

CONTRIBUTION OF UNĀNI MATERIA MEDICAS TO THE
IDENTIFICATION OF VEDIC PLANTS WITH
SPECIAL REFERENCE TO UŚANĀ

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Uśanā has been mentioned in the *Śatapatha Brāhmaṇa* as the name of a plant from which *Soma* was pressed. Thereafter, it disappears as a plant entity from the Indian tradition. This name seems to have been adopted on the basis of its root word *uśa* appearing in later books as *uśa* meaning 'saline or alkaline earth'. The epithet *uśanā* is suggestive of a group of plants native to the coastal areas and other saline tracts, represented botanically by the plant-species of the genera *Haloxylon*, *Suaeda* and *Salsola* and some others, all belonging to the *vāstuka* family, i.e. Family : Chenopodiaceae. These plants are found abundantly in the Punjab, Sind, Rajasthan, Baluchistan, in Afghanistan (the Aryan Settlement areas in India) extending Westward to the saline lands of Persia (the area of the Iranian branch of the Indo-Iranian Aryans) and further West in the Mediterranean coastal area, the composite lands of the Indo-European Aryan tribes, the non-Aryan and Semitic tribes. Looking to the relation of India to other regions of the Ancient World which extended from the Mediterranean to the Indian Ocean, when a search has been made into the historical antecedents, it is revealed that the Vedic *uśanā* has sustained its existence in slightly modified form, as *Ishlān* in the old Iranians and the root word *uśa* or *uśa* through the far western region the Greeco-Semitic world. And the Vedic *uśanā* reappears as *Uśnāna* in the Indian Unani Materia Medicas of the later Medieval period by the people of the mixed Arabo-Persian Culture. It is also revealed that the epithet *uśnāna* is an Indo-Iranian vocable rather than Arabic, as mentioned by the writer of the *Muhīta-Āzam*. The details of the facts and evidences in these investigations are discussed in the paper.

Uśanā occurs in the *Śatapatha Brāhmaṇa* as the name of a plant from which *Soma* was pressed (1, 4). Thenceforth the further whereabouts of this plant totally disappear in the Indian tradition and are not traceable elsewhere. This name, as a plant, does not appear also in the *Mufradātā-Hindī (Tālif Sharifī)*, an authentic work in Persian language on the single drugs of Hindustān (pertaining especially to the Western India) belonging to the later Medieval Period written by the learned Hakim scholar and the then Moghal-Court physician Hakim Mohammad Sharif Khān, who is also the founder physician of the Sharifī school of Unani physicians in India. *Soma* analogous with *Homa* of the *Avesta* (the letter 'S' being replaced by 'H') seems to have occupied a very high place in the life of the Indian Aryans in

the context of their sacrificial rituals and has been highly praised for possessing miraculous properties. The correct identity of the original *Soma* to be finally agreed upon unanimously by the scholars still remains an objective to be achieved. Later on *Soma* seems to have become more or less a 'generic name,' as with the further movements of the Indian Aryans and their settlements in newer and newer areas, various substitute-plants have been recommended depending upon their easy availability in the new area of the settlements and their fulfilling the requirements of the original *Soma*. *Uśanā* of the *Śatapatha Brāhmaṇa* also appears as one of the substitutes of the *Soma* available in the Vedic India of the *Brāhmaṇas*. This study is confined to the search of the whereabouts and the identity of this *Uśanā* plant without entering much into the controversy of the Vedic *Soma*.

No descriptive characters of this plant, whatsoever, are available in the Vedic literature or elsewhere in the Indian classics. So, at the start we have to depend upon this name itself as to what does it suggest. From a critical study of the Ancient Flora of this country and elsewhere in the ancient world, it is revealed that the main basis of the plant nomenclature had been geographical consideration, that is, the habitat area had been the commonest. In the name *Uśanā*, *uśa* seems to be the root word. *Uśa* in the later *Samhitās* and the *Brāhmaṇas* denotes salt ground (alkaline earth) suited for cattle (1, 2, 3, 4b). This word in the sense of alkaline earth continues in the Indian tradition and is seen also in the Sanskrit lexicons of the Medieval Period (circa 13th-14th century A.D.) (8, 9),* which is probably the basis of the today's colloquial word *u(ū)śarā* for alkaline earth. Thus the name *Uśanā* is suggestive of plants growing on the alkaline earth, where crops do not flourish and being thus suitable for cattle-grazing. The name seems to be rather of the 'generic' than the 'specific' nature, and may be applicable to several species, but having similar properties. This is analogous with the 'salt-worts' of the Greeks and the 'soda-plants', the source plants of *Barilla* (impure soda) or *sajjikhāra* (*sarjikākṣāra*) of the Ayurvedic texts and the *Nighaṇṭus*. Soda is also the basic ingredient of soaps used for washing clothes. *Barilla* is obtained from various species of salt-worts found abundantly in Sindh, the Punjab, Rajasthan and used for both washing purposes and as digestive and carminative in medicinal preparation and in the preparation of *pāpaḍa*. Bikaner is still famous for *pāpaḍa* industry. Sodium-bi-carbonate in the modern medicine (though prepared by chemical methods) is also used for the same purposes.

Detailed information on the soda-plants regarding their distribution, economic values and botanical characters is now available in the modern books on economic botany, regional floras, gazetteers, dictionaries, pharmacographics etc. (15—22). All these soda-plants, though belonging to different plant-genera and species, are included in the Family : Chenopodiaceae, i.e. the family of the common leafy vegetable *vāstuka* (white goose-foot), which is found as the weed of cultivation

*In the *Medinī Kośa* (8)—*uśa* and in the *Vaijayanti Kośa* (9)—the vedic form *ūśa*.

in the fields of wheat and barely and sometimes cultivated in the suburban areas of the cities. Though there is some divergence in the botanical nomenclature of these soda-plants but they can be converged into the following three genera : (a) *Haloxylon*, (2) *Suaeda* and (3) *Salsola*. The generic name *Haloxylon* derived from the Greek *halos*, the sea, and *xylos*, wood, refers to the saline habitat. It includes 8-10 species distributed in the Mediterranean region and the Western Africa. Three species are distributed in the Punjab, Sind, Baluchistan, Rajputana desert and western coastal area, where it has great economical value as a source of *sajji* and fodder for animals. *Haloxylon* species are all saline perennials, a few being shrubs or small trees. In the Punjab, Sind, Baluchistan, N. W. Frontier Province (now in Pakistan) and extending westward to Afghanistan, Syria and Arabia, the *suaeda* and *salsola** species or other soda plant species find similar uses and sustain their knowledge and popularity from a long time. In the Punjab, Sind and Rajasthan, these plants are now known under the name, *lanā*, *gora-lānā*, *lāni*, *shorā*, *sajji* etc. In English these are collectively known as 'Punjab Salt-Worts'.

From the perusal of the Unani Materia Medicas (11-14), a very valuable information is revealed that the same salt-worts or soda plants, as mentioned above, are included in, and described under a group of plants having similar uses under the caption *uśnāna*. On a comparison of the descriptions given in these materia medicas with those in the modern books (15-23), one is reasonably led to the conclusion that the *uśanā* of the Vedic Literature and the *uśnāna* of the Unani Materia Medicas are one and the same epithets having common etymological basis and representing the same plant or plants. But before concluding the finding, there is another point worth-mentioning in this context at this juncture which has to be settled before taking any final conclusion. The learned writer of the *Muhīta-Āzama* (12, p. 162) while giving two other synonyms, *Gāsūla* and *Hurz*, for *Uśnāna* says that *uśnāna* is an Arabic vocable. Since the Arabic and the Sanskrit, both, belong to altogether different linguistic families, the mutual correspondence of both, the *uśanā* and the *uśnāna*, and the previous link of the *uśnāna* to the vedic *uśanā* will have to be settled before concluding that the Vedic *uśanā* and this *uśnāna* are one and the same epithet, conveying the same idea and suggesting the same plant. For establishing the communion of these two divergent poles, a downward historical survey of the root word *uśa* will have to be done starting from the first pole to meet at the second one.

This is the commonly agreed opinion of the historians and indologists that the ancient civilization had originated and developed in the valleys of the three great rivers, the Indus giving rise to the Indus Valley Civilization in India, the Euphrates and the Tigris in the Middle East, from which arose the Mesopotamian

*It is interesting to note that, though these plants are saline, in Persia a saccharine exudation (*Manna*) is also obtained from *Salsola oetioa* Del. Thus the plant *uśanā* fully justifies itself as a substitute for *Soma*.

culture and the Nile Valley in Egypt, the mother of the Egyptian Culture. Egypt had one special feature that the three continents Asia, Africa and Europe, (especially the mediterranean region), meet here. There were intercommunication, mutual trade relations, and movements of the groups of people from one region to another. Practically the ancient history of any region of this vast area is the history of a world which extended from the Mediterranean Sea to the Indian Ocean, where India, by her valuable geographical virtues formed an important integral part representing the eastern pole. Sir William Jones (*Asiatic Researches*, Vol. I, p. 426) has rightly remarked that the Hindus had an immemorial affinity with old Persians, Ethiopians, Egyptians, Phoenicians, Greeks and Tuscans, the Scythians or Goths and Celts, the Chinese, Japanese and the Peruvians. After the great invasion of Alexander the Great, the relation of India with the West increased in a very vast sphere and the matrimonial alliance of the Mauryan Emperor with the Seleucids made this contact all the more cordial, prosperous and long-lived.

Sarjikākṣāra has been prepared in India from a very early date. Its knowledge in the western world is also very old. In the time of Pliny a mineral alkali appears to have been prepared in Egypt from the ashes of certain plants. Strabo mentions an alkaline water in Armenia used for washing clothes. The plants from which *barilla* was prepared were known to the Greeks as meaning 'salt-worts' (18.)

Seleucus's son Antiochus I sent Patrocles to explore the Caspian. Patrocles started from the *Kizil ushen* in Atropatene (Azērbaijan)⁶. Here both epithets reflect our attention to 'uṣa'. It is worth mentioning in this context that the Greek name of *vāstuka* is *atraphaxis* (D.S. 145) (14) which is most probably based on the habitat area Atropatene. The English name 'atriplex' is directly derived from the Greek *atrcphaxis*. *Vāstuka*, *Chenopodium album* Linn. (Family : Chenopodiaceae) grows abundantly and flourishes in the saline and alkaline lands of the Punjab, which is mentioned by Ḍalhaṇa, the commentator (circa thirteenth century A. D.) on the *Suśruta Saṃhitā* as *ṭāṅkavāstuka*, where *ṭāṅk* is the ancient geographical name applied to the Punjab.

After the fall of the Seleucids in the Middle East and the Ptolemies in Egypt and the establishment of the Roman Empire, in the years circa 193-194 A.D. the provinces of Mesopotamia and *Osrhena* were created by the Romans (5, p. 211). During the Roman Empire (circa second century A.D.) in the context of Jerusalem there is mention of *usrusalem* near the Red sea.

The *Suaeda* species grow in the Punjab, Baluchistan, Sind and adjoining areas and also in the Syrian Saline areas adjoining the Dead Sea to the Sea of Galilee. In the Atlas a place 'Es Suweida' is shown in this area, which seems most probably the basis in the Generic name 'Suaeda'.

Aitchison in his plants of Afghanistan states that the name *ishlan*, probably

a mispronunciation of *uśnān* (and also of the Vedic *uśanā*) is applied in the Hari-rud valley to *Anabasis erispoda*, Benth, et Hook. f. (Family : Chenopodiaceae) and used in preparing *bcrilla*.

Based on the facts and evidences revealed in the foregoing paragraphs, it is seen that the Vedic *ūṣa* and *uśanā*, of which the *uśanā* has diaspeared from the Indian tradition, have flowed to the West to the Iranian, Greek and Semitic world. It is sustaining its existence in the Iranian tradition and has returned again through the confluent Arabic and Persian traditions to reappear in its land of origin through these newcomers and immigrants of the later medieval periods. Concurrently, it is also evinsed that *uśnān* seems to be an Indo-Iranian vocable and not an Arabic one, as mentioned by the writer of the *Muhīta Āzam*.

It is, therefore, concluded that *uśanā* of the vedic period and *uśnān* of the Unani Materia Medicas are one and the same plants and this is an exemplary instance where the Unani Materia Medicas have great impact on arriving at the identity of the Vedic Plants, whose whereabouts are lost in obscurity from their own tradition.

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