrual cycle, spontaneous abortion and ulcer.
Four faces rudraksha	Recommended for : mental disease, paralysis, arthritis, yellow fever and nasal disease.
Five faces rudraksha	Recommended for : bone marrow, liver, kidney, feet, thigh, ear, diseases of fat and diabetes.
Six faces rudraksha	Recommended for : eyes, reproductive organs, urinary tract, prostate, mouth and throat.
Seven faces rudraksha	Recommended for: weakness, colic pain, handicappers, pain in bone and muscles, paralysis, long term disease, impotency, worries and hopelessness.
Eight faces rudraksha	Recommended for ; lung, feet, skin and eye catarrhis, hydrosol, airtracia.
Nine faces rudraksha	Recommended for: Lung diseases, fever, eye pain, bowel pain, skin disease, body pain.
Ten faces rudraksha	Recommended for: Pacifying all the bad planets effect on our body.
Eleven faces rudraksha	Recommended for ; maintainence of entire neurophysiology
Twelve faces rudraksha	Recommended for : heart, lung, skin disease, hiatus of stomach, esophagus and bowel problems.
Thirteen faces rudraksha	Recommended for ; meditation and spiritual attainments.
Fourteen faces rudraksha	Recommended for : safety and riches, provides miraculous cures to several ailments.
Fifteen faces rudraksha	It is best for curing diseases like skin diseases, recurring miscarriage, still birth etc. Fifteen mukhi rudraksha is measured as a blessing for women who are incapable to imagine and in such case both the partner should wear for fruitfulness.
Sixteen faces rudraksha	It is used for curing the diseases like leprosy, tuberculosis, cor-pulmonale, lung diseases etc.
Seventeen faces rudraksha	It is best for the treating diseases like memory lapse, body functional disorders etc.
Eighteen faces rudraksha	Its treatment is best for prevent and curing diseases like mental in harmonization, loss of power etc.
Nineteen faces rudraksha	Nineteen mukhi rudraksha eradicate the diseases like blood disorder, spinal disorder etc <sup>[11]</sup>

Twenty Mukhi Rudraksha bead	It is used as medical cure for eyesight problem and snake bites.
Twenty One Mukhi Rudraksha bead	It has deep-rooted medical healing and it eliminates every form of diseases.
Trijuti/Tribhagi Rudraksha bead	Trijuti Rudraksha is best for keeping diseases like internal and external body disorders at bark
Gauri Shankar Rudraksha bead	It is used for the treatment of diseases like sexual problems, behavioral disorders, etc
Ganesh Rudraksha	It is used for wisdom, learning, prudence, and power. <sup>[25, 26]</sup>

### AYURVEDIC TREATMENT

1. According to Ayurveda, Equal proportion of Rudraksha churna and Arjuna twak churna were mixed together. A teaspoon of this mixture was mixed with 2 to 3 teaspoons honey. A thin paste was prepared, applied on the affected parts or on whole face. Wait for 30 minutes and then rinse face with warm water. This remedy provides glowing effect to the face and skin. It also reduces acne and prevents recurrence. Paste prepared with Rudraksha powder and lemon juice applied on the face which is more beneficial for skin glow. It makes feel fresh.
2. Black Spots & Blemish - Rudraksha fades dark spots and reduces blemishes. It is used internally as well as externally.

Internal Use: Rudraksha is taken with Mulethi (Licorice), Amalaki (Indian Gooseberry) and Manjistha. Intake of this mixture reduces hyperpigmentation, black spots and blemish. 1 tsp powder should be taken with water an hour after meal twice a day.

External Use: Fine Rudraksha churna after mixing with rose water is applied over the skin with dark spots, hyperpigmentation and blemishes. The regular use fades the dark spots and makes skin clearer.

3. Burning Sensation - The decoction of Rudraksha churna and sandalwood (Chandan) is used in amount of 50 to 100 ml relieves burning sensation. The Rudraksha paste prepared with rose water is applied over the skin if burning sensation persists.
4. Cough - Rudraksha churna with honey is used to cure cough. It is more beneficial when patients have cough with chest tightness and cough starts with irritation in the throat.
5. Breathing Problems & Asthma – Rudraksha therapy is effective in curing severe cases of asthma and breathing troubles.

6. Rudraksha churna and haridra churna (turmeric) each of 2000 mg are mixed in equal amount with honey (10ml). In acute attack, the patient is asked to lick the paste after every 15 to 30 minutes. In chronic cases, this mixture should be taken 2 to 3 times a day.
7. Tuberculosis Ancient doctors mostly prefer Rudraksha combination. This mixture was given to patients with tuberculosis. Now, it can be used as supportive therapy along with Swarna Bhasma and Vasant Malti Rasa in case of Multi Drug Resistant Tuberculosis. Vamshalochan should be added in higher possible dosage to protect and strengthen the lungs.<sup>[15]</sup>
8. Rudraksha is very useful for the patients of high blood pressure. It does not let it go up or down. It keeps the blood pressure normal. It pacifies Vaata (air), Pitta (bile) and cough automatically.
9. It is also useful for women in pregnancy.
10. Rudraksha are a good medicine for skin diseases and for leprosy. Hysteria, coma, leucorrhoea and female diseases related to genital organs can be cured by Rudraksha.
11. Earlier pharmacological activities of *Elaeocarpus sphaericus* showed that the crude extract has antiasthmatic, antidepressant anti-inflammatory, antimicrobial, anticonvulsive, antiepileptic and antihypertensive properties.<sup>[27]</sup>

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