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DIVINE CHANTING-A STIMULANT TO SEED SPROUTING

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ABSTRACT

Adhyatma-A Spirituality the starting point to conception of universe. Science has also acknowledged the preeminence of spirituality.If science has told who has created this universe, then our adhyatma(Spirituality)told why universe has created. Indian Vedas have specified music therapy which is becoming popular even though it is known from ages that music has an impact on our physical and physiological conditions. peaceful and rhythmic music has an impact on physical and physiological conditions of living organisms plants, animals, especially human plays his flute with melodies, all are drawn towards the music as a magnetic attraction.

Particularlyin Indianayurveda- charak and sushrut had adopted Vedic melody (Mantras) techniques to heal chronic diseases like cancer and epilepsy. To analytically understand and its effect on seed germination system is the attempt of this examine work. We have presented the investigational setup to study the outcome of music on seedgermination and enlargement. With proposed analysis has been carried out. It was observe that plant which is open to the elements of Vedic chanting has a fabulous outcome on enlargement, leaf dimension and inter-node. This research evidently specify the vedic chanting (Mantras) having superior frequency which influence the ability of plants to execute their functions, ensuing in less germination period and growth. Vedic Mantras is considered to be a cosmic sound, The entire psychological pressure and worldly thoughts are removed by chanting Mantra .By this investigation we could sum up Vedic chanting is therefore serves as a stimulant, which is also an energy medicine for seed.

Keywords: *Plant growth, Indian classical music, Vedic chanting, Height, Internodes,*

I. INTRODUCTION

The *voidikas* scriptures on the origin of the universe mentionthat the absolute existence of the brahmis expressed and realized in the sublime vibrations of sabdaand nada. The anahatswar(the evolutionary impulse of cosmic sound) induced by these vibrations is said to be the generator of perpetual energy in the universe. sabda–the omnipresent eternal origin of sound and nada– the eternal element of the self-existent cosmic impulse of music, immanent in the subliminal as well as the gross realms of existence and their ever-evolving expressions in infinity are referred in the *shastrik* literature assabda and brahm and nada brahm

abdaitavada– the *voidikaknowledge* of absolute sound, describes the sublime power of the omnipresent sound (sabda) as an eternal, limitless whole and the sole creator of the universe. Sound is regarded here as the basic source of energy and motion existing in the universe. The existence of the material world is said to have originated from the cosmic impulse, the infinite bang of sabda.(The big-bang theory of the modern science agrees with this conclusion of the risis-scientists of yore). The non-existence or absolute end of the world at the ultimate time – the other ‘end’ of the universal cycle – is also described to be a consequence of similar supersonic explosion. On the subliminal front, the existence of enormous activities² of mind is said to have been realized through the eternal medium of sound.

In our day-to-day life, we generally come across with two types of sound – *vyakta* (audible) and *avyakta* (non-audible). These are defined as *jalpa* and *antarjalpa* in the Jain scriptures. The spoken words fall under the first category and those expressed silently (e.g. while thinking....) or through the language of mind are examples of the latter.

Acoustic theories of modern physics have characterized these categories in terms of frequencies of the involved 'hard sound'. The manifestation of the *vyakta* and *avyakta* are relative in the physical world. The ultra and supersonic forms are *avyakta* to our ears, which can normally sense a sound only in the frequency-range of 20 to 20000 vibrations per sec. Similarly, the loud noise of a busy road would be non-audible to a person who is sitting in a closed house away from the road.... These examples clearly illustrate that the *avyakta* sound also exists in the same 'reality' as the *vyakta* one. Our cosmos consists of the sound waves in all frequency ranges – beyond the grasp of our audio sensors and even beyond the limits of our imagination.... Each impulse of the infinite activities of Nature indwells in the cosmos in the form of subliminal vibrations (of *sabda*) before its physical manifestation in space and time. Many animals in this world are well equipped to perceive such subtle sounds in some range. Several varieties of birds and animals are therefore able to sense the future events, especially, many of the natural calamities of tremor etc, that are impossible to be pre cognized by humans. Often this 'superhuman' potential of animals and birds beats the advanced sensors of sophisticated instruments.[2]

The sonic vibrations of each spoken or mentally thought syllable exist in the universe forever. Some frontline researchers of the modern science of sound hope that further advancement of science and technology would one day enable recording the voices (of the sages of yore) in the omnipresent 'ocean' of ether.

The *vaidika* science of *mantras* – the *Mantra* *vijnana* developed by the *risishad* endowed them with an exceptional faculty of communication across the universe. This power was indeed supernormal as compared to the capabilities of the modern inventions like Medical science, radio, television and radar and Agriculture Sciences...., etc. *Mantra* is the science of the subliminal as well as the cosmic powers of sound. The specific configuration of the syllables compiled in the *mantras* makes them important in terms of associated sonic effect. The enunciation of a *vedic mantra* in a specific composition of accent, pitch, intensity, amplitude and rhythm results in its expansion (at a pace faster than the laser beams) in the endless domain of physical energy waves and consciousness. Because of the unique property of sound to traverse (via the electro-magnetic waves) anywhere in the space, the collective chanting of *vaidika mantras* can induce cosmic impact.

II. SECRETE OF POWER OF MANTRAS

For a substantial understanding of the effects of *mantra* *japa* the knowledge of the science of sound, air and electricity is required along with that of psychology and spirituality. The importance of *shabda* or its manifestation in sound – is recognized in one form or the other by almost all known schools of religion in this world. Even the sound produced by the matter has its effects of varied orders and types. That thunder bolt affects the bio-rhythms in the animals as well as the human beings – is a well accepted claim of homeopathy. The psychologists would agree that the soft sound of the flow of a river does influence the poetic and nature-loving minds in a creative fashion....; and that, the roaring sound of lions induces fear in some and stimulates the valor of a few...., etc. These are some examples of the natural impacts of sound.... Some specific effects of resonance of sound of different frequencies have also been discussed earlier. Just imagine of the synergistic conjunction of the psychological effects with those wonderful effects of sound...![7]

The words spoken with hatred, anger or affection would create corresponding 'matching' effects in the listeners; even animals respond in accordance with this fact. Because of the linkage between psychological and sonic effects, the silent words of thoughts are equally effective like the spoken words. For instance, if a person with sacred and serene mentality is sitting near someone who is engrossed in cruel or erotic thinking, the former would definitely get some kind of irritating or repulsive feeling.... The creative and destructive effects of sound in the form of music are well known. Some more examples in this regard are listed below that throw light on the interconnection of music and psychology.

Science and mantra

The science of *mantras* was developed by therisisin the ancient era with the purpose of creating a happy and prosperous world where the progress of the inner self was given significant importance along with other aspects of human life. The modern science (of *yantras*) has no doubt accomplished great success in material based progress and prosperity. However, the negligence of the sublime domains – of thoughts, emotions and inner sentiments of faith in divine moral values and altruist responsibilities towards selfless service of humanity – has left this progress as one sided and incomplete. In spite of material progress and worldly achievements, one hardly finds peace and happiness in this world today. Possessive and selfish attitude largely prevailing in the entire human society has added to the sufferings of some and the cruelty or apathy of some others... The lack of faith in the moral values, divine origin and dignity of humanity has led to the hidden feelings of insecurity and illusive passions even among the mightier (more successful) and wealthier sections of the society including the elite intellectuals.[7]

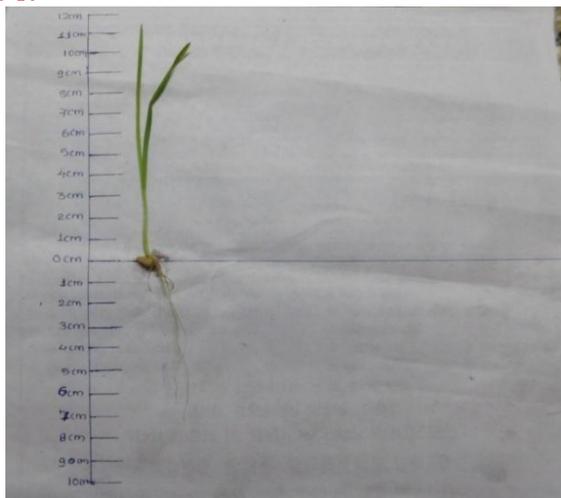
Mantrachikitsahas been an important branch of ancient Indian Medicine. This is a sublime sound therapy and science of healing of the body and the mind derived from the principles of *Mantra* vinjara. Even today, the use of this ‘esoteric’ mode of treatment is quite popular– especially in the interior parts of India, for eliminating the poisonous effects of biting by the snakes, scorpions, dogs or lizards etc. *Mantra* therapy is also applied here for curing a variety of diseases including jaundice, typhoid, epilepsy, hysteria ... etc. Same Like Human body mantra therapy can be implemented on plant growth. We have proposed the empirical study on effect of different types of music on growth of plant.

Music is an art form whose medium is sound and silence. It produces beauty of expression, emotion in significant forms through the elements of rhythm, melody, harmony and colour. A property of living things is that they respond to stimuli. Plants are complex multi-cellular organisms considered as sensitive as humans for initial as saying of effects and testing new therapies. Sound is known to affect the growth of plants and plants respond to music the same as humans do. It also receives the same sound waves and could in fact be receiving some form of stimuli. Music can cause drastic changes in plants metabolism. Plants enjoy music, and they respond to the different types of music and its wave-length. Little work has been done in this field wherein the plants have been subjected to different types of sound and the effects being monitored and analyzed. On the basis of literature review the present study was an attempt to test the music effect on plants through plant growth

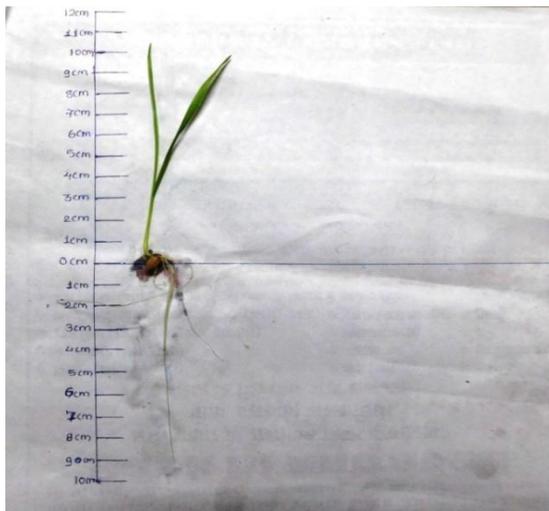
III. EXPERIMENTAL IMPLEMENTATION

Very little research has been conducted on the specific effect of the growth of plants subjected to sounds of varying intensity and frequency. Any environmental factor that places a biological system under stress can affect its performance and/or behavior. The effect of sound on physiology and behavior of animals and man has been studied by various researchers. However, only a limited amount of detailed information is available on the effect of sound on plant systems. Audible sound is vibration traveling through matter and is perceivable to the human ear within a frequency range of around 20 to 20,000 cycles per second, or Hertz (HZ)[5]. Sounds below this frequency range are called “subsonic” and above this threshold are called “ultrasonic” Sound is a wave and more specifically, a pulse wave.

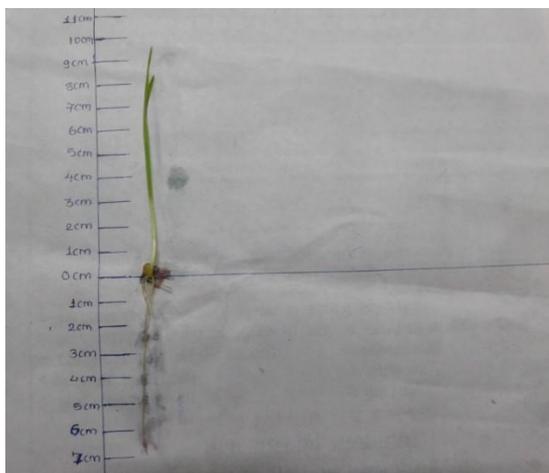
This simply means that it is formed by areas of higher and lower pressure in the atmosphere through which it travels. Terms such as “amplitude,” when used in reference to sound, are actually referring to the plot of the air pressure versus time on a graph. Now, it is difficult to believe such (extremely small) fluctuations in air pressure could have any effect on a plant's growth. This is very little difference, to a plant, in music and ambient noise. Plant can't here music but they can sense the vibration created by music. By sensing that vibration plant will respond according to the music feeded.



Experimental setup exposed to vedic chanting.



Experimental setup exposed to Indian classical music.



Experimental setup exposed to Rock music



Experimental setup of controlled environment

Pots were prepared and groomed with distilled water and wheat seeds were selected and soaked overnight for germination and the seeds were sown in a standardized procedure for repeats and the music of the selected music was played with the help of the speakers and were kept in a separate room to avoid other sound. Equal amount of water was poured in each pot and placed under normal environmental conditions (e.g. light and temp.) [3].

Music was played regularly for 30 days between 7am to 9am every day. The time taken for germination and height, number of leaves were recorded to study morphology. After one month the results were recorded and photographs were taken. Control plant without exposing to music was also maintained.

Plant with Vedic (Gayatri Mantra) injection accelerates the rate of growth of plant. Even in adverse circumstances when the natural growth of plant is slow. Mantra demonstrates its efficiency in acceleration of growth. Comparative analysis of different parameters are tabulated in the following table.

COMPARATIVE ANALYSIS OF PLANT GROWTH EXPOSED TO DIFFERENT MUSIC

Parameter	Vedic	Classical	Rock	Controlled
No of Leaf	2	2	2	2
No of Root	6	6	4	4
Height of Leaf	11.5cm	10.5 cm	9.7cm	9cm
Height of Root	7.5cm	7.2cm	6.9cm	6cm

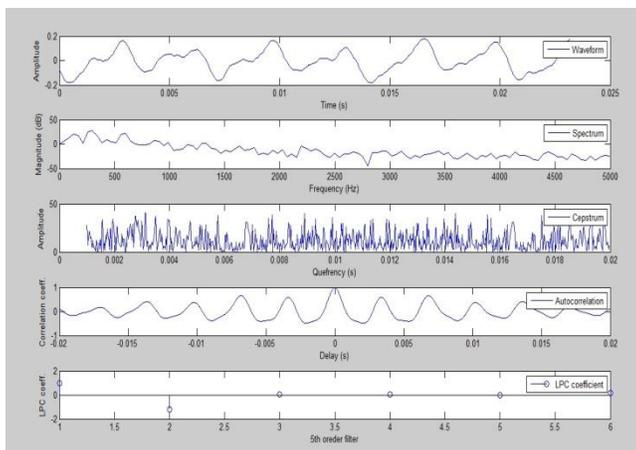
IV. RESULT AND DISCUSSION

From the experimentation we have observed that, the final measurement of sound is frequency. Frequency is similar to wavelength, the standard use of period, and speed. It is essentially the amount of times a wave occurs in an area over a given amount of time. It is equal to the speed divided by the wavelength. These vibrations from different music

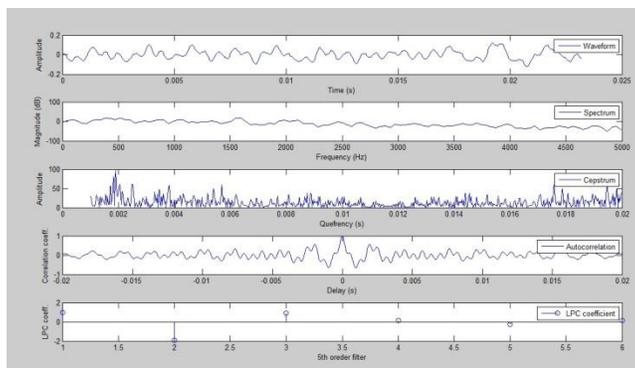
like vedic chanting or Indian classical music absorb by plants or seed and these vibration promote growth of plant. Vocal pronunciation of Indian vedic mantras (Gayatri mantra) contents high frequency signal. The high frequency harmonics promote seed germination and the growth.[1]

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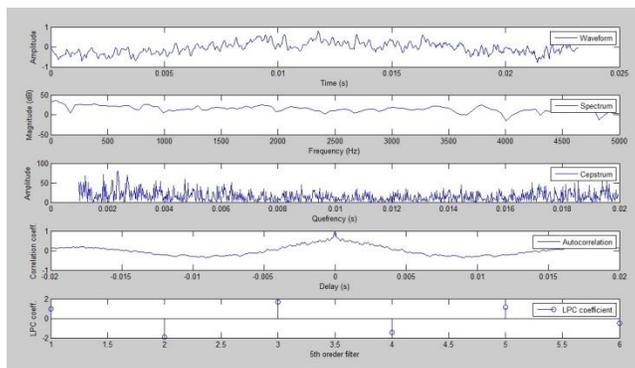
Also same music and mantra were process in Matlab tool. The result were incredible.



Experimental setup of vedic chanting



Experimental setup of Classical chanting



Experimental setup of Rock Music

It was seen that the plants exposed to Vedic chants show the maximum elongation of shoot, maximum number of leaf and color of leaf. The inter-node elongation was highest in plants exposed to Vedic chanting than Indian classical music (Figure 2). This clearly shows that the subjecting the plants to Vedic chants or Indian classical music promotes the growth of plants as compared to the control group (Figure 3). This experiment clearly indicates the Vedic chanting (Mantras) having higher frequency which affects the ability of plants to perform their functions, resulting in greater growth.

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