The Study of Rudraksha Bead showing a Symbol of OM
DURG V. RAI, SUNIL JAWLA and SAURABH BAJPAI

Abstract
A considerable interest has been generated since ages for knowledge about the bead with the universe symbol- Om. The word Om is known and considered as the beginning, middle and the end of present, past and the future. The chanting of Om brings awareness about the physical reality of the world and the human body, the subtle impressions of the mind, emotions, thoughts and beliefs of our life. According to the Indian philosophy, Om is a spiritual symbol referred to as Atman (soul) and Brahma (reality, entirety of the universe, truth, divine, supreme spirit, cosmic principles & knowledge). This syllable is one of the most important symbols in universal religion, and often found in Vedas, Upanishads & other ancient texts. It is the sacred spiritual chanting made during the recitation of spiritual texts, puja and prayers, ceremonies, weddings, meditations & Yoga. In the present work, morphological studies have been carried out to see the surface of rudraksha (Elaeocarpus ganitrus) which indicates the presence of the universal symbol as a common sight in the divine beads of rudraksha. During microscopical studies it was observed that the Om symbol was present on the surface of various cells of rudraksha bead indicating the existence of Om at cellular level. The present study further strengthens the belief that the presence of symbol Om in Universal.

Key words: Rudraksha, Elaeocarpus, Bead, Om Symbol, Morphology and Microscopy

Rudraksha (Elaeocarpus ganitrus; Syn. E. sphaericus) is known as holy tree as it is the beloved tree of Lord Shiva. The term Rudraksha refers to the tears of Lord Shiva. As per the literature, the origin of rudraksha took place in the tarai region of the Himalayas (Ramadurai et al., 2007; Khan et al., 1987). It belongs to the Elaeocarpaceae family, containing about 360 species distributed in temperate, sub-tropical and tropical zones of South-East Asia, Australia, Chile, New Zealand and the West Indies. South East Asia contains about 120 species of Elaeocarpaceae, out of which 25 species occurs in India (Bhuyan et al., 2002). The stony endocarp or the bead can be obtained after removing the outer epicarp and fleshy middle mesocarp. The outer skin of the fruit has several medicinal values as reported by the local people of the area where these trees grow (Rai, 2004). The aqueous extracts of the fruit is used in fever, cough or cold. The leaves showed antibacterial properties and is used in the treatment of wounds and or used orally to cure headache, migraine, mental disorders and epilepsy (Tewari et al., 2013). Various researchers have reported anti-convulsant (Dasgupta et al., 1984), hypertension (Sakat et al., 2009), anti-inflammatory (Sarkar et al., 1972), analgesic (Singh et al., 1999a), and anti-microbial activities (Singh et al., 1999b & 2010) related to it. The Elaeocarpaceae family contains indolizidine alkaloids, having an ability to inhibit the enzymatic activity of glucosidases. Hence, there is a potential to explore the Rudraksh further in the treatment of AIDS, diabetes and cancer (Wheelright et al., 1985; Stewart et al., 2006). In the present work, morphology of beads and microscopy of its structure was carried out for this purpose.
Origin of Om

The word *Om* contains the power of the whole universe. It is the beginning, middle and the end of the past, present and future (Saraswati, 2014, p.11). Chanting *Om* brings awareness of the physical reality of the world and human body. The Upanishads records *Om* (AUM) as syllable and known as deliberate superimposition. In pronunciation of A-U-M, AU become O and hence the word as *Om* (Saraswati, 2014, p.6).

The A (aahhh) sound word here represents the creation of the universe and all of the gross objects within this universe. Ahh is the beginning of all sound words (the most common letter in alphabets). It connects us to our sense of self, the ego. With this syllable we experience the existence of the world through the activity of the senses. The U (ooh) sound word signifies the maintaining energy of the universe and the subtle impressions of the mind. It connects us to an inner sense of something greater than that which we can see and feel with our senses. Oooh lets in lightness, clarity, balance and goodness (Saraswati, 2014, p.14-15).

The M (mmmm) sound word characterizes the transformative energy of the universe and the thoughts and beliefs of your being. This sound unites you to the awareness of oneness. The fourth sound is silence or anagata. It is the vibration which is beyond verbal pronunciation which brings consciousness of the self or the Atman. The unity of Sat Chit Ananda (I exist, I know, I am blissful) is experienced. It is said that the sound of AUM includes the entire process of sound and all other sounds are included within it. Therefore, *Om* is called the seed sound (bij), i.e., the original sound from which all other sound words come from. This is why *Om* is said to represent God, Brahma, Source, and the Universal Consciousness, because it has the power to create human existence (Saraswati, 2014, p.14-15).

*Om* is a sacred sound and a spiritual icon in the Dharmic religions. It is also a mantra in Hinduism, Buddhism and Jainism. In the Indian philosophy, *Om* is a spiritual symbol referring to Atman (soul, self within) and Brahman (ultimate reality, entirety of the universe, truth, divine, supreme spirit, cosmic principles, knowledge). The syllable is one of the most important symbols in ancient literature, and is often found at the beginning and the end of chapters in the Vedas, Upanishads, and other Indian texts (Saraswati, 2014, p. 14-15).

Description of Om

In Sukla Yajurveda (Madhyandina sakha), *Om* is found in the phrase “*Om* pratiṣṭha”, “*Om* krato smar”, and “*Om* kham brahma”. In Brhadaranyaka, Chandogya and Taittiriya, the *Om* symbol is mentioned many times by the name of *Om* and omkara (Saraswati, 2014, p.31). In the Mandukya Upanishad it is clear that Om is a mystique sound, it is present within everything and everything is derived from *Om* (Saraswati, 2014, p.32). In Kathopanisad, Lord Yama presents *Om* as the answer to Nachiketa’s question. In this Lord Yama claims that anyone who meditates on the syllable *Om* can attain Brahman. In Mundakopanisad, *Om* was integrated into the practice of meditation is accordance with the Indian thought. It says that *Om* is the arrow and Brahman is the target. In Prasnopanisad *Om* is the bow (Saraswati, 2014, p.45). Many more Upanishads are also helpful in throwing light on and explaining the meaning of *Om*, which is part of the iconography found in ancient and medieval era temples, monasteries and spiritual retreats of Hinduism, Buddhism and Jainism. The symbol has a spiritual meaning in all Indian philosophy. Various Puranas also describe the Rudraksha. According to the Linga Purana, the Rudraksha bead can be worn by anybody without distinction of castes. This Purana tells us about the Ayurvedic properties related to vaat (Gas), Pitta (Bile), and Kapha (Phlegm). In this it is believed
to be ideal for those suffering from Rakat-Chaap or blood pressure related problem (Saraswati, 2014). According to Padma Puran, whoever wears a Rudraksha rosary is supreme among all human beings.

According to Shiv Puran, Rudraksha is very dear to lord Shiva and hence all the sins of a man get destroyed if one chants the name of Lord Shiva while using a Rudraksha bead and they also attains salvation after death. It is believed that the origin of Rudraksha is connected with Lord Shiva’s penance (Acharaya, 1976, p.170). A person who wears eleven hundred Rudraksha on his body, unites with Shiva.

Rudraksha are of various types i.e. Ek mukhi Rudraksha (one opening) to Rudraksha with fourteen openings. Each type of Rudraksha has a specific mantra and specific deity connected with it. Rudraksha of specific colors have been prescribed for different castes. For example, a Brahmin, a Kshatriya, a Vaishya and a Shudra have been instructed to put on Rudraksha of white, red, yellow and black colour respectively (Acharya, 1976, p.170).

The Bhagavata Purana told us about the importance of wearing the Rudraksha beads. There is an explanation of different type of Rudraksha with their rule to wear and different stories which tells us about the benefit of wearing a Rudraksh. The Shrimad Devi Bhagwatam Purans very nicely give the description of Rudraksha.

Om Sound in Universe

The previous studies in the years 2010 and 2013 mentioned above did show samples of sounds recorded from Sun's atmosphere, however, none of them mentioned the Om sound or any such resemblance recorded by NASA to be precisely as the ancient Hindus had described it in the Vedas thousands of year’s ago; That it is a mantra which can be intoned with human speech as “OM” (Gurnett, 2013).

Om Symbol on Mountains

The Om Parvat which is also known as the Adi Kailash, Little Kailash, Jinglingkong Peak, Baba Kailash, chhota Kailash) is a mountain in the Himalayan mountain range, lying in the Darchula district of western Nepal and in Pithoragarh District, Uttarakhand, India. It is considered sacred by the Hindus and its snow deposition pattern resembles the sacred 'OM' (ॐ). Its appearance is distinctly similar to Mount Kailash in Tibet. Near the Om Parvat lies the Parvati Lake and Jinglingkong Lake. Jinglingkong Lake is sacred, like the Mansarover Lake, to the Hindus. Opposite to this peak is a mountain called Parwati Muhar. The Om Parvat is a fruit of discord between India and Nepal, who do not reach agreement about the border line between the two countries. The Om Parvat is currently on the Indo-Nepalese border face "Oṃ/sa" in India and the back of the mountain in Nepal. Elevation of Om Parvat is 6,191 m (20,312 ft.) (Saraswati, 2014, p.79).

Meditation and Yoga

Om is a mantra, or vibration that is traditionally chanted at the beginning and end of yoga sessions. In the Indian philosophy and yoga, the mantra is considered to have high spiritual and creative powers, which can be chanted in many ways. It can be silently uttered in the mind. It can be silently uttered with the breaths, semi verbal uttering, or mild intonation and verbal chanting. It
is believed that silent chanting yields the best results (Amit, 2010). However, if you practice *Om* chanting in a group, semi verbal or vocal chanting creates a very powerful healing vibration, from which everybody can benefit. When silently chanting *Om* keep your attention fixed on the silence between two utterances. Gradually, mantra meditation with *Om* will lead the chattering mind to blissful inner silence (Amit, 2010).

**Methodology**

**Plant Material**
The fruits of *Elaeocarpus angustifolius* Blume (*Elaeocarpus ganitrus*; Syn. *E. sphaericus*) were collected from Dehradun, India, in June, 2015. The plant material was authenticated by the Botanical Survey of India, Northern Regional Centre, Dehradun, India (voucher specimen no. 115875). The fruit pulp was manually removed from the bead and beads were dried at room temp under shade and then powdered. The morphology of beads and microscopy of bead powder were studied.

**Morphology**
A mature or ripened ovary formed after fertilization is called a fruit. Morphology of the Rudraksha fruits was studied by using a hand lens. The morphological studies showed the presence of *Om* symbol on about 10% of the beads, indicating that the presence of the universal symbol is common in the divine beads of Rudraksha (Fig. 1).

![Fig (1): Photographs showing the Presence of *Om* Symbol on Rudraksha Bead.](image)

**Microscopical Study**
The fruits pulp of *Elaeocarpus angustifolius* Blume (*Elaeocarpus ganitrus*; Syn. *E. sphaericus*) was manually removed from the bead and beads were dried at room temp under shade and powdered. The bead powder was spread on microscope slide and added few drops of glycerin, coverslip was applied and viewed under microscope at 40X and 100X. Staining of bead powder was carried out by using safranin solution and observed under microscope. Microscopy of *Elaeocarpus ganitrus* bead powder showed lignified cork in surface view, tannin contents from cortex, lignified fibers from xylem, crystal fibers, simple starch grains, prismatic crystals of calcium oxalate, lignified parenchyma, stone cells and border pitted vessels from xylem. It was observed that *Om* symbol was present in various cells at cellular level (Fig. 2). This further strengthens the presence of symbol *Om* everywhere.
DISCUSSION
Rudraksha beads are obtained from Eleocarpus ganitrus tree which play an important role in a spiritual seeker’s life. The Rudraksha tree species usually grows at a certain altitude in the mountains – mainly in the Himalayan region. These beads have a very unique vibration and usually the big beads are not so vibrant. For travelers, Rudraksha beads provide a very good support because it creates a cocoon of your own energy as dictated in the literature. For frequent travelers moving for business or profession who may have sleep disorders and are not able to adjust in the new environment, Rudraksha is the best remedy for them (Sarcar et al., 2006; Khare, 2004). For sadhus and sanyasis, places and situations could trouble them because they were constantly moving. So Rudraksha beads are useful for them in various situations. Phytochemical screening showed the presence of various medicinally important alkaloids including indolizidine alkaloid Rudrakine (Johns et al., 1970 & 1971; Michael, 1997; Ray et al., 1979). In the present work, morphological studies showed the presence of the Om symbol on various beads, indicating the presence of the universal symbol is common in divine beads of Rudraksha (Fig.1). During microscopical studies it was observed that Om symbol was present in various cells at the cellular level (Fig 2). This further strengthens the presence of symbol Om on holy Rudraksha bead, hence proves the importance of Rudraksha as reported in ancient literature.

Conclusions
The morphological studies showed the presence of Om symbol on various beads, indicating that the presence of the universal symbol is common in the divine beads of Rudraksha. During microscopical studies it was observed that Om symbol was present at the cellular level in the Rudraksha bead. These studies further strengthen the belief that Rudraksha beads are holy and may be used for the welfare of mankind as discussed in the Puranas

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