



**A REVIEW ARTICLE ON ETHNOMEDICINAL AND TRADITIONAL USES OF
ELAEOCARPUS GANITRUS ROXB. (RUDRAKSHA)**

Prabhakar Shukla*, Suresh Chaubey and Swati Bala

¹PG Scholar, PG Department of DravyaGuna Rishikul Campus, Haridwar, U.A.U Dehradun, Uttarakhand, India.

²Prof. PG Department of DravyaGuna Rishikul Campus, Haridwar, U.A.U Dehradun, Uttarakhand, India.

³PG Scholar, PG Department of Prasuti Tantra Evam Stree Rog Rishikul Campus, Haridwar, U.A.U Dehradun, Uttarakhand, India.

***Corresponding Author: Dr. Prabhakar Shukla**

PG Scholar, PG Department of DravyaGuna Rishikul Campus, Haridwar, U.A.U Dehradun, Uttarakhand, India.

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ABSTRACT

The word Rudraksha, literally derived from two Sanskrit words – ‘rudra’, a synonym for Lord Shiva and ‘aksha’ meaning eyes. *Elaeocarpus ganitrus* Roxb. is an evergreen tree, ripe fruits of which contain a hard and highly ornamental stony endocarp known as bead or nut, and is commonly termed as *Rudraksha* in India. It holds popular belief reinforced by experiments that it has confirmed medicinal uses apart from its attractive stones. Traditionally the plant is used to treat various diseases such as mental diseases, hypertension, epilepsy etc. In the present review, an attempt has been made to congregate the botanical, phytochemical, ethno medicinal, pharmacological information on *Elaeocarpus ganitrus* Roxb. belongs to family Elaeocarpaceae. It is prevalent for its fascinating fruit stones and medicinal properties. It procures a remarkable position in Hinduism and Ayurveda, the indigenous system of medicine.

KEYWORDS: *Elaeocarpus ganitrus*, Hypertension, Rudraksha.

INTRODUCTION

Elaeocarpus ganitrus commonly known as “*Rudraksha*” in India belongs to the Elaeocarpaceae family and grows in the Himalayan region. *Elaeocarpus* has about 360 species world wide. Out of this, 25 species occur in India alone. According to Hindu mythology, *Rudraksha* beads bear a great religious, spiritual, and materialistic significance.

It is also called blueberry beads as, beads are covered by an outer shell of blue color on fully ripening. The seed is borne by several species of *Elaeocarpus*, with *E. ganitrus* being the principal species. The specific appellation *ganitrus* is plausibly taken from *ganitri*, the name for this species in Sundanese and Malay. It has been adored in almost all ancient ayurvedic texts for its extraordinary medicinal properties. It is ethnomedicinally important plant and possesses ameliorating pharmacological properties which have been used for the treatment of various ailments.

In Hindi it is recognized as Rudraksha, is a large evergreen broad-leaved tree whose seed is conventionally used for prayer beads in Hindu religion. In traditional system of medicine, different parts (beads, bark, leaves and outer shell of beads) of Rudraksha are taken for the alleviation of various health problems such

as mental disorders, headache, fever, skin diseases, and for healing the wounds. Ayurvedic texts categorise Rudraksha fruits as thermogenic, sedative, cough alleviator and are useful for the treatment of bronchitis, neuralgia, cephalgia, anorexia, migraine, manic conditions and other brain disorders. It is employed in folk medicine as a counter agent of stress, anxiety, depression, palpitation, nerve pain, epilepsy, lack of concentration, asthma, hypertension, arthritis and liver diseases. Furthermore it is retrieved to exhibit multifarious pharmacological activities like anti-inflammatory, analgesic, hypoglycemic, antiulcerogenic and very high antimicrobial activity. Phytosterols, fats, alkaloids, flavonoids, carbohydrates, proteins and tannins have been found to be largely responsible for the therapeutic potential of *E. ganitrus*. Aqueous extract of leaves contains glycosides also. Ethanolic extract of leaves contains gallic acid, ellagic acid & quercetin. This review provides a scientific basis for pharmacological /medicinal properties and therapeutic uses of *Elaeocarpus ganitrus* Roxb.

Botanical classification

Kingdom - Plantae
Division - Magnoliophyta
Class - Magnoliopsida
Order - Oxalidales

Family - Elaeocarpaceae
 Genus - Elaeocarpus
 Species - E. ganitrus
 Binomial name - Elaeocarpus ganitrus (Roxb.)
 Common name - Rudraksha

Synonym of Rudraksha

Language - Synonyms

Sanskrit - Chattu sampangi, Rudraksha, Bhutnasan
 Hindi - Rudraki, Rudraksha
 English - Utrasum Bead Tree, Wooden Begger bead
 Gujarati - Rudraksh
 Bengali - Rudrakya
 Kannada - Rudrakshi mara, Rudraksh
 Malayalam - Rudraksha, Rudraksam
 Marathi - Rudraksha
 Punjabi - Rudraksha
 Tamil - Rudraksha, Ruttiratcam
 Telgu - Rudraksha, Rudraksi
 Assam - Rudrai, Ludrok, Udruk
 Other - Sivaksha, Sarwaksh, Paawan, Nilkanthaksha, Haraksha, Sivpriye

Habitat

Elaeocarpus ganitrus is an average sized evergreen tree with a spreading attractive crown, found in tropical and subtropical areas at the altitude ranging from the sea coast to 2,000 meters more than the sea level. Elaeocarpus ganitrus generally dispersed from Madagascar in the west through India, Malaysia, Southeast Asia, Southern China, and Japan, through Australia to New Zealand, Fiji, and Hawaii in the east with it's around 350 species. E. ganitrus found in Assam, Bihar, Bengal, Maharashtra, Madhya Pradesh and Sikkim in India. Tree of Rudraksha is common along the foothills of all districts of Arunachal Pradesh, Tree of Rudraksha is originated in humid evergreen forests, which are characterized by three-tier forest structure.

Botanical Description

It is a large evergreen tree with large leaves. Its height ranges from 50–200 feet. Leaves are large and shining green on the sun facing side and dull stringy on earth facing side. Flowers become visible in the month of April May and are white or yellow in colour. Fruits start appearing in June and ripen near October. Ripe fruit is fleshy and has a seed with blue shell. Inner part or bead lying in the seed is called Rudraksha.

Synonym of Rudraksha in other Language - Different synonyms of Elaeocarpus ganitrus in other language are mentioned in classical books like Bhavaprakash Nighantu, Raj Nighantu, Shankar Nighantu, Dravyaguna Vigyan, Nighantu Adarsha, etc.

Morphological & Macroscopical Description

The morphological characters of plant are shown below as follow.

Leaves- Simple, glabrous, oblong-lanceolate, sub-entire or irregularly crenate, acute or acuminate

Flower- White or yellow colored, in dense racemes and mostly from axils of fallen leaves, fringed petals, anthers are linear, appear in April-may.

Fruits- Round or oval, small, violet or blue colored and acidic in taste.

Endocarp- Stony endocarp is hard, globular, strongly tubercule, marked with 5 to longitudinal ridges, rarely 1 to 4, reddish brown in color.

Table: Macroscopically description.

S. No.	Leaf	Inspection/Observation
1	Apex	Acute
2	Base	symmetric
3	Color	Shining green
4	Margin	Undulate
5	Shape	Ovate
6	Size	5-6 inch in length, 2 inch broad

Table: Macroscopically Examination of seed.

S. No	Seed	Inspection/Observation
1	Color	Blue (on fully ripening)
2	Texture	Hard
3	Taste	Sour
4	Shape	Round, Bulbous
5	Size	½ -1 inch

Bioactive Compounds in Elaeocarpus-

The Elaeocarpus ganitrus fruit have many phytoconstituents such as alkaloids, flavonoids, tannins, steroids, triterpenoids, carbohydrates and cardiac glycosides. Singh^[5] says that a significant amount of phytocomponents such as isoelaecarpicine, elaeocarpine isoelaecarpine and quercetin, gallic, ellagic acids and rudrakine. Three new ellagic acid derivatives of eleocarpaceae, 4-Omethylellagic acid 3-0-a-rhamnoside, 4-Omethylellagic acid 30-(300-O-acetyl)-a-rhamnoside and 4-Omethylellagic acid 30-(400-Oacetyl)-arhamnoside in addition to the known ellagic acid derivative, 4-O-methylellagic acid 30- (200,300-di-Oacetyl)-a-rhamnoside are used in multi besieged therapy of cancer and a significant antioxidant ability due to its wealthy content of tannins and flavonoids³⁴. Prosopis species has been widely used to cure basic ailments in the usual system of medicine. Elaeocarpus ganitrus have gallic, quercetin, and ellagic acids, (-) elaeocarpine, (-) isoelaecarpine and rudrakine.

Types of Rudraksha

Rudraksha beads are catalogued depending on the number of "mukhis" – the clefts and furrows – they have on the surface. The scriptures state of 1 to 38 mukhis, but Rudrakshas of 1 to 14 mukhis are usually bring to light. One mukhi rudraksha is not widely distributed. Five facetedor Punchmukhi rudraksha bead is most commonly found. The higher mukhis or faces are very rare. Each bead imposes a different influence associated with the number of mukhis.

Benefits of Rudraksha associated with no. of mukhis

1 mukhi Medicament for diseases like mental anxiety, heart problems, eye problems, TB, paralysis, bone pain, etc. Enlightens the super-consciousness and provides improved concentration.

2 mukhi Implausible treatment of ailments like chronic asthma, renal failure, impotency, stress, anxiety, depression, eye problems, negative thinking, mental chaos, lack of concentration, hysteria, intestinal disorder etc. Blesses the wearer with 'UNITY'.

3 mukhi Sure shot remedy for the diseases like depression, schizophrenia, blood pressure, jaundice, menta.

4 mukhi Provides medication for diseases like blood circulation, asthma, memory lapse, cough respiratory strip problems, and brain linked illness, etc. The wearer bestows power of creativity, enhances memory power and intelligence.

5 mukhi For treating medical conditions like blood pressure, diabetes, piles, stress, displeasure, mental disability, as well as neurotic, heart and maladjustment problems etc.

6 mukhi Counter measure for the ailments like gynecological problems, epilepsy etc. Defends from emotional trauma of wordy sorrows and imparts wisdom, learning and knowledge.

7 mukhi Extraordinarily works for treating diseases like asthma, impotency, pharyngitis, respiratory confusion, foot related diseases, pains and aches etc. Beneficial for peoples who are suffering from finance and mental set-up.

8 mukhi Provides cures for medical conditions like stomach ache, skin diseases, stress, anxiety etc. Get rid of all obstacles and affords success in all undertakings.

9 mukhi Works as a mystical therapeutic agent for treating strange diseases. Wearer is harbored with lot of energy, powers, dynamism and fearlessness.

10 mukhi Alleviates discomforts like mental insecurity, hormonal inequality in the body, whooping cough etc. It does a job like a shield on one's body and kicks evils away.

11 mukhi Provides relief from body pain, backache and recovers from chronic alcoholism and liver diseases. Blesses wearer with wisdom, right judgement, fearlessness and success.

12 mukhi Medically it is more valuable for ameliorating discomforts of bone diseases, osteoporosis, rickets, mental disability, anxiety etc. Wearer gains the strength of sun to rule and to move continuously with brilliant radiance. Boosts self image and motivation.

13 mukhi Used for treating muscle dystrophies. It gives honor and fulfills all the earthly desires.

14 mukhi It provokes the sixth sense organ by which the wearer foresees the forthcoming happenings.

15 mukhi Skin diseases, recurring miscarriage, still birth etc can be cured.

16 mukhi Taken as a curative agent for the diseases like leprosy, cor-pulmonale, tuberculosis, lung diseases etc.

17 mukhi Excellent for handling conditions like memory lapse, body functional disorders etc.

18 mukhi Prevent ailments like loss of power, mental inharmonization etc.

19 mukhi Exterminate the disorders of blood, spinal cord etc.

20 mukhi Taken as nullifier for problem of eyesight and snake bites.

21 mukhi Possesses built-in medical healing and it eradicates every form of diseases.

Trijuti Trijuti Rudraksha is supreme for keeping internal as well as external body disorders at bark.

Gauri shankar Works for the medication of problems related to sex and behaviour.

ETHNOMEDICINAL AND TRADITIONAL USES OF RUDRAKSHA

Rudraksha have many Ayurvedic properties that refer to this wonderful bead and gives details of rudraksha for increase body constitutions. The beads, bark and leaves of Rudraksha all are used to cure various ailments like mental disorders, headache, fever, skin diseases etc. Rudraksha may be worn either on arm, wrist or other parts of the body.

Different parts (beads, bark and leaves) of rudraksha are used for the treatment of diverse ailments as well as may be worn either on arm, wrist or other parts of the body. Rudraksha can be taken as a medicament for blood purification and powers the body substance. Regular consumption as a quath in conjunction with honey purifies blood and works as general tonic. A quath made by mixing beads of rudraksha, bark of adusa and harad, in equal amount can be consumed with honey. The concoction of ten- faced rudraksha with milk mitigates recurrent cough. Rudraksha shall be keep under pillow and preparation of its bead in the milk shall be applied on the eye lid for getting better sleep. It can be used as a panacea for skin diseases, ringworms, sores, pimples and boil also.

Epilepsy management: Pulverized bark of rudraksha tree and pulp of fruit or the bead can be used.

For curing Piles: Rudraksha bead in combination with triphala churna and guggul or with root of kaner is beneficial for treating piles.

Counter measure for jaundice, liver related problems or stomach ache: Rudraksha, chitrak, harad, devdaru, giloy, daruhaldi, dharangi and punarnava shall be taken in equal proportion and regular consumption of it as a quath is an important medicine. 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.

For improving memory power: Milk boiled with four or six faced rudraksha seed is excellent remedy for mental disorders. This also assists in enhancing memory.

Sexual power improvement: A recipe of rudraksha applied over the forehead improves sexual power.

For Blood Pressure: Five mukhi rudraksha keeps blood pressure normal.

For High Blood Pressure: Rudraksha is a best medication for curing H. B. P. (high blood pressure).

Sure shot remedy for conceiving baby: One rudraksha and one karsa (10 gm) of Sarpakshi (Ophiorrhizamungos) 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.

Alleviator of heaviness, tongue cracks and tastelessness: Gargling with rudraksha decoction is beneficial in heaviness, tongue cracks and tastelessness.

Curing all brain disease: All brain disorders can be recovered with four faced rudraksha remedy.

Neutrilizer of brain fever: Consumption of overnight kept water of rudraksha in earthen pot on an empty stomach can get rid of brain fever.

For Hysteria and Coma: *Elaeocarpus ganitrus* is also a good assistance for panic conditions of hysteria and coma in woman.

For Frequent fever: Rudraksha is also good for children's who suffers from frequent fever.

Imparts calmness to mind: It cools down the body temperature and brings calm to mind.

Controlling anxiety: A person grieves from anxiety should keep big size panchmukhi rudraksha with themselves and during nervousness; they should hold them tightly in their right palm for ten minutes. It will assist them to get back their confidence. To Ward off evil spirits and omens: The rudraksha fruits were employed to defend from evil spirits in traditional Indian medicinal system These diversified traditional.

Important Formulations of *Elaeocarpus Ganitrus*

Gorochanadi vati, Mrtasanjivani gutika, Svarnamukhladi gutika, Dhanwantara gutika and Cukkumitppalyadi gutika. Rudraksha Churan, rudraksha Hima (Cold infusion), Rudraksha Milk, Rudraksha decoction for Gargling, Rudraksha Lehyam, Rudraksha Vibhuti, Rudraksha Oil, Rudraksha eyedrops, Rudraksha Paste and Rudraksha Bhasma.

MATERIALS AND METHODOLOGY

Available literature regarding reference of Rudraksha from different ayurvedic books of dravyaguna and different research papers available on net.

CONCLUSION

The widespread investigation of literature exposed that *Elaeocarpus ganitrus* Roxb. is an imperative basis of various pharmacologically and medicinally significant chemicals, such as indispensable triterpenes, tannins like geraniin and 3, 4, 5-trimethoxy geraniin, indolizidine alkaloids grandisines, rudrakine and flavonoids quercitin. Different bioactive extracts prepared from *Elaeocarpus ganitrus* roxb. have shown numerous healthpromoting effects in vitro and in vivo, such as antioxidant, anti-inflammatory, analgesic, antifungal, antimicrobial, antidiabetic, antioxidative, antihypertensive, antianxiety, antiasthmatic and antidepressant activities. *Elaeocarpus ganitrus* has been used lucratively in Ayurvedic medicine for centuries; investigations are called for to be attempted towards more clinical trials to support its therapeutic use. Eventually, it is also important to distinguish that *Elaeocarpus ganitrus* may be effective not only in isolation, but may in fact have a potentiating effect when given in combination with other herbs or drugs.

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