

# Effects of Yagya on Environment Purification and Human Mental Health or Physical Health

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**Abstract:** Yagya is an ancient Hindu Vedic ritual aimed at ablution of the body and surroundings by reinforcing the natural equilibrium in various components of the body and ambient environment. Yagya is directed with selective medicinal preparation of herbs that is forfeited in the holy fire inflamed by specific woods along with the chant of distinct Vedic Hymns (mantras). Medicinal smoke significantly removes human pathogenic microbes. The vaporization and sublimation of ingredients of havansamagri in an inverted pyramid shaped yagya-kunda deliver vast amount of therapeutic and environmental benefits. Yagya is basically a healing process. "Heal the atmosphere and the healed atmosphere will heal you." Different experiment showed that, the smoke produced by burning the mixture of ghee and sugar kills the germs of certain diseases. The foul odours are automatically neutralized by various volatile oils get diffused in the surrounding atmosphere along with steam and smoke. Yagya could also be used as a powerful remedy against varieties of physical (bodily) and psychiatric diseases and psychosomatic disorders by proper selection of wood and HavanSamagri. The stress and strain of modern life, degradation of social norms and all- pervasive fall in moral values are contributing to an alarming increase in psychosomatic diseases. Psychosomatic disorders are believed to be physical diseases that have a mental component derived from the stress and strain of everyday living. Here Yagya might offer a solution to this serious problem as well. As, in performing Yagya, two energies, namely, the heat from Yagya fire and the sound of the Gayatri and other Mantras, are combined to achieve the desired physical, psychological and spiritual benefits. A lot of research has been done at bhramvarc has laboratory at Haridwar and many other places in and outside India to prove the effects of Yagya on body. So, it appears to be a God-send gift of the ancient Indian sciences for achieving good psychosomatic health. Doing Yagya was yuga dharma (Supreme prerogative and duty) of Treta yuga and people used to see the lord being satisfied by that when he used to appear in the yagyakund. "अयं यज्ञोः विश्वस्य भुवनस्य नाभिः" (Atharvaved 9/15/14)

**Keywords:** Yagya, Mental Health, Physical Health, Environment Purification

## I. Introduction

A Yagna is also known and called a Homa or Havana. The importance of Havana is stated in approximately 114 Mantras in the Sama Veda. According to Yajurveda, Havana is the most effective, appropriate, and beneficial deed. In Hinduism, any big Puja is incomplete without Havan. A Havan can achieve a level of sacredness and purity that no other ritual can. According to the Vedas, the only ways to achieve Moksha (salvation) or Self-realization are by Yajna or Yagna and the Gayatri Mantra. There are several mantras linked to Yajna in each of the four Vedas. According to the Yajur Veda mantra –

“Yajudevapujasangatikaranadaaneyshu,” the word “Yaj” / Yagna has three aspects

- Deva Puja: worshiping and honoring the Divine in all forms.
- Sangatikarana: which means unity, taking everyone along with?
- Daan ‘charity’: giving, sharing, and gifting what one has been blessed with. It is a yajna that purifies our life, our mind, and our actions.

The purpose of a Yagna ritual has been to bring ancient yogis into direct contact with the source of the universe by connecting them with the elements-the underlying forces of its creation.

#### What is Hawan or Homa?

- Yagya comprises of igniting a holy fire using pure wood and pure cow ghee and cow dung cakes and with the chanting of mantras, the hawish is poured into the fire with the word “Swaha!”. The hawish comprises of Indian Cow Ghee and mixture of Herbs called Hawan Samagri along with some other pure materials.
- The fumigation of specific object in the *Yagna* — fire is a scientific method of sublimation of matter into energy and elaborate its potential and positive effects in the surrounding air. The electromagnetic waves generated thereby help in transmitting at cosmic level, the desired sonic signals ‘stored’ in the *Mantras*, which are chanted during the process of sacrificing the special materials in the fire.
- In order to get an idea of the various chemical changes which take place, it is essential to know the various substances offered in Yagya.
- Wood: Wood has to be dry and free from dust, insects and worms. The wood is cut into small sticks of varying lengths called Samidhas according to the size of the altar or Agnikunda.

**Table 1: Usual ingredients of ‘Hawan Samagri’.**

Vernacular name	Botanical name	Family
Jow	<i>Hordeum vulgare</i>	Gramineae
Til	<i>Sesamum indicum</i>	Pedaliaceae
Chauval	<i>Oryza sativa</i> Linn.	Gramineae
Makhana	<i>Euryale ferox</i>	Nymphaeaceae
Kismis	<i>Vitis uinifera</i>	Vitaceae
Nariyal	<i>Cocos nucifera</i>	Arecaceae
Baadam	<i>Prunus eommunis</i>	Rosaceae
Chandan	<i>Santanum album</i>	Santalaceae
Deodar	<i>Cedrus deodara</i>	Coniferaceae
Agar	<i>Aquilaria agallocha</i>	Thymelaceae
Indrayan	<i>Citrullus colocynthis</i>	Cucurbitaceae
Jatamansi	<i>Nardostachysjatamansi</i>	Honeysuckle
Chandni tagar	<i>Ervatamiadevarricata</i>	Apocynaceae
Pepal	<i>Ficus religiosa</i>	Moraceae
Pista	<i>Pistacia vera</i>	Anacardiaceae
Tambul	<i>Zanthoxylum armatum</i>	Rutaceae
Kapoor(camphor)	<i>Cinnamomum camphora</i>	Lauraceae
Kesar(saffron)	<i>Crocus sativus</i> L	Iridaceae
Guggul	<i>Commiphora mukul</i>	Burseraceae
Ashwagandh	<i>Withaniasomnifera</i>	Solonaceae
Nagarmotha	<i>Cyperus scariosus</i>	Cyperaceae
Nagkesar	<i>Mesua Ferrea</i>	.....
Tejapatra	<i>Cinnamomum macrocarpum</i>	Lauraceae

Kulanjan	Alpinia galanga	Zingiberceae
Jaiphal (Nutmeg)	Myristica fragranus	Myristicaceae
Laung (Clove)	Syzygium aromaticum	Myrtaceae
Neem	Azadirachta indica	Meliaceae

The principal types of wood used are the following:-

- Sandal-wood (**Santalum Album**)
- Agar and Tagar wood (**AquilanaMalaccensis and Valeriana Wallchii**)
- Deodar (**CedrysLibani**)
- Mango (**Mangifera Indica**)
- Dhak or Palash (**Butea Frondosa**)
- Bilva (**Aegle Marmelos**)
- Pipal (**Ficus Religiosa**)
- Bargad (**Ficus Bengalensis**)
- Shami (**ProposisSpicigera**)
- Gular (**Ficus Glomerata**)

## II. Types of Yajna

### ➤ Everyday Yajnas

- **Anna-sudhhi** - purifying the food. In India, the ancient tradition has always been before eating rice or any carbohydrate; add a spoonful of ghee (clarified butter) on it. This tradition exists even today. That spoonful of ghee makes you digest the food slowly. Thus, it does not immediately get converted to sugar and affects the sugar level in your body. It aids digestion.
- **Dhana-shuddhi** - when you have earned some wealth, a portion of it should be donated. If you spend everything that you earn on yourself, these earnings are considered impure and a sin. Money becomes pure only when you spend a percentage of it as yajna.
- **Meditation**: when you sit for meditation and withdraw the mind from all the senses, you feel fresh and peaceful from inside! You feel rejuvenated, and purified—this is Yajna.
- **Agnihotra** : Below are the steps to perform our mini-ritual of Havan(Yagna) at home:
  - Set the intention
  - Identify those thoughts and beliefs that have been troubling most and need to let go of- “sacrificial offering”,
  - Chose a declaration or mantra to be recited linked to the intention,
  - Re-affirm the intention
  - On a quiet morning time, light the flame over an earthen pot- re-affirm and repeat the intention 11 times,
  - For each repeat your chant, add camphor to the flame, offering away thoughts and beliefs that are holding you back and
  - Finally, before getting up from the Yagna, re-affirm the intention and purpose.

Staring into a fire or a flame can be captivating, almost feeling of a meditative state. Use the power of fire to drive your inner fire toward its purpose. You can perform this Yagna(Havana) known as ‘agnihotra’ as an everyday ritual, or when you’re about to begin a new venture, or whenever you wish so.

## III. Mythological(Ancient) Yagnas

The manner of the gathering of thoughtful people, exchanging of ideas, and solving problems have been named as- Yagya. Some prominent and great yagyas are described as follows:

- **The Rajasuya** - Just like Yudhishthira did. This yagya used to take 33 months and had been performed for all-around political victory. All the best people gathered and all kinds of problems - political, social, cultural, economic, protective, etc. - were discussed and the decisions taken were universal. The system of governance is called Rajsuya. Now-a-days, the Indian Parliament is the only Rajsuya.
- **Ashwamedha Yagya** - Only the Chakravarti( king of kings) king had the right to perform this yagya. As has been done by Raja Ramchandra. It used to be completed in two years. Leaving the horse of Ashwamedha free, he had sent an invitation to the thoughtful and asked them to gather at one place. To organize the nation and its powers well is the Aswamedha Yagya.
- **Vajpeya Yagya** : Under it, events were organized to solve moral, spiritual, personal and social, and religious problems. This yagya is said to be completed in forty days. Like Kumbh Mela – which are being held from time to time.

### COMPOSITION

The Yagya, which includes the application of medicinal herbs, is recognized as Bheshaj Yagya. Even in contemporary times, application of Bheshaj Yagya is usually seen in Indian culture. It is an Indian therapeutic procedure of transnasal and pulmonary inhalation and transcutaneous permeation of medicinal-smoke of precise herbs produced through sacrifice in specific-fire-environment for health benefits. The key reason for this is that Yagya is the process through which one can preserve the natural balance in many components of the environment. “Agni” means ‘fire’ and “Hotra” means an ‘offering’; Agnihotra means the act of an oblation into the fire. Agnihotra consists of a base fire generated in a specifically designed vessel fixed on the surface of the level ground. Burning fire of some specified characteristics forms the base fire. To these base fire specific substances like clarified butter (ghee) and herbal materials are added in the form of oblations. It should be stressed on that the purpose of agnihotra is not to burn the ingredients that are added in the form of oblations, but to vaporize them i.e. to heat them just to the extent that they alter the air quality. Yagya is directed with selective medicinal preparation of herbs that is forfeited in the holy fire of specified woods along with the chant of specific Vedic Hymes (mantras). The chemical reaction and sublimation of selected wood and havansamagri (Table 2) in an inverted pyramid shaped yagya-kunda to deliver vast amount of health benefits and therapeutic and environmental purification applications.

**Table 2: Woods recommended for the use in Hawan.**

Vernacular name	Botanical name	Family
Mango	Mangifera indica	Anacardiaceae
Sandal-wood	Santalum album	Santalaceae
Agar wood	Aquilanamalaccensis	Thymelaeaceae
Tagar wood	Valeriana	Valerianaceae
Deodar (cedar)	Cedrus libani	Pinaceae
Dhak or Palash Butea	frondosa	Fabaceae or Leguminosae
Bilva	Aegle marmelos	Rutaceae
Pipal	Ficus religiosa	Moraceae
Bargad(Banyan)	Ficus bengalensis	Moraceae
Shami	Propolis picigera	Fabaceae or Leguminosae
Gular (wild fig)	Ficus glomerata	Moraceae

Ber	Zizphus jujube	Rhamnaceae
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It was detected that the ability of the smoke to purify the air was maintained up to 24 hours in the closed room. Absence of many pathogenic bacteria even after 30 days was suggestive of the bactericidal potential of the medicinal smoke treatment. In another study, Bio fumigation was supported by sweltering the mixture of selected plant with fumigation catalyst with ghee and cow dung cakes. Various holy sticks (dhoop) made from different trees were attained and fumes were formed. Numerous bacteria secluded from different sources were exposed to different stick fumes (dhoop). It was detected that the fumes of *Achyranthus aspera* controlled the bacterium *Streptococcus pyogenes* whereas *Azadirachta indica*, *Calotropis gigantea*, other components like *Ficus benghalensis*, *Ficus religiosa*, *Mangifera indica*, and *Pongamia pinnata* were also found to be fruitful in controlling pathogenic bacteria.

#### IV. Effect on Human Mental Health

##### Psychological Effect

The anxiety, depression, and stress, along with diabetes, obesity, lack of vital power, and many other threats to human health, are the issues which humans have to face in 21st century due to modern bad lifestyles. Many medicines and scientific experiments to find the solution in new ways through pharma industries are being sought. The present manuscript not only deals the scientific aspects on these all afore said issues, but also scientifically analyses the experiments of energy levels and Chakra energy of subjects, which were measured through pre and post of this Indian ritual. The visualizations have been measured through Kirlian energy aura meter, which quantifies the complex bio energy, energy disbalances, and Chakra energy of the individual. It is also a blend of science and spirituality, and establishes strongly the fact that in the future, all global, physical, mental, and social problems will have a single solution; and that is Yajna and Mantra propounded by Indian Rishis.

Let's see the scientific part of the syllables of Gayatri mantra, and its significant activation on 24 glands of a person who chants the mantra. The hormonal secretions are controlled and balanced, thus balancing the emotions, and helping the person to reverse back his physical and mental health, brings revolution in thought patterns in both alpha and beta levels, giving rise to his personality upliftment (Pl. refer Fig. 1)

Figure 1. The Syllables of Gayatri Mantra and Their effects on the Human Body parts (Saxena, M. et al., 2018)

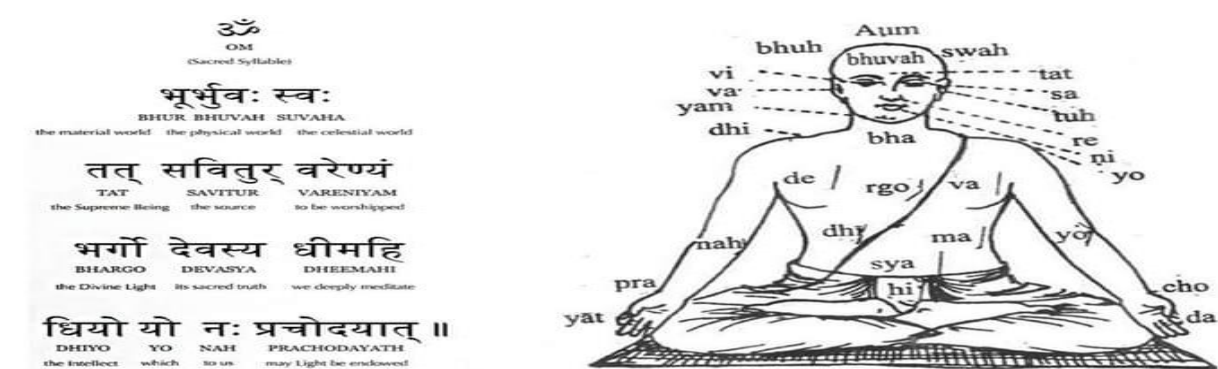
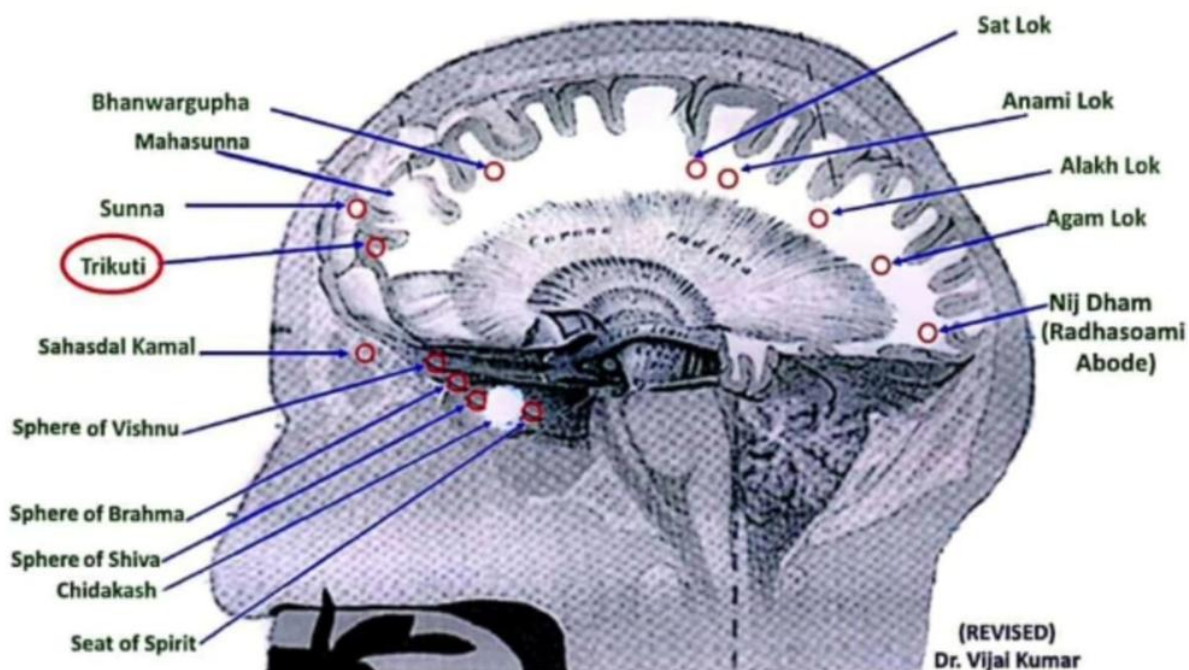


Figure 1

There are many neuro studies done on the effects of Gayatri Mantra. Its vibrations, frequencies on our system and also its effects on other patients have been medically proven. It has been visualized that the effects of

Gayatri Chanting are on nerves and its functions along with it works with both parts of your brain and then through whole system. The Meditation practitioners also teach this, how to take universal energy, through Gayatri Mantra and activate all glands individually with mantras to energize oneself (Pl. refer Fig. 2) (Ghosh et al., 2015); (Apte et al., 2016).



**Figure -2.** Brain Regions during Meditation. (Saxena, M. et al., 2018)

Yajna Meaning, Functioning and Symbolic Interpretations Ms. T. Rajeshwari, an active Yajnapathy researcher has depicted that humans and deities are connected with Yajna. Every human is born with some traits, holds him in the form of faith, which is an inseparable aspect of human personality. It is embodied by birth as our psych. Our psych consists of consciousness (chitta), brain (buddhi), mind (Mana) and id (ahankara). It is the primitive and instinctual part of mind that contains aggressive drive and hidden memories as Karma. Thus the nature of faith defines the quality of our life (Gupta et al., 2012). Yajna means sacrifice, usually in the sense of ritual fire, worship ceremony in which negative Karmas can be consumed by giving oblations (ahutis) with clarified butter or certain medicinal herbs, along with Vedic mantras (chanting of mystic sound syllables repeatedly) and offering oblations with swaha (surrendering to supreme). Vibrations produced by mantras during Yajna penetrate the energy sphere at the subtle and cosmic level. The chanting of Vedic mantras are latently contain the essence of quiet essential sound of torrent of life sustaining energies emanating from the cosmic energy centers (Chauhan et al., 2015); (Karatzas et al., 2010). The two energies during Yajna are heat from the Yajna fire, and the sound of chanting Gayatri and other Vedic mantras are blended together to achieve the desired physical, psychological and spiritual benefits. The appearance and the energy of subtle body affects our physical and mental plain as it inter-penetrates our physical body by attracting the universal divine cosmic energy that further helps in cleansing the human psych helping to understand the true virtues and inculcate them, and thus the personality traits of demonic nature is destroyed and eradicated. We humans through Yajna are thus connected to our divine deities (Cortes et al., 2000).

Mantras and its place in Yajna (Mantra ka Yagyonmesthan, 'Place of Mantra in Yajna') where it has been explained what mantra is, how it works in human physical, mental and subtle level during Yajna and attains the cosmic level oneness. We all know that every mantra represents the energy of God or Goddess, and as per mythology, every divine has a plant origin. For example Lakshmi Mantra shreem is turmeric orient (When you chant Gayatri with shreemsamphut (Special syllables), revered Pt. Sriram Sharma Acharyaji has asked to use turmeric in oil to massage and in our food, also to imagine Gayatri in yellow attire in Gayatri MahaVigyan). When you have the fruits, oil, seed, leaves or roots that Mantra can get inculcated into blood, along with if you chant the mantras little the divine begins to live in that person's consciousness and the mantra siddhi happens (NadiShastra) (Dev et al., 2017); (Limaye et al., 2019). This is for those who are unable to perform austerities like big anushthan due to busy life. This gives us an idea to search for plant origin for Gayatri mantra. It was searched and got a plant Himalayan intellect tree, also known as Jyotishmati, Vanhiruchi, Katumbhi etc. In English it's known as staff tree. Dr. VandanaSrivastava of Dev Sanskriti Univ. Haridwar has prescribed jyotishmati oil for autistic and MR patients. It is popularly used by Ayurveda doctors (McCarron et al., 2018).

### **1. Effect on Anxiety and Stress:**

Our study indicated a reduction in stress and anxiety. The herbs we used are traditionally known for mental and stress reduction. Some of the herbs included are Brahma, shankpushpi, jatamansi, vach, etc. Also, it is a well-known fact that the substances, when taken in their vapor or gaseous form through the nostrils, have much greater efficacy. Besides it can help many participants with same quantity of substance. The sublimated vital elements and herbal medicines inhaled have a direct healing effect. Yajna therapy, therefore, with mantra and specific herbs can act as a holistic approach to fight stress and anxiety quantity of substance. The sublimated vital elements and herbal medicines inhaled have a direct healing.

### **2. Effect of Gayatri Mantra on Personality:**

Every moment everybody is broadcasting their being continuously as subtle vibrations. We feel stressed, restless, and tired when we come in touch with negative vibrations knowingly unknowingly. If a tense person is passing around any one, one gets exposed to tension, if one comes across sick person, one is vulnerable to sickness. When one experiences meditation, one becomes soft and vulnerable. Whatever comes near one, it enters in oneself. Hence, there were Kavacham. The acoustic vibrations due to its chanting along with meditation develop a shield around oneself. Gayatri Mantra chanting, meditation on the rising sun in front of the sun etc. cleanses one's aura. Trikal Sandhya (3 Times Chanting in a day) helps one to remain unaffected even when one is in crowded place or exposed to negative person or space. Hence, when one takes spiritual endeavours like Ashwamedha Yajna; it is advisable to first do collective Sadhana and Tapas to clean and purify the subtle vibrations (Rastogi et al., 2019d).

### **3. Gayatri Mantra Researches on Neuro Sciences**

Ms. Rajeshwari also revealed the fact that there are many neuro studies on effects of Gayatri mantra, on its vibrations, frequencies on our system and on any patients. Also there is study for the effects on which part of brain and nerves and its functions. It has been found that it works with both parts of your brain and then through whole system. The practitioners teach how to take universal energy through Gayatri mantra and also activate all glands individually with mantras to energize. You can opt for Vangmay" NAADA-BRAHMA, SHABDA-BRAHMA" to go and explore in more

details.<https://www.facebook.com/2039279573047305/videos/442158706694861>. Please see complete video for this research by Dr. Rama Jaysundarji of AIIMS (Sharma et al., 2019).

#### 4. Effect on Psychological and spiritual Benefits

Yagya is performed with an aim at ablution of the body and surroundings by reinforcing the harmony in various components of the body and ambient environment. In the Yagya, traditional medicinal herbs are fortified in the sacred fire using clarified butter (Ghee). These herbs include specific woods and herbs. Pure fumes (aroma) coming out of herbs along with chanting of mantra in Yagya can provide the holistic benefit including physiological, psychological, and spiritual benefits.

#### Effects on Human Bodies and Environmental Purification

**Table 3: Effects of various active vaporized constituents of Hawan Samagri on human body.**

Botanical name	Active component	Effects on human body
Saffron Crocus sativus	Crocin	Antihypertensive, antitussive, antioxidant, antidepressant, anticonvulsant
Jatamansi Nardostachys jatamansi	Valeranone	Increase in seizure threshold, Inhibit the electroshock convulsions
Coconut Cocos nucifera	Monounsaturated fatty acids, Saponins	Inhibit convulsions, increase GABA and, serotonin level
Sesame seeds Sesamum indicum	1-(5-methyl-2-furanyl)-1-propanone	propanone Antioxidant, antimicrobial, anti-inflammatory, anticancer
Clove Eugenia caryophyllus	Eugenol, $\beta$ -caryophyllene	Analgesic, antioxidant, anti-inflammatory, anxiolytic, anticonvulsant.
Nutmeg Myristica fragrans	Myristicin and macelignan	Reduce severity of seizures.



Nagkesar Mesua ferra	Sesquiterpene	Anti-inflammatory, anti-pyretic.
Tagar Valeriana wallichii Valerian Antispasmodic,	Sedative	Anticonvulsant
Agar Aquilana malaccensis	Sesquiterpenes	Sedative action.
Nagarmotha	Cyperus rotundus Cyperone	Anti-inflammatory, anti-microbial, anti-fungal, anticonvulsant action.
Ber Zizphus jujube	Flavonoids, saponins, tannins, vitamin A, vitamin B	Anti-microbial, anti-ulcer, antispasmodic, immunostimulant, anticonvulsant action.
Phoolmakhane Nelumbo nucifera	N-nornuciferine	Anticonvulsant action.
Mango Mangifera indica	PGG, polyphenolics, flavonoids	Increase GABA levels, anticonvulsant action.
Neem Azadirachta indica	Azadirachtin	Antibacterial, antiviral, immune booster, anti-inflammatory
Sandal-wood Santalum album	Azadirachtin	Antibacterial, antiviral, immune booster, anti-inflammatory

#### V. Importance of Yajna in Better Digestive System:

Mr. Lokesh Kumar, an active volunteer has informed that when the Oxygen content is higher in early morning time in the atmosphere then it is considered to be useful for the health while walking. One will get nourishment and nutrition of the contents when the useful components are available in air. Havan fulfills the same purpose. It

helps in gasify the useful herbals so that all coming in the touch of that surrounding can be benefitted by this. This is very much important related to vitality and health. The same thing is related to nutritious elements (Devender et al., 2019); (Azam et al., 2016). The nutritious diet is felt useful to make poor body stronger. But the question is that how the person with bad digestion can digest the nutritious and rich diets. The ill and poor person has slow digestive process. Whenever they consume simple or small amount of diet, they feel omitting sensations. Yajna-Havan is the perfect and simplest means to help the person to digest the rich diet. The process is that rich diets like different nuts etc. are offered in oblations in Havan and they are consumed through nasal point, mouth or tiny body pores. Then this rich diet contents can easily enter in the body and can be more beneficial to people as per their convenience (Vangmay 26, Yajna EkSamagraUpcharParkriya, (Rastogi et al., 2018b); (Rastogi et al., 2018c).

### **1. Effect of Mantra Chanting and Yajna Extracts / Ashes in Farming**

Mr. Dinesh Sharma is a businessman at Ramprastha Green, Vasundhara, Ghaziabad, U.P., NCR, and India. He and his team have found surprising results at their home kitchen garden of Yajna ashes conducted with Vedic Mantra Chanting. They grew the tomatoes and fruits without using any fertilizer; also they got good productions of garlic, beetroot and Methi. It was found astonishing effects of Yajna and its ash acted as a natural catalyst and fertilizer. Now they are trying with their team to work on some farms as a bigger sample work so that it later is proposed to be used as natural fertilizer to enhance organic food production (Rastogi et al., 2018d).

### **2. Pollution Control through Yajna**

Speaker and writer Dr. Omprakash Pandey of Banswada, Rajasthan has stated in his article which has been published in DainikBhaskarhindi newspaper through BharatiyaVidyapeeth, B. Ed college campus, Banswada Rajasthan, India that Global warming has been a cause of crisis not only for India but for whole world. Every year the conferences, seminars and summits are held at global level to check it. Jika, Ebola, Nipah, Dengue, Chickengunia, swine flu are those virus, which were not in existence earlier and one has never heard those names. These virus are spreading only due to the reason because there are holes in Ozone layer of the earth, even larger the size of Antarcatica continent and it is causing the radiation incoming to the earth (Singh et al., 2018).

### **3. The Research for Cure of Sugar, Blood Pressure, and many other diseases through Yajna**

Dev Sanskriti University in Haridwar has always reached different heights of various dimensions for the development of Indian culture. It is continuously applying new plans. In same sequence, the pro-vice chancellor of university, Dr. Chinmay Pandya has started the Yagyavalkya Research Center. The purpose of this center is to accelerate the work of Brahmvarchas established by Pt. Sri Ram Sharma Acharya ji in 1979 in a new modern ways. The Chancellor of University Dr. Pranav Pandya and patron Shailbaladidi conveyed their wellwishes for the continuous development of this center (Rastogi et al., 2018f). Dr. Chinmay Pandya ji told that total seven research scholars have achieved their doctorate from the University on Yajna Sciences. The Center has been established caring their experiences. It is high need of time to make the access of Yajna and Gayatri to individual in modern domain. He stated that this center will act as a milestone for the scholars who are curious to do some concrete researches in Yajna Sciences (Oprea et al., 2011).

### **4. Antifungal effect**

Laboratory tests were directed by exposing petriplates having czapek dox agar medium, in a closed room, before and after fumigating 'Hawansamagree' and plant parts (dried leaves, bark, sawdust) of *Mangifera indica*, *Azadirachta indica* and *Santanum album*. Results displayed substantial decrease in concentration of fungal load. This method can be successfully applied at actual work places like small flour mills, ginneries, cobbler shops etc., to limit the concentration of lethal fungi like *Aspergillus*, *Penicillium*, *Alternaria*, *Curvularia*, *Cladosporium* etc.

## **5. Nosocomial infections**

Camphor purifies the air in the diffusive atmosphere and achieves various medicinal benefits when we inhale. It acts as a germ killer, mosquito and fly repellent and bounds spreading of the virus in that place. The chief ingredient in Hawan is mango wood (*Mangifera indica*) when burnt releases formaldehyde a gas which slays harmful bacteria thus purifying the atmosphere. The jaggery burnt in the Hawan also releases the formaldehyde gas.

## **VI. Yajna & Environment - Effects and Benefits**

Yajna purifies the doer, the receiver, and the environment. The benefits of yajna are not restricted to the time of activity or to the people who participate in it but extend much beyond.

- A yajna and its ash purify the air, water, soil, and agriculture as found in scientific research.
- Reduces the harmful bacteria in the atmosphere significantly and boost immunity.
- After the yajna, the environment is charged with Prana and positive energy which nourishes all beings by cleansing and healing the atmosphere.
- Yajna also reduces air pollution by dropping the concentration of particulate matter in the air and the harmful gases like NO<sub>2</sub>, CO, and air pollutants like SPM (Suspended Particulate Matter) and RSPM (Respirable Suspended Particulate Matter).
- The distance did not affect the influence that the yajnas had on the environment. The yajnas' positive effects were observed in places more than 6500 km away immediately after the yajnas.
- It balances the environment, protecting against negative energies.
- By studying the auras of various samples before and after the yajnas, it has been observed that the positive vibes or auras became significantly more positive by 300 %.

To study the subtle effect of the yajna on the environment, a research team used an aura and energy scanner known as the Universal Aura Scanner(UAS) along with its sixth sense. This UAS has been invented by Dr. Mannem Murthy (a former nuclear scientist from India). This instrument can ably detect negativity and/or positivity in any object's aura along with the length (or extent) of the aura.

- 'Electromagnetic radiation' impacts the environment, and dangerously 'pollutes' the mental and physical well-being of human beings, especially since the Corona -19 upsurge. Research has shown that electromagnetic radiation from devices is greatly reduced in the yajna environment.
- It is truly been said, "Heal the atmosphere and the atmosphere will heal you."

Experiments on Havana were conducted by a French scientist called Trelle. He discovered that when mango wood is used in yajna, a gas called "formic aldehyde" is released. It harmful bacteria and purifies the air. The scientists then created "formalin" from "formic aldehyde" gas. He also researched jaggery (Gur) and discovered

that when the jaggery is burned, it produces “formic aldehyde” gas. Another scientist, Tautilk, discovered that if we remain in a ‘Havan and its smoke’ for half an hour, the typhoid germs are killed.

## VII. Miscellaneous Effects

- The mind calms down and a sense of serenity dawns. The aroma of the yagna fumes is also quite refreshing and sometimes acts as a natural perfume.
- It is interesting to know that an average adult eats \*2 kg of food per day, drinks \*3-4 litres of water, and breathes \*11,000 litres of air in a day! Thus the quality of air can have a significant impact on our health.
- They are influential tools that generate enormous positive spiritual energy, which ultimately increases well-being in society, bringing harmony and good health.
- The ‘havan- ash’ can be used to purify water in water bodies and make it fit for drinking by increasing the dissolved oxygen content, regulating the pH, and removing the harmful bacteria in it.
- ‘havan- ash’ is also being used to cultivate organic food having higher yield and nutritional value.
- One can explore homa farming or kitchen gardens through ‘Agnihotra havan’ at home as well.
- Yagna is beneficial in resolving a variety of financial, health, marital/family, and career/job-related issues.
- In the Atharva Veda, various types of yagnas are given for curing diseases. Modern research has shown yagnas to help reduce anxiety, addictions, stress, and other lifestyle-related diseases. Their therapeutic use is a topic of research.

By having rich and nutritious foods devoid of any chemical pesticides or fertilizers cultivated using homa farming, having pure and balanced water and breathing in pure air charged with Prana, living in a charged atmosphere, and balancing our emotions and thoughts through Yagna, one can truly live a sustainable, healthy and holistic life that nourishes the environment and us.

### Scientific Aspects of Yagya

There are two basic energy systems in the physical world: Heat and Sound. In performing Yagya, these two energies, namely, the heat from Yagya’s fire and the sound of the Gayatri and other Mantras, are combined to achieve the desired physical, psychological and spiritual benefits. The fumigation of specific substances in the Yagya-fire is a scientific method of subtilisation of matter into energy and expanding its potential and positive effects in the surrounding atmosphere. The electromagnetic waves generated thereby help in transmitting, at cosmic level, the desired sonic signals ‘stored’ in the Mantras, which are chanted during the process of sacrificing the special materials in the fire.

### Yagya's Effect on Environment - A Study

The industrial wastes, rapid urbanization, deforestation, air and water pollution, disturbances in the ozone layer - formation, radioactive waves etc., have destabilized the human, animal and plant life cycles. The ecological imbalance caused by these acts of ‘civilized men’ has resulted into disastrous threat not only to human survival but to the life as a whole on our planet. Till recently it was accepted that research into science can furnish answer to all of man’s problems. Today we find increasing number of diseases including malfunctioning of body organs due to increasing severity of pollution in the atmosphere. Ozone layer depletion has been causing ailments like sunburn, skin cancer; cataracts and weakening of the immune system. Viruses are becoming Drug-resistant and showing consistent growth trends.

Experimental studies show that the incidence of physical ailments, sickness and disease are reduced in the houses, where the Yagya (Agnihotra) is regularly performed because it creates a pure, nutritional and medicinal atmosphere. It renews the brain cells, revitalizes the skin, purifies blood and prevents growth of pathogenic organisms. Agnihotra is basically a healing process. ‘Heal the atmosphere and the healed atmosphere will heal

you'- is the Modus Operandi. Purification of environment through the constituent electrons of the substances fumigated in the Yagya is an obvious effect of this process. The observation of some distinguished scientists is noteworthy in this regard. Dr. Hafkine has mentioned that - "mixing ghee and sugar and burning them creates smoke which kills the germs of certain diseases and secretion takes place from some glands relate to the wind-pipe, which fill our heart and mind with pleasure. Sugars present in Havishya have great power to purify the atmosphere. It kills the germs of T.B., measles, smallpox and cow-pox, remarks Prof. Tilward. According to Dr. Shirowich, a Russian scientist has remarked that (i) Cow's milk contains great power of protection from atomic radiation;(ii) Houses having cow-dung covered floors enjoy complete protection from atomic radiation; (iii) If cow's ghee is put into Yagya fire, its fumes lessen the effect of atomic radiation to a great extent. The medicinal fumes emanating from Agnihotra have been observed by researchers in the field of microbiology to be clearly bacteria lethal in nature. These eradicate bacteria and other micro-organisms, which are the root cause of illness and diseases. This must be the reason why the incidence of physical ailments, sickness and diseases becomes less in the households, where Agnihotra is regularly performed. Even without going into detailed chemical bacteriology, it can be stated that performance of Yagya leads to purification of air.

### VIII. Conclusion

Usually Mango woods are being used in havan ceremony which produces the pharomic aldehyde gases after burning. It destroys the bacteria of the atmosphere and purifies the air. The negative energy is also omitted after chanting of Mantra in Yajna Process. According to Scientist named as Tauteek, the gases generated during fumigation at Havan period enters in the subject's body and destroys the bacteria like typhoid which are fatal for human life. Havan process provides the gift of healthy and disease free life but also empowers the religious faiths in individual. Havan Samagri contains the mango woods, pure Clove, Til, Barley, honey, camphor, agar, tagar, Guggul, Laung, Akshat, coconut, sugar etc. along with medicinal herbs are used for oblations and they are responsible to kill the bacteria which are fatal and very tiny and of atomic structure. The vapor, smoke and heat of Yajna also omit the dizziness, anxiety and maintain the inner-peace. The above experiment reveals the fact that the bio energy was significantly increased after the Yajna Process and the vital power, reduction in energy imbalance and energy of Chakras were significantly observed through Yajna experiments. Yagya is a very ancient treatment. It was performed to harness the power of positivity through the science of sound in mantric syllables uttered, combined with therapeutic powers of aromatic herbs offered to Agni- the Fire Diety. The contemporary world too can take a leaf out of the past and address the various physical and emotional ailments, reflected as distrust, depression, indecisiveness with the process of Yagya. Hence, it can be concluded that Yagya can be used widely as aromatherapy in form of complimentary or alternative therapy to treat mental and physical illness.

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