

**PERFORMANCE ENHANCING DRUGS (PED)  
VIS-A-VIS DIVINE PLANTS  
THE REMINISCENT OF VEDIC AGE**

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**ABSTRACT**

While detailing the *Rasāyanatantra*, Indra makes the sages acquainted with a series of vitalizing (*jīvaniya*) plants, growing in the *Himālayas* and *Divyauśadhi* (Divine drugs) which endow the user with physical, mental powers equal to gods and a very long life. This section is an echo and reminiscence of *Rgvedic*, indo-Iranian nomadic culture, where the famous *Sōma* is consumed to get similar benefits apart from giving instantaneous virtues like wakefulness, poetic ability, physical endurance and sexual vitality. The soma is equated with *Amṛta*, the ambrosia itself which gives immortality. Gods had access to this *Amṛta* and they became immortal. The concept of immortality is backed by the desire of humans to live forever. Albeit the fact till none has achieved this, the desire to live if not with mortal remains, in some other form continues to guide the mankind. This is the motive behind leaving impressions, such as: literary, ornamental, architectural and any other. These creations were in some or other way powered by use of *Sōma* like stimulants, intoxicants, which is reflected in the form of rituals across different ethnic groups even today. *Rgvedic* nomads when entered from west to east into deep pockets of Indian sub-continent, they have lost something and gained much more. The loss was, access to the native lands where *Sōma* was abundantly available, which gradually has become so scarce that they started substituting with similar looking alternatives. The method of consumption got more and more ritualized. By the time *Āyurveda* took shape as an independent discipline, the gap between actual source of *Sōma* and other similar potential herbs became so wide that, it began to be considered as divine. It was nostalgia for which the books remembered *Sōma*, but the efforts to replace it with much easily available local ones never stopped. *Āyurveda* stands a testimony for this adaptation and further evolution. In response to the loss of *Sōma*, other such potential herbs *Āyurveda* came up with an array of much more potential, simple drugs such as *Haritaki*, *Vibhitaki*, *Āmalakī*, *Laśuna*, *Vidaṅga* etc. It has developed two independent branches to cater the needs of longevity and good progeny which are known as *Rasāyanatantra*, *Vājīkaranatantra*. Parallel to the allegory of *Sōma* pressing, the knowledge the *Rgvedic* seers about the minerals enabled them to specialize in extraction of precious metals, specially Gold which is considered the best of all metals. Gold is equated to immortality as it does not perish easily. This wisdom simultaneously has evolved into another independent branch of *Āyurveda* which is widely known as *Rasasāstra* (Indian alchemy). This article is an attempt to provide a glimpse of the human quest to discover valuable drugs, minerals and suitable methods to convert them into proper forms for the benefit of human usage. It also demonstrates the diehard spirit of our ancient seers, to retain, re-invent and stabilize the precious knowledge acquired over ages and transmit carefully to the posterity.

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The quest to discover, utilize, ritualize and finally attribute divine origin to certain substances (which help acquire the finest intellectual, artistic skills, physical endurance and an edge over the fellow beings so that they are on par with the much alluded Gods) is seen in all cultures of the world. For example many religions include the use of a divine potion, made from sacred plants, as necessary vehicles to achieve much desired godly stature. Shamans frequently incorporate the use of such potions into their religious practice. In Chan Kom, descendants of the *Maya* use a favorite *Mayan* intoxicant and purge that has strong religious associations. They make ceremonial mead of fermented honey and add the bark of the *balche* tree during the process for its narcotic effect. This drink, *balche*, enables communication with the deities and is necessary for all religious rituals, especially those for fertility, abundance of crops, rain, health, and family.<sup>1</sup>

*Rgvedic Sōma* is the pivotal example of such genre of elixir plants having a great ritualistic, literary, historical, alchemical and medical importance. This plant has set a standard of what an otherwise performance enhancing drug (PED) can be. In modern context the performance enhancement has become an unworthy requirement in sports and NAAC<sup>a</sup> has enlisted drugs which are accepted as PEDs. They include a. Stimulants; b. Anabolic Agents; c. Alcohol and Beta Blockers (banned for rifle only); d. Diuretics and Other Masking Agents; e. Street Drugs; f. Peptide Hormones and Analogues; g. Anti-estrogens; h. Beta-2 Agonists.<sup>2</sup> Though doping i.e. use of PEDs in sports and competitions is universally accepted as unethical, from the medical point of view use of the said group of medicines for selective therapeutic purposes is completely acceptable in required conditions. This article is written keeping in the medical, social aspects of pre-modern times and their requirements in day to day need in consideration permitting the use of such Performance enhancement elixirs/ substances.

### **The *Amṛta* (Ambrosia)-Immortality**

The idea of immortality follows once the humans achieve the virtues of additional mental and physical capability. Immortality is an unreasonable urge, yet desired by many. Though none has succeeded in it, the humans have tried to stay alive in some or other form. When they failed to live with the mortal body, they created icons, symbols, used precious metals like Gold to leave their mark, which last longer than the perishable mortal biological bodies. Thus begins the saga of search for *Amṛtam*. The idea of a herb of immortality, most probably a hallucinogen, is at least as old as the Sumerian Gilgamesh

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a. NAAAC- National Collegiate Athletic Association-2009-2010 List of Banned Drugs

epic, which takes us back to about 2,000 B.C.<sup>3</sup> Frist stall reports that, Wassan has suggested that the Taoist belief in ‘magic mushrooms’ constitutes evidence of systematic ritual use of hallucinogenic substances, and Needham has endorsed this view,<sup>4</sup> also suggest that the Taoist generated hallucinogenic smokes in their incense burners.<sup>5</sup> In recent times, the use of hallucinogens of plant origin has been found in all parts of the world, especially in the Americas.<sup>6</sup> Apart from mushrooms (see especially seeds that are eaten, drunk, smoked or sniffed. Many of these plants are considered sacred. The Mexican Indian regarded them as mediators with the gods. The Chontal Indians of Oaxaca call their hallucinogenic shrub ‘leaf of god,’ and the Aztecs refer to the sacred mushroom as ‘god’s flesh’.<sup>7</sup> In a characteristic reversal, the Christian invaders of Mexico called the Aztec *ololiuqui* (Morning Glory) a ‘*diabolic seed*’.<sup>8</sup>

According to the *Rgveda*, *Sōma* is the elixir of life, indispensable for both men and gods. It is *Amṛtañ*, the draught (a serving of drink) of immortality. This term is Indo-European: *Amṛtañ* (English ‘immortality’) corresponds, for example to the Greek *ἀλῆνιούα* - *amrbosía*. Indra is especially fond of *Sōma*. Soma has various properties in common with other Vedic gods. He is treated as a king and invoked as a fighting god, a valiant commander, a hero, and a destroyer of enemies. *Sōma*, in this respect again similar to Agni, was brought down from heaven by a bird of prey (*śyena*).<sup>9</sup> The Indian myths of the churning of the ocean show that the production of this elixir is thought of in terms similar to the production of fire by friction. The bird of prey-an eagle, vulture, or falcon-which brings the draught and fire down to earth, is associated with a celestial tree is transported. In Europe the celestial tree is often an ash. As we have seen, the theft of fire and Soma is generally attributed to a bird, but many also be attributed to a personage such as Prometheus, whose name Kuhn related to the kindling stick (*pramanthana*).<sup>10</sup>

### ***Sōma* as a simple beverage during *Rgvedic* times**

*Sōma* the *Rgvedic* beverage is very often misinterpreted as an intoxicant/hallucinogenic. In practice it was actually meant to support the user to face harsh cold climates against the long spells of darkness, where they were finding it difficult to stay awake. It was more of a daily need for them to use a beverage prepared with such a substance which will power them to stay awake, remember and recite things properly and have enough physical endurance to travel long distances, go atop of mountains with ease and finally survive. There is no surprise then that those people were all praise for such a substance and revered it as divine. It received great attention in *Rgveda*. It is evident from the fact that the entire ninth maṇḍala (114 hymns) and *Rgveda*’s longest hymn (RV 9.97) are addressed to *Sōma*

Pavamana, the purified *Sōma*. Apart from this there are only six dedicated *Sōma* hymns outside the ninth maṇḍala. In addition, there are numerous references to *Sōma* in other hymns of the *Ṛgveda* which reiterate the importance given to *Sōma* by *Ṛgvedic* people.<sup>11</sup>

It is important to know the following, to track the influence of using *Sōma* and similar substances and their influence on *Āyurveda*, *Rasaśāstra*.

- i. Events, sequence of *Sōma* usage as a performance enhancing entity from *Ṛgvedic* period to *Āyurveda*.
- ii. Consequent evolution of *Rasāyanāntra*, *Vājīkaranatantra* of *Aṣṭānāyurveda*.
- iii. Alternative view: *Ṛgveda* as an allegory of *Rasaśāstra* (Indian alchemy).

***i. Events, sequence of Sōma usage as a performance enhancing entity from Ṛgvedic period to Āyurveda***

It is very intriguing to observe that the *Sōma* which was a very common, easily available item to *Ṛgvedic* people has become a divine, and sacred entity by the time it got enlisted in early Brāhmaṇas, *Āyurvedic* texts like *Carakasamhita* and *Suśrutasamhita*. To understand this long chain of events it is imperative to understand the story of populating the earth with humans, the migration of people from Africa, the life and times of proto-indo-european people and *Ṛgvedic* people.

***Migration of people to Eurasia, far-east and consequent Indian civilization.***

There were pre-historic, pre-modern migrations in the bygone times which resulted in populating the various continents on earth with humans. The remote migrations are very speculative, yet provide a glimpse of how and why people chose to leave their home land and try to go beyond hard trenches in search of green pastures. Modern humans, *Homo sapiens*, evolved in Africa 200,000 years ago and reached the Near East around 125,000 years ago.<sup>12</sup> An exodus from Africa over the Arabian Peninsula around this time brought modern humans to Eurasia, with one group rapidly settling in coastal areas around the Indian Ocean and one group migrating north to steppes of Central Asia.<sup>13</sup> The earliest migrations which can be reconstructed from historical sources are those of the 2nd millennium BC. The Proto-Indo-Iranians began their expansion from c. 2000 BC, the *Ṛgveda* documenting the presence of early *Indo-Aryans* in the Punjab from the late 2nd millennium BC, and Iranian tribes being attested in Assyrian sources as in the Iranian plateau from the 9th

a. The appearance of Indo-Aryan speakers, Encyclopedia Britannica; Trivedi, Bijal P (2001-05-14). "Genetic evidence suggests European migrants may have influenced the origins of India's caste system". Genome News Network (J. Craig Venter Institute). Retrieved 2005-01-27.

century BC.<sup>14</sup> In a much later period the Indo-Aryan migration from the Indus Valley to the plain of the River Ganges took place in Northern India and presumed to have taken place in the Middle to Late Bronze Age, contemporary to the Late Harappan phase in India (ca. 1700 to 1300 BC).<sup>a, 15</sup>

### **R̥gveda the source of later vedic civilization and Āyurveda.**

The *R̥gveda* is by far the most archaic testimony of *Vedic Sanskrit*. Bryant suggests that the *R̥gveda* represents a pastoral or nomadic, mobile culture, centered on the Indo-Iranian *Sōma* cult and fire worship.<sup>16</sup> It is very important to note that the *R̥gvedic* people were not static and were on the move from West to East. It is interesting to note that this journey enacted while conducting *somayajña*, where the sacred fire (going back to the Indo-European period) and the sacred Soma plant (going back to Indo-Iranian period) are ritually transported from west to east, as they were carried by the *Vedic* nomads in the course of their eastward expansion.<sup>17</sup> It is very much in the human nature to choose between nomadic lives or of a settler or something in between. Various societies have demonstrated this nature from time to time and *R̥gvedic* society in particular provides an interesting pattern of how a society on a gradual move from region to another region tends to uphold their identity through retaining certain most cherished rituals/practices from their original habitat which forms the crux of this paper.

Before we delve into the details of *Sōma* and its later representations it is apt to understand the *R̥gvedic* people in comparison with their predecessors the proto-Indo-Europeans. Some of the common features between *R̥gvedic* and proto-Indo-European people are:

- I. Practice of stockbreeding and animal husbandry, including domesticated cattle, horses, and dogs<sup>18</sup>
- II. Oral heroic poetry or song lyrics (vedic hymns) that used stock phrases such as *imperishable fame* and *wine-dark sea*; agriculture and cereal cultivation, including technology commonly ascribed to late Neolithic farming communities, e.g., the plough; a patrilineal kinship system based on relationships between men<sup>19</sup>

The Proto-Indo-Europeans/ *R̥gvedic* people were a patrilineal society, relying largely on agriculture, but partly on animal husbandry, notably of cattle and sheep. They had domesticated horses -*eqwos* (cf. Latine*quus*). The cow (*gwous*) played a central role, in religion and mythology as well as in daily life. A man's wealth would have been measured by the number of his animals (small livestock), *pe\_us* (cf. English *fee*, Latin *pecunia*). They

practiced a polytheistic religion centered on sacrificial rites, probably administered by a priestly caste. Many Indo-European societies know a threefold division of priests, a warrior class, and a class of peasants or husbandmen.<sup>20</sup>

***Sōma as an anchor to sustain a more courageous, fulfilling life:***

As mentioned earlier the *Rgvedic* people and their predecessors *Proto-Indo-Europeans* lead a mixed life of a nomad and a settler. They were slowly moving eastwards for rather more permanent settlements, yet were in need of herbs/ substances which were in great demand to sustain the physical, psychological hardships they were facing while they are on the move. *Sōma* was an ideal substance to provide them what they exactly wanted. They were convinced that it gave them immortality, a healthy and long life, offspring, happiness, courage, strength, victory over enemies, wisdom, understanding and creativity.<sup>21</sup> Kochhar (2001) provides a categorized list of benefits from consuming *Sōma* drink: culture-specific attributes<sup>22</sup>

- *Yasna*<sup>a</sup> (9.23), Haoma grants good husbands to maidens.
- In RV(8.80), a maiden, Apala by name, plucks *Sōma* twigs by the wayside and chews them with the purpose of becoming attractive to men.
- Haoma provides brilliant and righteous offspring to pregnant women (Yasna 9.22).
- Anyone who maltreats Haoma is cursed to remain childless (Yasna 11.3).
- The *Sōma* drink enables the poetic drinker to compose a hymn. Therefore, *Sōma* is very frequently called a Kavi, poet. *Sōma* is the procreator of thoughts (RV 9.95.5),
- *ṛsikṛt* 'the maker of seers' (RV 9.96.18).
- 'the poet *Sōma* procreates the thought' RV (9.107.18),.
- The composer plainly asks: 'Will you not make me the protector of people, make me the king, O *Sōma*- drinking lord, and make me the *ṛṣi* after I have drunk of *Sōma*! Will you not give me of the excellent *amṛta*! (RV 3.43.5)

**II. Objective physical characteristics<sup>23</sup>**

- *Sōma* prevents sleep; it keeps the drinker awake and alerts. 'The Gods seek him who presses out the *Sōma*, they desire not sleep. (RV 8.2.18).
- Indra is awake, because he has drunk *Sōma* (RV 8.92.33).

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a. *Yasna* - Avestan for 'oblation' or 'worship' is the name of the primary liturgical collection of texts of the Avesta as well as the name of the principal Zoroastrian act of worship at which those verses are recited

- *Sōma* is *jāgrvi* (awake) (RV 9.36.2; 9.44.3; 9.106.4).
- The *Sōma* drink enables the poetic drinker to compose a hymn. Therefore, *Sōma* is very frequently called a Kavi, poet. *Sōma* is the procreator of thoughts (RV 9.95.5).

*Sōma* as a powerful stimulant which helps the user to extract more out of his ability is narrated in the following sentences mentioned by Kochhar. ‘It seems that some of the Rgvedic poetry was composed at night after drinking *Sōma*. As RV (5.44.14) puts it, áthe sacred hymns love him, who wakes and watches; to him who watches come the *sarnan* verses. This *Sōma* says to the man who watches, I rest and have my dwelling in the friendshipâ. In RV (9.97.37), *Sōma* is awake and has become áa singer most like *Angirasâ*. In the same creative spirit, the poet in RV (8.48.14) wishes that neither sleep nor idle talk should govern him after he has drunk *Sōma*. *Sōmâs* ability keep one awake was known outside the poetic circles also.’<sup>24</sup>

#### **Āyurvedic description of *Sōma* qualities:**

Similar virtues of *Sōma* such as alertness, improved intellectual capability, and improved physical endurance are described in later *Āyurvedic* books. The descriptions are as follows:

- 1 *Sōma* group of drugs impart successively to the person (the user) youth, strength of a lion, luster (beautiful body), and such a powerful memory that he can recall any thing heard once only and a long life of two thousand years. (*Suśrutasaṃhita*, *Cikitsāsthāna*-30/6).
- 2 The user decorated with bracelets, ear-rings head dress, heavenly wreathes (of flowers), sandal paste and dress becomes able to walk with irresistible determination even up to the place in the heaven where no clouds can go. (Implying Mountain trekking). (*Suśrutasaṃhita*, *Cikitsāsthāna*-30/7).
- 3 A person who has successfully taken these drugs moves (unrestricted in the same way as the birds and the clouds full of water do. The walking power of some treated persons is still superior. (*Suśrutasaṃhita*, *Cikitsāsthāna*-30/8).<sup>25</sup>

To summarize ‘Consumption of *Sōma* and its variants mentioned in *Āyurvedic* texts bestow benefits like: improved mental faculties (memory and recollection), poetic ability to think creatively and compose, recite poems/ hymns, physical endurance help walk long distances, climbing mountains and travel long distances, sexual attractiveness and possibly better conjugal life blessed with abundant offspring.’ Following statements made by Kochhar support the same:

‘The *Rgvedic Sōma* (as well as the Avenstan *Haoma*) is a scented leafless plant with

thin and long jointed juicy stalks, which grew in the mountainous region. The juice was extracted by pressing the stalks, and drunk unfermented. In effect, it was energizing, invigorating and anti-sleep.<sup>26</sup>

It is very interesting to note here that *Sōma* consumption alone was offering abundant showers of so called material benefits person desires in a life time. It was providing them with an edge over the others in terms of physical and psychological superiority. Expectedly the procedure and the substance got very prized in the later date slowly became ritualistic, cryptic and finally divinized.

#### ***Journey of Ṛgvedic Sōma from Ṛgveda times to Āyurveda***

By the time *Āyurveda* was codified, the original *Sōma* became a mythical plant,<sup>27</sup> The *brāhmaṇa* texts preserve the memory of the original *Sōma* and prescribe various substitutes which, ranging as they do from grasses to trees, are unable to provide any clues to the master plant. In the later period, while on the one hand, the original *Sōma* was mythified, on the other, the name *Sōma* (often with a suffix was given to locally available field plant, usually a creeper.)<sup>28</sup>

The *Sōma/Haoma* tree was leafless. The juice was extracted from the shoots or stalks, never from the fruits or berries. A number of terms are used to denote the stalks: *amśu* (literally 'ray'), *kṣip* (finger), *vakṣaṇa* (tube), *vāna* (cane). All these terms indicate that the shoots were long and thin. In the Avesta, the shoots are called *asu* (corresponding to *amśu*). The term *frasparega* (Avestan term for 'branch, twig') is also used where the word without the prefix *áfraâ* corresponds to the English sprig.<sup>29</sup> The colour of the stalk was ruddy (*aruṇa*), brown (*babhru*), or golden (*hari*), corresponding to *zairi* in the Avesta. (In the Avesta, the plant is called *Haoma-zairi* to distinguish it from three other *Haomas*, persons or deities.)<sup>6</sup> A very important characteristic of the *Sōma* plant is that it was sweet-scented (Yasna 10.4, RV 9.97.19; 9.107.2).<sup>30</sup> Medical texts *Suśrutasamhita*, *Cikitsāsthāna*, 29.21, 22 and *Carakasamhita*, *Cikitsāsthāna*, 1.4-6) describe *Sōma* having 15 leaves, which appeared one per day during the waxing moon (*śuklapakṣa*), and dropped off one by one during the waning moon (*kṛṣṇapakṣa*) which is a deviated description to that found in *Ṛgveda* or Avesta. Another important observation to establish the lost treasure of *Sōma* to Ayurvedists is identifying local substitutes and naming them as varieties of *Sōmavalli*. The best example is provided in *Suśrutasamhita*, *Cikitsāsthāna*, 29 provides details of 24 varieties of *Sōma*, which are distributed across different geographical locations of Indian Subcontinent.



### Original Habitat of *Rgvedic Sōma*

It is difficult to actually locate the habitat of *Sōma* as per current geographical setting. An important clue from *Rgveda* is that *Sōma* grew in the mountains. This fact is mentioned or alluded at number of places in the *Rgveda*. Thus, *Sōma* is called *parvatīivrdh*, ámountain grownâ (RV 9.46.1). (In the *Atharvaveda* (3.21.10), the mountains are called *Sōmapr̥ṣṭha*, ácarrying *Sōma* on their backâ.) RV (10.34.1) uses the term *Sōma Maujavata*, áthe *Sōma* from Mujavatâ. The latter according to Yaskaâs *Nirukta* (9.8) was a mountain.<sup>31</sup> *Yasna* (10.10) mentions *Haraiti Bareza* (also called Hara Barazaiti) as the *Sōma* habitat. *Haraiti* is identified with Mount *Elburz*. But it must be borne in mind that the name *Elburz* not only denoted the present Mount *Elburz*, a peak in the Caucasus, but was applied to the whole range of mountains, extending from the Hindu Kush in the East to the Caucasus in the West.<sup>32</sup> *Yasna* (10.17) quotes *Zarathustra* as saying, *áI praise all the Haoma plants, as many as there are on the high plateaus of mountains, as many as there are in the depths of the valleys, as many as there are in the gorges, which are tied into the bundles of womenâ*. Interestingly, while the *Avesta* shows familiarity with a much larger *Sōma*-growing area than the *Rgveda*, it is the *Rgveda*, which displays greater variety as regards the colour of the shoots.<sup>33</sup>

This description indicates the plausible location of *Sōma* in the Afghanistan, Western India and Iranian including Hindu Kush in the East to the Caucasus in the West. The vast Ephedra-growing area in Afghanistan and Iran was occupied by or was accessible to the Indo-Iranians, who could develop a common *Sōma*/Haoma cult. As the Indo-Aryans moved eastwards, their distance from *Sōma* increased, first cutting down the supply and then stopping it altogether. Finally, in the plains, *Sōma*'s place in the rituals was given to the substitutes. In course of time, *Sōma* became a mythical plant.<sup>34</sup>

### *Sōma* locations mentioned in *Āyurveda*.

The Himalayas, the *Arbuda*, the *Sahya*, the *Mahendra*, the *Malaya*, the *Śrīparvata*, the *Devagiri*, the *Devasaha*, the *Pāriyātra*, the *Vindhya* and the *Devasunda* lake are the habitat of *Sōma*. The *candramas* which is the best of all the species of *Sōma*, is found floating like the *haṭha* on the stream of the great river *Sīndhu* which flows down at the foot of the five big mountains lying to the north of the *Vitasta*. The *Muñjāvāt* and *Añśumat* (*Sōma*) are also found in the same locality. The divine lake *Gāyatra*, *Traiṣṭhubha*, *Pāñkṭa*, *Jāgata*, *Śākkara* and also of those *Sōmas* which have a beautiful and pleasant appearance like that of the moon (*Suśrutasaṃhita*, *Cikitsāstāna*. 29/27-31).<sup>35</sup> Among this list The Himalayas, *Sahya*, *Mahendra*, *Malaya*, *Śrīparvata* (Srishailam, Andhrapradesh), *Devagiri* (Maharashtra),

*Pāriyātra*, *Vindyha* are easily locatable mountain ranges of Indian Sub-continent. While the *Sōma* on the stream of great river *Sindhu*, fall to the west of Indus river, and mention of *muñjāvāt* here indicates the Iranian Habitat ranging from Hindu Kush in the East to the Caucasus in the West. The divine attribution to the lake of *Gāyatra*, *Traiṣṭhubha*, *Pāñkta*, *Jāgata*, *Śākkara* indicate those regions which are in all probability farther places than that of *Sindhu* and *Muñjāvāt*. This list is a mix of realistic locations and mythical locations. It is interesting to note that by including places like *Malaya*, *Śrīparvata*, *Devagiri*, *Pāriyātra*, *Vindyha*, *Suśruta* entered successfully into deeper pockets of India in locating alternative sources (to Himalayan flora, fauna) for potential medicinal substances. This in itself is an important paradigm shift in legitimizing the use of newer herbs for healthcare purposes, other than those which were already in use by then medical community.

#### ***Sōma* like ‘or’ *Sōma* substitutes mentioned in *Āyurveda*.**

*Suśrutasaṁhita*, *Cikitsāstāna* provides a list of 24 *Sōma* variants: *Aṁśumat*, *Muñjavat*, *Candramā*, *Rajataprabha*, *Dūrvā-Sōma*, *Kaṇīyas*, *Śvetākṣa*, *Kanakapraha*, *Pratānavat*, *TalāvṛNta*, *Karavīra*, *Aṁśavat*, *Svayamprabha*, *MahāSōma*, *Garuḍāhṛta*, *Gāyatra*, *Traiṣṭhubha*, *Pāñkta*, *Jāgata*, *Śākkara*, *Agniṣṭoma*, *Raivata*, *Yathokta*, *Uḍupati*. The word ‘*tulyaguṇāścaiva* (having similar qualities)’ used in this context indicates that, the *Sōma* and its varieties described here are substitutes for the original *Sōma* of *Rgveda*. They are *Sōmasamavīryā mahauśadhi* i.e Drugs which are equivalent in potency to that of *Sōma*.<sup>36</sup>

#### **Record of *Sōma* Substitution in post-*Rgvedic* period.**

Stall (1975) described that the cult of *Sōma*, originally a hallucinogenic plant, has undergone the most massive ritualization. This is apparently connected with the fact that the original *Sōma* was lost and replaced by substitutes at an early period.<sup>37</sup> *Sōma* is a god, a plant and the liquid extracted from the plant. From the *brāhmaṇas* onward, the ritualists made use of substitutes for the original Soma. These include Ephedra, Sarcostemma, and other creepers and plants without particularly remarkable properties.<sup>38</sup> Kochhar provides other evidences for the substitution: *kātyāyana śrautasūtra* (10.9.30) commands the priests not to give the genuine *Sōma* to a *kṣatriya* or a *vaśya*, even when it was available. They should instead be given the juice of the fruit of the *nyagrodha* tree (*Ficus indica*, now called *Ficus bengalensis*, the Indian fig).<sup>39</sup> *Śatapathabrāhmaṇa* (4.5.10.2-6) lists the substitutes for use in the ritual, when *Sōma* is not available. In decreasing order of preference, they are the Phalgunā plant with the red blossom; the *Syenahrā* plant; the *Adara* plant; the reddish *Dūrvā* plant; or as the last resort, any of the golden-coloured grasses.<sup>40</sup> The explicit mention of red and golden suggests that the substitutes were chosen to resemble the original

*Sōma* in one parameter, the colour. Also, the cow to be given as the price for *Sōma* should be red-brown with red-brown eyes, no doubt, because this was the *Sōma* colour (*śatapathabrāhmaṇa:1a 3.3.1.1A*).<sup>41</sup>

### Justifying local substitution with divine/mythical attribution

Kochhar provides following arguments in support of justification for substitution of Soma in the later period:

- The *Sōma* substitutes are linked to the original *Sōma* through mythology. When *G āyatrī* was bringing *Sōma*, a shoot fell down and became the *Syenahrra* plant. When the head of the sacrificial victim was cut off, the *Adara* took shape from the juice squirting forth from it. Therefore, *Adara* can be used in place of *Sōma*.<sup>42</sup>
- The choice of the *Sōma* substitute was not unique, but depended on the *vedaśākha* (school of veda). *Tandya Mahābrāhmaṇa* (9.5.1-3) recommends the use of the putika creeper (*Gulandina bonduc* or *Basella cordifolia*). Or else, the dark grass known as *arjunani* could be used. Various other substitutes figure in the Brāhmaṇa; *śyāmāka* (cultivated millet), *muñja* grass, *kattṛṇa* (a fragrant grass), and *palāśa* (a sacred tree, *Butea frondosa*).<sup>43</sup>
- The Brahmanas reverentially reserve the name *Sōma* for the original ṛgvēdic plant and talk of its substitutes. The reverence disappears in the later period, when the term *Sōma* becomes free of all encumbrances, and is applied, normally suffixed with *lata* or *valli* (meaning creeper), to local plants (these terms do not figure in the *Rgvēda*). There must still have been some memory of the original plant, because like the *Rgvēdic Sōma*, all *Sōma-latas* and *Sōma-valli* are leafless with fleshy stems.<sup>44</sup>

### *Sōma as a divine entity in Āyurveda*

Suśrutasāhita portray the nostalgia of *Sōma*, which is presented as the drug of divine origin and depicted in the following verse from Suśrutasāhita, cikitsāsthāna-29/3.

‘brahmādayō ’srjan pūrvamAmṛtaṁ Sōmasañjñitam,  
jarāmṛtyuvināśāya vidhānaṁ tasya vakṣyatē.’

It means ‘Formerly, *Brahma*, created (srjan) a kind of *Amṛta* known as *Sōma* for the prevention of old age and death,<sup>45</sup> which upholds the reverence the *Suśrutasāhita* has for *Sōma* and the divine status given to it, owing to its non availability by then. The statement is established further by the following contexts which reiterate the unavailability of *Rgvēdic Sōma* by that time (*Suśrutasāhita, cikitsāsthāna. 30/ 26-29*).

1. The gods, headed by *Brahma*, placed the remnant of nectar after they had drunk of it, in the drugs as powerful as *Sōma* and also in the *Sōma*, the lord of the drugs.<sup>46</sup>
2. The first seven of *mahaushadhi* drugs which have the appearance of a snake should always be collected to the accompaniment of the recital of the mantra. The unbeliever, the lazy, the ungrateful and the impious persons never secure *Sōma* or drugs of similar virtues.<sup>47</sup>
3. The *Sōma* are invisible for the unfortunate persons those who insult the physicians, who are pious, who are ungrateful, who decry medicines and for those who look down upon the brāhmaṇas (this passage indicates the precious nature of the ingredients which, is rationed for the use of only elite).<sup>48</sup>

**B. Evolution of *Rasāyanatantra*, *Vājīkaranatantra* of *Aṣṭāṅgāyurveda* (Transition of *Sōma* consumption from a ritualistic entity to pragmatic health care entity.)**

The *Sōma* ritual, followed by intake of fresh expressed juice of *Sōma*, which offered the consumer with the benefits like: wakefulness, poetic ability, physical agility and probably certain sexual gratification have become very prized virtues to the *Ṛgvedic* society. Apart from this as it is evident from the narrations, it was a prized and private possession to a certain group of people only, which was indeed giving an edge over others. Naturally the psyche of humans got so much focused on usage of *Sōma* like substances that, it did not leave its influence on the later rituals and medical practice. The categorized list of *Sōma* consumption benefits is enlisted under the section '*Sōma* as an anchor to sustain a more courageous, fulfilling life.' One can observe a pattern with a mix of health care benefits in the form of longevity and sexual agility. On further evolution the same set of *Sōma* consumption of benefits have evolved into two significant branches of *Āyurveda*. 1. *Rasāyana* aspect dealing with mental, physical agility, longevity aspect, 2. *Vājīkaraṇa* for improved sexual performance and healthy progeny.

**i. *Rasāyana***

*Sōma* and its variants in the later texts are hallmark examples of such substances. In the beginning the consumption was limited only to stay awake or to get a feeling of freshness, but on further exploration people could identify the long term health benefits of such potions as they started substituting the *Sōma* with various other locally occurring herbs. This whole outlook from a ritualistic *Sōma* consumption has turned in to an independent medical discipline under the heading '*Rasāyana*' in *Āyurveda* which forms one of the parts of eight fold (*Aṣṭāṅgāyurveda*).

The branch has evolved into a specialization and provides multiple options to achieve the benefits of disease free longevity. It offers a set of vitalizing (*Jīvanīya*) drugs. *Rasāyana* regimens (*Kuṭīpraveśika*, *Vātāpika*) and also *ācārarasāyana*, the code and conduct to optimize zest in leading healthy long life. (*Carakasāmhita*, *Cikitsāsthāna*-1/1).

*Carakasāmhita*, *cikitsāsthāna* first chapter (*Rasāyanādhikāra*) is divided into four sections and the fourth section, called *Āyurveda samutthānīya*, opens with a second story on the divine origin of *Āyurveda*. The first narration is available at the beginning of *Carakasāmhita*, *Cikitsāsthāna* 1/1. This narrative introduces a group of sages, consisting of *Agastya*, *Aṅgīrasa*, *Asita*, *Atri*, *Bhṛgu*, *Gautama*, *Kāśyapa*, *Pulastya*, *Vāmadeva*, *Vasiṣṭha*, and others. The health of these sages had deteriorated due to their adoption of the way of living in cities and villages. Being no longer able to perform their duties, they repaired to the *Himālayas*, where Indra transmitted to them the *Āyurveda* (4.3-5). Caraka says that Indra instructed the sages a second time because their minds had become dull due to village life.<sup>49</sup>

#### Working definition of *Rasāyana*

‘A person undergoing *Rasāyana* (rejuvenation therapy) attains *Dīrghāyu* (longevity), *Smṛti* (memory), *Medhā* (intellect), *Ārogya* (Health), *Vayah* (youth), *Prabhā* (excellent lustre), *Varṇa* (complexion), and *Svara* (voice), *Dehendriyabalaṁ* (excellent potentiality of the body and the sense-organs), *Vāksiddhi* (i.e what he says comes true), *Praṇati* (respect) and *Kānti* (brilliance).’

The term ‘*Rasāyana*’ is used in the chapter (*Abhayāmalakīyaṁ Rasāyanapādaṁ* of *Rasāyanādhyāya*, *Caraka cikitsāsthāna*) implies a specific meaning. Drugs, diet and regimens which promote longevity by preventing ageing and diseases, are called ‘*Rasāyana*’. The term ‘*Rasa*’ has different connotations. It may mean the sap or juice, best and finest, or prime part of anything, essence, marrow, nectar, a constant fluid or essential juice of the body, serum, especially the primary juice called chyle, mercury, minerals and metals, taste or flavor, the feeling or sensation and the disposition of heart and the mind etc. In the present context, it means the body fluid which is responsible for the entire physique. Impairment of the circulation of this body-fluid results in diseases and decay. This body fluid of good quality should not only be present in adequate quantity, but also it should be able to permeate (circulate) throughout the various cells of the body to provide the type of nourishment they need.

The tissues of the body undergo a continuous, process of decay created by the interaction of agnis. If this process is allowed to continue, uninterrupted, the ageing comes in early. In

the young age, normally 'agnis' present in different tissues help to accelerate the synthesis of the ingredients required for the growth of the cells and as such the process of the decay is much less. In the old age, normally, the destructive activities are enhanced with the result that the person is exposed to several types of diseases which ultimately result in death. If this process of destruction and diminution of cell in the tissues is somehow arrested, or the nourishing fluid of good quality should be supplied to them in adequate quantity and it should have the power to penetrate the cell wall. This is the aim of *Rasāyana* therapy, which can be administered to a healthy individual either through selected diet, drugs or regime. Apart from the utility of this therapy to healthy individuals, even patients who are already suffering from diseases, can derive benefits from this (*Carakasāhita, Cikitsāsthāna*-1.1/1 āyurvedadīpikā commentary of *Cakradatta*.)<sup>50</sup> The means by which one gets the excellence of rasa (the nourishing fluid which is produced immediately after digestion etc., is known as *Rasāyana* or a rejuvenation therapy. (*Carakasāhita, Cikitsāsthāna* -1/7, 8)<sup>51</sup>

#### **Jīvanīya (Life prolonging) plants**

While detailing the *Rasāyanatantra*, Indra makes the sages acquainted with a series of vitalizing (jīvanīya) plants, growing in the *Himālayas*, which, when taken with milk for six months, bestow a maximum life span (paramāyus); the plants mentioned by name are: *Aindrī, brāhmī, Payasyā, Kṣīrapuṣpī, Śrāvaṇī, Mahāśrāvaṇī, Śatāvarī, Vidārī, Jivantī, Punarnavā, Nāgabālā, Sthirā, Vacā, Chatrā, Aticchattrā, Medā, and Mahāmedā* (*Carakasāhita, Cikitsāsthāna* 1-4/6).<sup>52</sup>

#### **Divyauśadhi (Divine drugs) - the reminiscent of Vedic age elixirs.**

Indra proceeds with his teachings on *Rasāyana* by describing nine divine herbs (*Divyauśadhi*): *Brahmasuvarcalā, Ādityaparṇī* (also called *Sūryakāntā*), *Aśvabalā, Kāṣṭhagodhā, Sarpanāmā, Śōma, Padmā, Ajā* (also called *Ajaśṛṅgā*), and *Nīla*. The use of these herbs in a course of treatment results in making one the equal of the gods in outward appearance and that provides a life span of a thousand years (*Carakasāhita, Cikitsāsthāna* 1-4/7). This treatment, perfectly suitable only to sages with a controlled mind (*kr̥tātman*), will enable them to perform all their duties; vānaprasta and *gr̥hastha* with a sufficiently disciplined mind (*nityātman*) may also resort to it (*Carakasāhita, Cikitsāsthāna*, 1-4/8-10). Owing to the divine character attributed to them, the same herbs, when growing in another habitat than the *Himālayas*, have a less powerful effect.<sup>53</sup>

a. A. Chandra Kaviratna's commentary on the verse number 23; Ca. Ci. 1(4)/ 15-29 - aindrarasāyana (The Rasāyana Inculcated by Indra.)

In this context A. Chandra Kaviratn comments that ‘the fact is, many of the herbs mentioned here are not to be found. It should be noted that they are named by Indra, the chief of the celestials, to *Ṛṣis* of great power which resided on the bosom of the *Himavat* Mountains. The way in which *Agīveśa* speaks of them shows that they were obsolete and unidentifiable even in his days<sup>a, 54</sup>

#### Meaning of Divyauśadhi -Divine origin or Divinization:

The word *Divya* is derived from the root ‘*div*’ which denotes:

1. *div* *krīḍāyām* (*dīvyati*, *dyūta*, *dudyūṣati*, *dīdeviṣati*) which means, to shine, play with dice a gamble, make a bet, sell or deal in, be bright or resplendent, praise, to be mad or drunk, wish for etc.
2. ‘*div*’ *pṛīṇane* (*divrīṇane dravanti*) implies to be glad or make glad.
3. ‘*div*’ *mardane* (*devayati*, *devati*) implies to afflict pain, torment, and crush.
4. ‘*div*’ *parikūḷjane* means to soo.<sup>55</sup>

To sum up ‘*Divya*’ means which has divine origin (*divi bhavaḥ*):

1. It is used in the sense of divine, heavenly, celestial.
2. Supernatural, wonderful.
3. Brilliant, splendid.
4. Charming, beautiful.

*Divyauśadhi* means a herb of great supernatural efficacy.<sup>56</sup> The term *divya* always need not be an unattainable divine one, for example the word *divyōdaka* means Rain water, which simply means that the water has come from sky.

From the points discussed here, it can be inferred that ‘whatever is less available’ becomes precious. Sometimes it becomes so prized that divinity is attributed to their sources, and also the people who are privileged to get such things become divine by them. The fate of drugs like *Sōma* in its course of usage is one such example. The drug once so abundantly available to *Ṛgvedic* people has become so prized to the later users, who probably were far away from the sources of its availability, it ultimately became mythical, and finally found many substitutes in the later medical works such as *Āyurvedic* texts. The story of divine plants as described by Indra, a celestial himself who probably has used the drug for himself to the Seers who approached him for the improvement in their quality of life through better life, performance enhancement illustrates this picture vividly.

Modern workers on *Āyurvedic* pharmacopoeia are silent about this group of drugs. Thakur Balvant Singh in his excellent work ‘Glossary of Vegetable Drugs in *Bṛhatrayi*.’ did

not include 'so-called divine drugs' and Poisonous plants mentioned by Caraka and Sushruta<sup>57</sup> possibly for the lack of concrete botanical confirmation, owing to scarce description and lack of access to Botanical survey in *Sōma* prevalent areas like Iran, Afghanistan then.

Even up to 1980s there were no breakthroughs in terms of locating Soma like herbs, the following narration from *Sangdhiga vanaushadhi darshika, a dedicated publication discussing about controversial plants*, reflects the dire lacunae. The passage is quoted here 'Even in spite of such elaborate description, *Sōma* is beyond the reach of Ayurvedists. In vaidik days *Sōma* built its own empire but later we lost track of it though *Sōma* was present on almost all the important mountains of the country. If vigorous search is made we can still find *Sōma* in between the Indus River & the high mountains beyond. The *Sōma* investigation expedition should have sanction from China, Russia, Afghanistan, Pakistan and by the WHO. It should comprise of Ayurvedists, Vaidic scholars, botanists of the countries concerned, along with interpreters of languages and local dialects of the people of the region under exploration. I have no doubt about the definite entity of *Sōma* as such. The stop gap interpretations of *Sōma* are meaningless for they do not offer any satisfaction worth the name.'<sup>58</sup> The whole exercise here is meant to emphasize the point that understanding the value of *Divyauśadhi* as reminder of roots of *Āyurvedic* wisdom from ages beginning with *Ṛgvedic* period to till date. It is very important to study this signature as though the textual narrative simply ascribes divine origin to certain drugs, in reality they are the drugs which were in use elsewhere geographically, but became inaccessible to the later user, hence ultimately got the status of divinity. This is a very important point to note, as there is a chance of rediscovering such so called divine herbs if the hypothesis changes from their mythical existence to real ones, perhaps existing still today at different geographical setting other than *Himalayas* or others mentioned in *Āyurveda*.

#### **Shift of focus from evasive divine drugs to pragmatic simple, easily available drugs.**

Further it is interesting to note that some of the prominent authors on *Āyurveda* are completely silent about *Divyauśadhi*. For instance in *Bhelasāmhitā* has no chapters on *Rasāyana* and *Vājīkaraṇa* chapters,<sup>59</sup> and mention of *Divyauśadhi*. It is very interesting to note that, after mentioning the *Jivanīya, Divyauśadhi*. Caraka deals with pretty simple and very easily available drugs like *Harītakī, Vibhītakī, Āmalakī, Viḍaṅga, Bhallātaka* and others. These drugs are in use till today.

#### ***Laśuna (the Garlic Rasāyana)***

The other prominent *Āyurvedic* sources like *Kāśyapasāmhitā, Navanītaka, Hārītasāmhitā,*



and much later *Aṣṭāṅgahṛdaya* have focused their attention on much more simpler, cultivable wonder drug '*laśuna (Garlic)*' as a common man's elixir. The following narrations from the said sources provide how much importance they gave to *laśuna*, which continues to enjoy the same status till date.

- Part I of Bower Manuscript (navanītaka) opens with a flowery description of *Himālayas*, where a group of munis reside, interested in the names and properties of medicinal plants. *Suśruta*, whose curiosity is aroused by *Kāśīrāja*, granting his request, tells him about the origin of the plant, which proves to be garlic (*laśuna*), its properties and uses (9-43). *Kāśīrāja's* exposition on the subject is called the *laśunakalpa*, as taught by the ancient sages.<sup>60</sup> A noteworthy feature of part I is this *laśunakalpa*, which occurs separately from essential part of *Sanskrit* medical lore. They usually describe the mythological origin of which the plant is an important ingredient. The *laśunakalpa* of the Bower manuscripts has parallels in other medical treatises, for example the *Aṣṭāṅgahṛdayasamhitā* (*uttarasthāna*.39.111-129), *Aṣṭāṅgasamgraha* (*Uttarasthāna*. 49. 161-213), *Kāśyapasamhitā* (*Kalpasthāna, Laśunakalpādhyāyā*), and *Harītasamhitā* (*Kalpa* 4). The stories about the origin of garlic vary in these texts, but all the versions connect it with the rape of the *Amṛta* at the churning of the ocean. The account of the bower manuscript on the properties and uses of garlic shows some peculiarities which are absent from or disagreeing with other medical texts. A garlic-festival (*Laśunōtsava*) is described (I.17-18), and a procedure which circumvents the interdiction for *Brāhmaṇas* to make use of garlic, by making it pass through a cow (I.34.)<sup>61</sup>
- *Kāśyapasamhitā, Kalpasthāna*, Chapter-2 deals with mythical origin of *Laśuna* (garlic) and its uses in medicine. Garlic is said to originate from drops of the *Amṛta* which fell on the earth when *Indrāṇi* belched the froth of *Amṛta*. Many rules are given which pertain to the diet etc., to be observed after consumption of garlic. Rituals connected with *laśuna* are also described, in particular a garlic festival; this festival owes its origin to *Rudra*, who expounded its beneficial effects to *Bhadrakālī Umā* on an occasion when he, incognito, begged for alms in the *devadāru* forest; the garlic festival was instituted on this occasion as a means to deliver the wives of the sages from their childlessness.<sup>62</sup>
- *Harītasamhitā, sūtrastāna*, Chapter four (*Rasōnakalpa*) is concerned with the mythical origin, properties and uses of garlic (*Rasōna, Laśuna*). Garlic owes its origin to some drops of the *Amṛta*, fallen from the beak of *Garuḍa*, who stole a portion of it during the churning of ocean. It is described as a rejuvenating substance.<sup>63</sup>

- *Aṣṭāṅgahṛdaya* deals with the mythic origin of garlic (*Rasōna, Laśuna*); though arisen from the body of Daitya called *rāhu*, as it has originated from the *Amṛta*, it is the most excellent *Rasāyana* (*Uttarasthāna*.39.111-112); method of expressing juice of garlic uses, suitable dosages, the articles of diet to be taken after digestion of the garlic, articles of diet prepared with garlic are discussed. Garlic is considered as the best medicine in disorders caused by *vāta*, either singly, or when covered (*āvṛta*), except when covered by *pitta* and *rakta* (*Uttarasthāna*.39.127); contra-indication for *laśuna* usage are discussed in (*Uttarasthāna* 39,138); It is emphasized that after the use of garlic a mild purgative is recommended, in order to prevent the excitation of *pitta* (*Uttarasthāna* 39, 129).<sup>64</sup>

The point to be noted here is that, the nostalgia of *Sōma* pressing, expression of juice, consumption of the juice to get the health, longevity, vigour and vitality are difficult to forgo. As it can be seen from the way *laśuna* as equated to that of *Amṛta* (ambrosia) and the analogies drawn, followed by its recommended use as a common man's *Amṛta*, portrays humans beings constant tryst with nature to defy the aging changes. Though partially successful, this saga goes on, and surprisingly yields discoveries like *laśuna*, which effortlessly substitute the otherwise unbelievably divine substances like *Sōma*.

#### ii. *Vājīkaraṇa*:

The term *Vājīkaraṇa* is derived from the root *vāja* which means 'vigour'. The therapy which produces semen in a person who is deficient in it is known as '*Vājīkaraṇa* or aphrodisiac therapy. One should not only have power to produce children, but should produce such children who, in their turn, will be able to give birth to grand children for their parents.<sup>65</sup> This is the second discipline which *Āyurveda* has developed in response to the soma consumption benefits such as, good sexual vigor, and progeny. All the *sāmhitas* except *Bhelasāmhita* have dealt with this topic.

#### C. *R̥gvedic Sōma, divyośadhī* as an allegory of *Rasaśāstra* (Indian alchemy): an alternative view point

*Rasaśāstra* (Indian alchemy) can be defined as 'the art of liberating parts of the cosmos from temporal existence to achieve perfection, which for metals, was gold, and for man, longevity, immortality and finally, redemption'<sup>66</sup> Across the civilizations, gold was considered the perfect metal, because it was lasting, resistant to rust and was easily worked with for creating jewellery, its luster was alluring to the royalty and plebeian alike. It became the standard of value, a currency medium, together with silver, another lustrous (second-ranking) desirable metal, for economic transitions; the state of antiquity sustained their

power-base by accumulating gold in their treasuries. May be because of its lasting quality, a religious belief arose that gold-making techniques could be extended to avoid bodily corruption and death and to attain ‘immortality’ for the body and spirit.<sup>67</sup>

### **Rasaśāstra (Indian alchemy)**

The *Rasaśāstra* is an independent branch of *Āyurveda* dealing with art and science of handling, mercury, minerals and metals. Its purpose is two fold, the first is dehavedha (immortality) and the second lauhavedha (mastery over manipulating metals). Though today it is rarely employed for purpose of attaining dehavedha, the therapeutic side of *Rasaśāstra* is well exploited. It is noted that ‘the blending of alchemy with medical and chemical sciences, metallurgy, pseudo-sciences of astrology and magic, religion and even social organization (as it seems to have happened in India) is a characteristic feature in the alchemical traditions of all civilization.’<sup>68</sup>

**Kalyanaraman**, in his work *Indian Alchemy: Sōma in the Veda*, presents a completely alternate view that declares that entire handling of Soma is an alchemical process, precisely preparation of Gold from electrum. He puts forth his points in the following way in support of this argument:

- *Sōmayajña* as a ritual, can be interpreted as an elaborate justification for the memories of processing *asemom*, *asem*, *electrum* (cf. phonetic concordance with: *ayas* metal). A Tamil lexicon of Winslow, 1862 provides a philological trace; *soma maṇal*, is interpreted as meaning *veḷ maṇal*, sand containing silver ore! Soma, *soma maṇal*, *asenon*, *asem*, *electrum* may perhaps denote the same substance that dazzled and drew travelers of antiquity in search of Indus gold. It may perhaps be the same substance [contained in the *kamaṇḍalu* symbols in the icons of the *yakṣa* legacy] said to be *Amṛtam* which was considered to be the elixir of life, of immortality.<sup>69</sup>
- The entire *Rgvedic* text dealing with *soma* may be seen as an allegory on the ‘killing’ of *Vṛtra*.<sup>70</sup>
- *Sōmayajña* in *Rgvedic* days, in particular, connotes the process of parting/extracting gold and silver from *soma*, *electrum* ore (gold-silver pyrite ore).<sup>71</sup>
- The oral tradition of transmitting the knowledge of gold-smelting operations was continued over millennia to maintain secrecy.<sup>72</sup>
- P.C Ray evaluates the contribution of *soma* to Hindu alchemy: ‘Even in *Rgveda* we find that *Sōmarasa* (juice of *Sōma* plant) has been described as an *Amṛta* (allied to the Greek *ambrosia*), which conferred immortality upon the gods, and a medicine for a

sick man. In *Sōma* rasa and its attributes, it may, therefore, be said that we have the dawn of Hindu alchemy. But it was during the Tantric period that the practice of alchemy reached its highest development in India.<sup>73</sup>

- The argument which will be elaborated further, is simple: *Sōma* is electrum; *Ṛgveda* cannot be interpreted meaningfully without understanding the true meaning of *Sōma*; *Ṛgveda* is an alchemical metallurgical allegory. *śulvasūtras* are texts concerned with the sciences of mines and extraction of metals. The *vedi* is the metallurgist-chemist's hearth. The so-called 'cult-object' seen on hundreds of Indus seals is indeed a sublimation apparatus [possibly yielding mercury from cinnabar], later-day *somanāla* yantra. *Ṛgveda* may, therefore, be the earliest alchemical treatise continuing the remembered metallurgical legacy-symbolized by the forge, the crucible and the *kamaṇḍalu* -of a civilization of great antiquity.<sup>74</sup>

The premise of this article is based on the human will towards health, longevity, the longing to achieve the impossible, the drive to excel, create things, procreate for the best progeny and immortalize the existence in multiple forms. This is the universal nature of human being. From time immemorial our predecessors have left enough tracts to trace back to this obsession, to immortalize. Whether it is quest for securing *Amṛta*, ambrosia, sorcerer's stone or to undergo rigorous cleansing therapies to achieve *Rasāyana*, the basic objective is to stay forever. This desire is reflected well in the way *Sōma* was put to use in *Ṛgvedic* times. The *Sōma* in the later periods due to migration is compensated by inventing various substitutes, and by the time the *Āyurveda* took shape as it is evident from the narrations, the volume of therapeutically active drugs has grown up enormously, and took shape of specialization. The article identifies at least three such major disciplines which are still in practice, which are: *Rasāyana*, *Vājīkaraṇa* and *Rasaśāstra* (Indian alchemy). It is also noted that, though the quest for *Sōma* like performance enhancing substances if not always fruitful, but Indians, specially *Ayurvedists* have successfully invented very easy to collect drugs as substitutes for so called *Divyauśadhi* (divine plants) like *Sōma*. The best example for one such fitting substitute is *Laśuna* (garlic), a peasant's elixir, which is detailed upon to establish the human creativity to make up for the losses. It is consummate to consider that the reminiscent value of describing the otherwise exotic drug like *Divyauśadhi* (divine herbs) in a renowned book like *Carakasāhita* is not without purpose. Such narrations serve as a link between bygone ages to the time when the works were composed, and their relevance to this date.

**References:**

1. Lindsay Jones, Mircea Eliade, Charles J Adams. editors. Encyclopedia of religion. 2nd edition, Vol. 14, Detroit: Macmillan Reference; 2005. p. 9338.
2. Atkinson Ryan W. Attitudes toward performance enhancing drugs: division in male athletes : Eastern New Mexico University, 2011. P. 35
3. Staal Frists. Agni, The Vedic Ritual of the Fire Altar Vol-1. Delhi: Motilal Banarsidass; 1983. p.107.
4. Needham J. Science and Civilization in China, III-V. Cambridge; 1974, p.121
5. *ibid.*, 150-154
6. Staal Frists. Agni, The Vedic Ritual of the Fire Altar Vol-1. Delhi: Motilal Banarsidass, 1983. p.107.
7. *ibid.*,
8. *ibid.*,
9. *ibid.*,p. 108.
10. *ibid.*,p. 111.
11. Rajesh Kochhar. The Rgvedic Soma Plant in /Medicine and Life Sciences in India / Subbarayappa BV editor. New Delhi: Munshiram Manoharlal Publishers; 2001. p. 724.
12. Hints Of Earlier Human Exit From Africa'. Science News. doi:10.1126/science.1199113.
13. [http://en.wikipedia.org/wiki/Early\\_human\\_migrations](http://en.wikipedia.org/wiki/Early_human_migrations); a b 'Atlas of human journey: 45 - 40,000'. The genographic project. National Geographic Society. 1996-2010.
14. [http://en.wikipedia.org/wiki/Historical\\_migration](http://en.wikipedia.org/wiki/Historical_migration)
15. *ibid.*,
16. Bryant Edwin. The Quest for the Origins of Vedic Culture: The Indo-Aryan Migration Debate. Oxford University Press; 2001. ISBN 0-19-513777-9.( [http://en.wikipedia.org/wiki/Indo-Aryan\\_migration](http://en.wikipedia.org/wiki/Indo-Aryan_migration))
17. Staal Frists. Agni, The Vedic Ritual of the Fire Altar Vol-1. Delhi: Motilal Banarsidass, 1983. p. 20.
18. Calvert Watkins. Indo-European and the Indo-Europeans. The American Heritage Dictionary of the English Language, 4th edition; 2000.

19. Brian M. Fagan. editor. The Oxford Companion to Archaeology. Oxford University Press; 1996. p 347.
20. <http://en.wikipedia.org/wiki/Proto-Indo-Europeans>
21. Rajesh Kochhar. The Rgvedic Soma Plant in // Medicine and Life Sciences in India / Subbarayappa BV.editor. New Delhi: Munshiram Manoharlal Publishers; 2001. p. 725.
22. *ibid.*,
23. *ibid.*,
24. *ibid.*,
25. Singhal GD. *Susrutasamhita* Vol. II (Sarira,Cikitsa, and Kalpasthana) - Delhi: Chaukhamba Sanskrit Pratishtahan; 2007. P. 432-433
26. Rajesh Kochhar. The Vedic People (Their History and Geography). New Delhi: Orient Black Swan; 2009. P. 104.
27. Rajesh Kochhar. The Rgvedic Soma Plant // Medicine and Life Sciences in India / ed. Subbarayappa B. V. New Delhi: Munshiram Manoharlal Publishers Pvt. Ltd., 2001. p. 728.
28. *ibid.*, 729.
29. *ibid.*, 726.
30. *ibid.*,
31. Hillebrandt, A. *Vedische My tho logie*, 2nd ed. (Engl.tr. by S.R.Sarma), Delhi:Motilal Banarasi Dass; 1990. II: 154-6. as quoted in Kochhar (2001)
32. Modi JJ: *The Religious Caremonies and Customs of the Parsees*, 2nd ed. (Bombay: Society for the Promotion of Zoroastrian Knowledge and Education, Reprint, 1995) (1937: [205]. as quoted in Kochhar (2001)
33. Rajesh Kochhar. The Rgvedic Soma Plant in // Medicine and Life Sciences in India / Subbarayappa BV.editor. New Delhi: Munshiram Manoharlal Publishers; 2001. p. 726-727.
34. <http://www.heritageinstitute.com/zoroastrianism/haoma/iic.htmKhtop>
35. Singhal GD. *Susrutasamhita* Vol. II (Sarira,Cikitsa, and Kalpasthana). Delhi : Chaukhamba Sanskrit Pratishtahan; 2007. p. 429
36. *ibid.*, p. 423, 431.

37. Staal Frists. Agni, the Vedic Ritual of the Fire Altar Vol. One. Delhi: Motilal Banarsidass; 1983. p. 20
38. Ibid., p. 105.
39. Hillebrandt A. Vedische My tho logie, 2nd ed. (Engl.tr. by S.R.Sarma). Delhi: Motilal Banarasi Dass; 1990. I: 158. as quoted in Kochhar (2001)
40. O'Flaherty WD. The Post-Vedic History of the *Sōma* Plant. In: Wasson. 1968 p.96. as quoted in Kochhar (2001)
41. Hillebrandt, A. 0927-29) Vedische My tho logie, 2nd ed. (Engl.tr. by S.R.Sarma),Delhi: Motilal Banarasi Dass; 1990. I. p. 136. as quoted in Kochhar (2001).
42. Ibid., p. 159.
43. O'Flaherty WD. The Post-Vedic History of the *Sōma* Plant. In: Wasson. 1968 p. 96-7. quoted in Kochhar (2001)
44. Rajesh Kochhar. The Rgvedic Soma Plant in // Medicine and Life Sciences in India / Subbarayappa BV editor. New Delhi: Munshiram Manoharlal Publishers; 2001. p. 728.
45. Singjhal GD. Susruta Samhita Vol. II (Sarira,Cikitsa, and Kalpasthana). Delhi: Chaukhamba Sanskrit Pratishtahan; 2007. p. 423.
46. ibid., 435.
47. ibid.,
48. ibid., p. 429.
49. Meulenbeld GJ. A History of Indin Midical Literature Vol.- IA. Egbert Forsten: Groningen Publishers; 1999. p. 52, 53.
50. Sharma RK, Bhagwan Dash. Caraka Samhita (Eng. Translation) Vol. III (Chikitsasthana Chp. I-IV). Varanasi: Chaukhamba Sanskrit Series Office; p. 3-4
51. ibid., p. 8.
52. Meulenbeld GJ. A History of Indin Midical Literature Vol.- IA. Egbert Forsten: Groningen Publishers; 1999. p. 52, 53.
53. ibid.,
54. Chandra Kaviratna A, Sharma P. Charaka Samihita, Vol.-III , 2nd Revised edition.- Delhi:Srisatguru Publication; 1996. P. 690.
55. Suryakanta Sanskrit Hindi English Dictionary, Reprint. Hyderabad: Orient Black Swan; 2008. P. 270, 271.

56. Vaman Shivram Apte. The Practical Sanskrit English Dictionary. 3rd edition. New Delhi: Bharatiya Granth Niketan; 2004.. p. 499.
57. Thakur Balwant Singh, Chuneekar KC. Glosary of Vegetable Drugs in Brhatrayi. Varanasi: Chaukhamba Amarabharati Prakashan; 1999. p. preface. IX.
58. Trivedi Acarya Raghuvveer Prasad. Sangdhiga vanaushadhi darshika. Nagpur: Baidyanath Ayurved Bhavan; 1985. P. 163.
59. Meulenbeld GJ. History of Story of Indian Medical Literatures Vol. 2 A. Egbert Forsten, Netherlands: Groningen Publishers; 2000.p. 15.
60. *ibid.*, P. 5.
61. *ibid.*, p. 9.
62. *ibid.*, p. 34.
63. Meulenbeld GJ. A History of Indin Midical Literature Vol. - IA. Egbert Forsten: Groningen Publishers; 1999. p. 57.
64. Meulenbeld GJ. A History of Indin Midical Literature Vol. - IA. Egbert Forsten: Groningen Publishers; 1999. P. 472.
65. Sharma RK, Bhagwan Dash. Carakasamhita Vol. III (Cikitsāsthāna- 1/9-12 āyurvedadīpikā commentary of cakradatta). Varanas: Chaukhamba Sanskrit Series Office; P. 9.
66. Kalyanaraman S. Indian Alchemy Soma in the Veda. New Delhi: Munshiram Monoharlal Publishers; 2004. p. xviii.
67. *Ibid.*, p. xx.
68. *Ibid.*, p. xxi.
69. *Ibid.*, p.13, 93.
70. *Ibid.*, p. 64
71. *Ibid.*, p. 67.
72. *Ibid.*,
73. *Ibid.*, p. 68.
74. *Ibid.*, p. 69.



सारांश

वैदिक युग की दिव्य औषधि एवं आज के युग की शारीरिक, मानसिक प्रदर्शन को बढ़ाने वाले औषधियाँ, एक तुलनात्मक अध्ययन

साकेतराम त्रिगुल्ला एवं अला नारायण

रसायनतन्त्र का परिचय देते हुए इंद्र हिमालयों में पाये जाने वाले जीवनीयपौधों के बारे में ऋषियों को बनाता है, जो देवताओं के समान शारीरिक, मानसिक, शक्ति एवं बहुत लंबे जीवन को प्रदान करने में सक्षम है। इंद्र के इस परिचय में ऋग्वेद काल का भारत-ईरान से जुड़ा खानाबदोश संस्कृति, प्रसिद्ध सोम का विस्तृत प्रयोग इत्यादि का स्मरण हो जाता है। सोम के सेवन से काव्य क्षमता, शारीरिक सहनशक्ति और यौन जीवन शक्ति इत्यादि प्राप्त होने का उल्लेख किया गया है। सोम को अमृत के समान माना जाता है, जो अमृतत्व को प्रदान करता है। अमरता की अवधारणा हमेशा ही मनुष्य की इच्छा रही है, परन्तु तथ्य यह है कि आज तक कोई भी इसे हासिल नहीं किया। इस इच्छा की पूर्ति के लिए मनुष्य अपने पीछे कुछ यादगार निशाने छोड़ता है, जैसे: इमारत, साहित्यिक सामग्री, सजावट वास्तु इत्यादि। इसी तरह व्यक्ति की क्षमता बढ़ाने वाले औषधियों का प्रयोग भी लम्बे समय से मनुष्य के इतिहास के साथ जुड़ा हुआ है। सोम जैसी औषधियों का प्रयोग विश्व के सारे पुगने संस्कृतियों में पाया जाता है। ऋग्वेद काल के खानाबदोश संस्कृति का पालन करने वाले व्यक्ति जब पश्चिम से भारतीय उप महाद्वीप की ओर बढ़ रहे थे उस समय वे कुछ चीजे हमेशा के लिये खो दिये, और बहुतकुछ अन्य सामग्री भी भी करली। जो चीजे खो गईं, उनमें सोम प्रमुख है, जिनका मिलना जैसे जैसे आगे बढ़ते गये दुर्लभ होता गया। इसका कारण सोम सहज रूप में उत्पन्न होने वाले वादियों से दूर चले जाना था। नये मैदानी, पर्वतीय इलाकों में सोम नहीं मिलता था, परन्तु सोम के जैसे काम करने वाले कुछ अन्य पौधों को उन्होंने नये प्रदेशों में खोज लिये। आयुर्वेद संहिता का रूप धारण लेते समय तक, असली सोम के जगह पर सोम के जैसा काम करने औषधियों का चयन किया गया। इन में रसायन प्रभाव वाले हरीतकी, विभीतकी, आमलकी, विडङ्ग, लशुन जैसे साधारण, असानी से मिलने वाले औषधी शामिल हैं। ध्यान देने वाली बात यह है कि, सोम के जगह की पूरण करने के लिये आयुर्वेद रसायन, वाजीकरण नामक दो अङ्गों का विकसित किया, जो आज के युग के लिए अत्यन्त महत्वपूर्ण हैं। इसके अलावा दीर्घायु की इच्छा से ही रसशास्त्र का भी विकास हुआ, जहाँ स्वर्ण सोम की जगह लेता है। स्वर्ण के जैसा बहुत काल तक टिकना, एवं अनमोल रहना रसशास्त्र का प्रधान अंश रहा। प्राचीन ऋग्वेद काल से लेकर आज तक सोम के जैसा पदार्थों की सेवन की पृष्ठभूमि, रसायन, वाजीकरण एवं रसशास्त्र की विकास में इसका प्रभाव इत्यादियों का यहाँ चर्चा की गयी।