



Identification Authentication And, Extraction Of Herb (Elaeocarpus Ganitrus)"

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1. ABSTRACT

Elaeocarpus ganitrus (syn: *Elaeocarpus sphaericus*: *Elaeocarpaceae*) is a large evergreen big-leaved tree. *Elaeocarpus ganitrus* is a medium sized tree occurring in Nepal, Bihar, Bengal, Assam, Madhya Pradesh and Bombay, and cultivated as an ornamental tree in various parts of India. Hindu mythology believes that, anyone who wears Rudraksha beads get the mental and physical prowess to get spiritual illumination. According to Ayurvedic medicine Rudraksha is used in the managing of blood pressure, asthma, mental disorders, diabetes, gynecological disorders and neurological disorders. The *Elaeocarpus ganitrus* is an inhabitant shrub that has a good rich history of traditional uses in medicine. Present review has been attempting to make to collect the botanical, ethnomedicinal, pharmacological information and therapeutic utility of *Elaeocarpus ganitrus* on the basis of current science.

Keywords: chromatography,spectroscopy,DNA analysis,phytochemicalprofiling

2. INTRODUCTION

Eganitrus commonly known as Rudraksha in India belongs to the *Elaeocarpaceae* family and grows in the Himalayan region¹. Type *Elaeocarpus* has about 360 species, occurs during Australia, East Asia, Malaysia and the Pacific Islands. About 120 species belonging to this genus from different parts of Asia and out of this, 25 species occur in India alone. *Elaeocarpus ganitrus* is a large evergreen broad leaved tree. The tree of Rudraksha is about 50-200 feet long and possess cylindrical trunk with a grayish white & rough textured bark. The diameter of trunk is up to 1.22 mete



Fig. 1 Unripe fruit

E. ganitrus, belongs to the family Elaeocarpaceae. A combination of bark, stem and leaf of *Elaeocarpus floribundus* has been used as mouth wash and fruits has been used as antiseptic. *Elaeocarpus oblongus* fruit is used as antiseptic. *Elaeocarpus* is used in ulcers, rheumatism, piles, pneumonia, and leprosy. Rudraksha beads are believed to provide a kind of protective energy for the wearer, to shield them from various circumstances, places and individuals they



Fig. 3 Rudrasha flower, Tree, Ripe fruit [Bead] & Unripe fruit

encounter in their daily life. 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 categorize Rudraksha fruits as thermogenic, sedative, cough alleviator and are useful for the treatment of bronchitis, neuralgia, cephalagia, anorexia, migraine, manic condition 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. Rudraksha seeds are dynamically polar and also possess both paramagnetic and diamagnetic properties which facilitate beneficial healing capacity to them. Rudraksha beads confer antiageing properties depend on their electromagnetism. Rudraksha pulp is used in managing head related diseases, epilepsy and mental sickness. Furthermore it is noted to have myriad pharmacological activities that involve anti-inflammatory, analgesic, hypoglycemic, antidepressant, antiasthmatic, sedative, antihypertensive smooth muscle relaxant, hydrocholeretic, antiulcerogenic and anticonvulsant. Besides, Rudraksha extracts possess potential antimicrobial activity and can be used even for the alleviation of chronic diseases like cancer. Present review has been attempting to make to collect

the botanical, ethnomedicinal, pharmacological information and therapeutic utility of *Elaeocarpus ganitrus* on the basis of current literature available.

Methods for Identification

of real *Elaeocarpus Sphaericus* 17,40-42 It is very simple to identify a real *Elaeocarpus sphaericus*. It is made falsely and the artificial *Elaeocarpus sphaericus* are also being sold in market. There are many methods of testing a actual (or fake) *Elaeocarpus sphaericus*: • Properties Test:- This test gives information that whether the beads show properties like inductance, capacitance, conduction of electric current etc. .Cut Test:- A fool proof method is to cut the Rudraksha bead horizontally. One will find the same number of compartments as that of the number of lines. However the drawback the bead gets destroyed. Properties Test The other is to find out whether the beads exhibit properties like inductance, capacitance, conduction of electric current etc. The copper coin test If Rudraksha beads are placed between two copper coins it should rotate slightly. This is due to the physical and magnetic properties of the Rudraksha beads. This test requires a high level of expertise.

level of expertise.



Eye test:- A fake or the artificial Rudraksha may look like a real one. In Rudraksha the facets or the mukhis means deep lining from the upper part to the lower part of Rudraksha. Looking at these deep linings (facets) with the help of a magnifying glass, one can easily recognize a real Rudraksha (Fig.13). 7. 3 .Water test:- Sometimes a higher valued Rudraksha (Gaurishankar Rudraksha or a Trijuti) are made by artificially joining two or three Rudraksha with the help of glue etc. In case of doubt such Rudraksha should be boiled in water for one to two hours. A sharp discoloration will take place at the joint in case of artificial Rudraksha. The test wherein the Rudraksha Bead dips in water (commonly known as water test) is not dependable.

Materials

1. Soxhlet apparatus
2. n-hexane
3. Ethanol
4. Distilled water
5. Shade dried coarse leaves powder of *Elaeocarpus ganitrus*.

C) Extraction procedure 1.Hexane extract:- The shade dried coarsely powdered whole plant of *Elaeocarpus ganitrus* (50 gm) was extracted with hexane until the extraction was completed. After achievement of extraction, the solvent was removed by distillation. Dark brown color residue was obtained. The residue was stored in dessicator. 1. Ethanol extract:- The marc left after hexane extraction was dried up and then extracted with ethanol 95%v/v, until the extraction was finished. After completion of extraction, the solvent was removed. 2.Aqueous extrac:-t The marc remains after ethanol extraction was dried and then extracted with aqueous medium by cold maceration process for 7 days. At the end of 7th days, it was filtered through muslin cloth and filter was concentrated. The residual solution was evaporated by heating on water bath. The brown color filtrate was obtained. The residue was then stored in dessicator. • Preliminary Phytochemical tests:- All the extracts of *Elaeocarpus ganitrus* were subjected to qualitative tests for the identification of various active constituents16-18 . A) Detection of Alkaloids:- Solvent free extract was stirred with few ml of dilute hydrochloric acid and clean. The filtrate was tested watchfully with a range of alkaloidal reagents as follows. 1.Mayer's Test:- To a few ml of filtrate, one to a couple of drops of Mayer's reagent was added by the side of the test tube. A white or creamy precipitate indicated the test as positive. 2.Wagner's test: -To a few ml of filtrate, couples of Wagner's reagent were added by the side of the test tube. A brick red precipitate confirmed the test as positive. 3.Hager's test:- To a few ml of filtrate 1 or 2 ml of Hager's reagent added (saturated aqueous solution of picric acid) were added. An outstanding yellow precipitate indicated the test as positive

Results and Discussion

Several review studies quoted the medicinal benefits of wearing Rudraksha beads against neurological and cardiovascular disorders, rheumatism, infertility and other diseases based upon Ayurvedic system of medicin. In addition, it has also been stated that the pharmacological properties of Rudraksha bead differs from each other based upon the type of grooves or Mukhis. According to Hindu mythology, Rudraksha beads bear a great religions, spiritual, and materialistic significance. The Hindu mythology considers Rudraksha as symbol of link between earth and heaven. It is believed that it contains the secrets of evolution of entire cosmos within itsel. Fruits of the plant are wearing by Hindu mystics as necklaces and in their daily worship for It is said that wearer of this Rudraksha is blessed by Goddess Parvati, Goddess Hence, the wearer of this Rudraksha is bestowed with Health, Wealth & Happiness as well as all the Luxuries, Pleasures and Comforts of Life since the ruling planet of this Rudraksha is planet Venus.

CONCLUSION

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