

EPHEDRA AS SOMA MEANING HEMP FIBRES
WITH SOMA LATER MISIDENTIFIED AS THE HEMP PLANT ITSELF

S. MAHDIHASSAN

SD-34, Block-A, North Nazimabad, Karachi 33

(Received 10 October 1983; after revision 12 March 1985)

Ephedra sinica, the Chinese species, is an assembly of thin long yellow stalks. Due to its appearance it was finally named in Chinese after yellow hemp fibres as *hao-ma*, fire-yellow hemp (fibres). *Soma* being thus associated in name with hemp, it was believed to be the hemp plant itself. Moreover names of hemp were transferred to ephedra. Here there are three epochs. 1. Ephedra=*hao-ma*, fire-yellow hemp fibre. 2. Ephedra=*ma-huang*, 'hemp-yellow' and cannabis=*huang-ma* 'yellow hemp'. 3. *Hum*=ephedra. Most names of hemp and of ephedra have been independently considered.

In *Rgveda soma* is primarily a plant. But its juice, being the more important, *soma* usually signifies its content and the drink. Then as actually known the plant, as container, would have priority over its content, the juice. This would be the reasoning according to common sense. But here comes the specialized reasoning of the philologist who assumes that the word *soma* is a Sanskrit word which then must have a Sanskrit root. He could not find this better than the root *Su*=to press. This delivered the word *soma* merely signifying what has been "pressed out". Then it is neither the juice, nor the plant, but merely the procedure to which the plant was subjected that has given the name *soma*. Moreover the juice was named before the plant, the content before the container. Whatever may be the justification of such an etymology it is imperative to know who it was that named the plant and what led to its discovery. It must be pointed out that no one seems to have taken the word *soma* to that early stage when the plant came to be used on account of which the plant and its juice became so popular that the plant was finally deified as God Soma in charge of all vegetation. People seem to have ignored the earliest use of *soma* and it is this feature that is being emphasized here.

However before proceeding further we may consider two criticisms already offered against the name *soma*. Bailey¹ clearly writes that "the plant has no reasonable name if it is traced to *hau*, press-out-juice that is the pressed out stuff or (actually to) the (mere) act of pressing juice." *Hau* would be the root in *Avesta* where the word is *hauma* or *haoma*, corresponding to the Sanskrit root *su* and its derivative *soma*. Then if *soma* had been a Sanskrit word some allied form should have been found in some other Indo-Germanic language. But Keith² critically observed commenting that "*Soma* is derived from the root *su*, and means merely the pressed drink, and there is no parallel word in the other Indo-European languages." Others must have also realized all this but the problem was to find the best root assignable to *haoma* or *soma*.

The solution lies in taking it to Chinese which then gives the meaningful name *haoma* in *Avesta* and *Soma* in Sanskrit. We start with a Chinese ascetic pressed to search food-stuffs from the resources of a forest. This emphasis on necessity leading to a discovery is no where hinted at in the present attempts to trace the etymology of the name *soma*. The hungry ascetic saw, on a hill, a bush loaded with conspicuous red berries. Finding them sweet and edible he had a hearty meal and as a result he further felt energized and happier. At times when there were no berries he tried to chew the thin stalks which characterized the plant and found that even these yielded a juice which was an energizer and euphoriant. The plant was ephedra and it became a regular drug with the ascetic. He then had to give it a name.

The Chinese species of ephedra has yellow stalks which are long and thin. Then both in shape and in colour it resembled the fibres of hemp. In Chinese hemp=*ma*, and fiery-yellow=*ho*. This was anciently pronounced *hua*, as given in Karlgren³. Then the term *hua-ma* first designated ephedra in Chinese. It was named after hemp or cannabis fibre. At this time, or about 4000 B.C., the Aryans were hunters, using spear and bow. With such weapons hunting was very strenuous and they needed a drug to make them fatigue-proof. Thus there was a regular necessity which induced the Aryans to learn the use of ephedra and they took to it with a vengeance. They consumed it thrice a day. Being hunters they pounded the stalks or twigs between stones, added water and drank the juice thus obtained. The point to note is that the stalks of ephedra are thin and long as also yellow in colour. As such they resembled fibres of hemp. To the hunters, familiar with thin arrows, the stalks resembled arrows. *RV. X. 89.5* speaks of *soma* as though "armed with arrows" and this feature is so characteristic that "all forest trees and all bushes (would) not deceive Indra with their (own) offered likeness", since none has arrow-like, thin and long stalks. Thus as verse *IX. 50.1* informs each stalk would end in "Soma's thin arrow's sharpened point". The thousand thin fibre-like stalks with as many "sharpened points" would collectively resemble, as verse *I. 32.12* speaks "a horse tail wast thou". This would be the general appearance of a plant collected from the field and seen at home. Now Hakim Mohammed Said⁴ has published a work on Chinese Medicine which now appears in its second edition. He quotes a Chinese source which mentions "Ephedra (as) a variety of shrubby *Horse-tail*" plant. Fortunately years ago Read⁵ had sent me a reprint of his article on Ancient Chinese Medicine. From this article I can offer fig. 1, which shows the "horse-tail" appearance of the plant. On the left in the figure there is the plant in fruit. The rest are whole plants. The white spots on the two central plants are "scab-leaves" coverings of the joints of stalks. Before we part we must remember that *Rgveda*, and a Chinese authority, each has compared ephedra, as plant, to "horse-tail", and independently, Read illustrates ephedra likewise. These three sources mutually confirm one another. The stalks of *E. sinica* are yellow and the name *hua-ma* likewise signifies fire-yellow hemp (fibres). Fortunately Prof. Farmsworth⁶ of Chicago has recently published in June 1983 an article with the Chinese ephedra, *E. sinica*, coloured yellow. It fully confirms how in *Rgveda* and in *Avesta*, the plant is praised as being golden-coloured. *RV. 8.9.19* says "when yellow stalks give forth the juice".

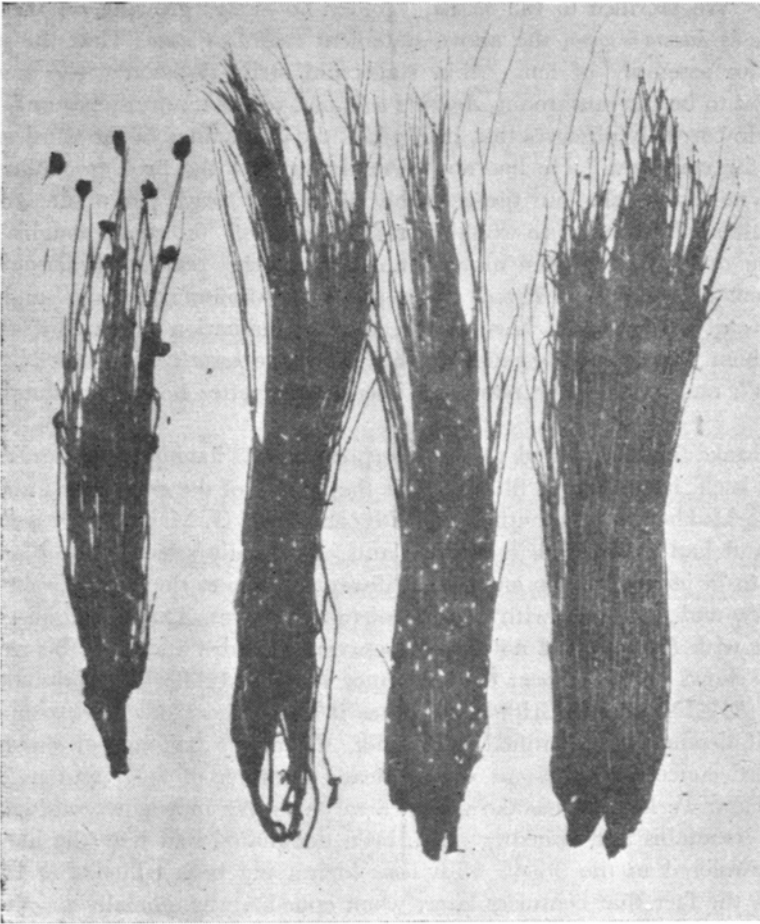


Fig. 1. *Ephedra sinica* from Read (1939)

History shows how ideas continue to persist some times in quite mutilated forms. B. L. Mukherjee⁷ has contributed an article where he finally states that "from what has been stated above we may now conclude that the weight of evidence is in favour of the identification of *soma* with *cannabis* (*bhāṅg*)." The one glaring fact against such a theory is that *cannabis*, as plant, has conspicuous large leaves while *R̥gveda* speaks of *soma* as though it was an all-stalk plant, with no leaves to speak of *RV. IX. 5.10* refers to *soma* as "*Vanaspati*, the ever-green, golden-hued, refulgent with thousand boughs." As *vanaspati* it is a medicinal plant, as ever-green it is perennial, which *ephedra* is, as golden-hued it is the yellow-stalked *ephedra* species of China, and with thousand boughs it is an *assembly of stalks* resembling a horse-tail. Here is a brief but a very characterising description of the Chinese *ephedra* plant. *Ephedra*, moreover, is a flower bearing plant and this fact can also be documented. Mills⁸ has translated from *Avesta*, *Yasna*

42.5 stating "We sacrifice to the *haoma*, "golden-flowered" growing on the heights". In as much as *haoma*=*soma*, the above statement refers to *soma*. That the plant was practically an assembly of long, thin stalks did strike Wasson⁹ who nevertheless imagines *soma* to be the mushroom, *Amanita muscaria*, which naturally has only one stalk per plant. He correctly observes that in *Rgveda* "the dominance of the word *amśu*-stalk, stem, calls for comment." He has not correctly worded the problem. What calls for comment is not only stalks but the assembly of *thousand boughs* per plant. Abiding by what *Rgveda* actually states *soma* would be an assembly of "thousand boughs" and this would single out ephedra from most, if not all, of the plants the Aryan nomads actually came across. When *Rgveda* could speak of "thousand boughs" and *Avesta* of "yellow flowers" there could have also been some indication of leaves if *soma* did at all possess them. We can safely conclude that the name *homa/soma* signifies "fire-yellow hemp fibres", and as such the plant has been named after hemp or cannabis.

The mistake further created was to interpret *homa* as having been named after the hemp plant itself, instead of its fibre. This is the genesis of the erroneous interpretation leading B. L. Mukherjee to "identify *soma* with cannabis". G. Majumdar¹⁰ was Professor of Botany and had specialized in Vedic plants. He finally selected five plants one of which was to be *soma*. Strange enough he illustrates among them both ephedra, with leafless stalks, and cannabis, with conspicuous large leaves. That a botanist who was also familiar with *Rgveda* could not decide between ephedra and cannabis as to which is *soma* only shows undue respect to the former writer, Mukherjee. Majumdar for his part quotes *RV. IX. 61.13*. Griffith translates it thus "the Gods have come to Indu (Soma) well descended, beautified with milk, the active 'crusher of the foe'. The Sanskrit word concerned is *bhanga* which means "crusher of foe", and not *bhāṅg*=cannabis. Here we have a mistake within a mistake. We may now consider how the two plants, cannabis and ephedra, have been designated and how the name of one has been transferred to the other, with *soma* identifying both ephedra and cannabis. Above all is the fact that centuries later, when ephedra was officially recognized as a medicinal plant, it nevertheless continued to be designated in terms of cannabis. If *hemp*=*ma*, then as yellow-hemp or *ma-huang* is ephedra really hemp (resembling) yellow (plant). Thus arose two names *huang-ma* for hemp and *ma-huang* for ephedra. They are mirror-images of each other which means next to being identical. Thus there is a regular continuation in associating by name cannabis with ephedra. It started with the name *ho-ma* or *so-ma*, yellow-hemp-fibres.

We have in the following list names of ephedra still current in the localities indicated. They are taken from an earlier publication.¹¹

1. *Soma*, in Kafirstan—Qazilbash¹²
2. *Somani*, in Kafirstan and Chitral—Qazilbash¹³
3. *Ma-Hu* and *Wa-ma*
(recalling *ho-ma* and *ma-huang*), in Hindukush Valley—Qazilbash^{12,13}
4. *Hum* and *huma*, in Herat, Afghanistan (recalling *ho-ma*)—Qazilbash¹³

5. *Uma* and *Uman*, in Baluchistan—Qazilbash¹³
6. *Hum* in Afghanistan—Stein¹⁴
7. *Hum*, *humb* and *Nar-Omb* in Baluchistan—Bailey¹¹ : 105
8. *Om* and *Hom* in Afghanistan—Bailey¹¹ : 105
9. *Hum*, *huma* and *yah-ma* in Harirud Valley, Afghanistan—Aitchinson quoted by Griffith¹⁵
10. *Hum*, mentioned by Alberuni—Hakim Said¹⁶

We may classify these names as allied in sound.

1. *Soma*, *Somani*
2. *Ma-hu*, inverse of *ho-ma*
3. *Hum*, *human*, *humb*, recalls *homa*
4. *Om*, *Uma*, *Uman*, is again *homa*, with the loss of initial, h.
5. *Omanos*. Cama¹⁷ gives as occurring in Greek the herb *omomi*, of which the singular is *omanos*. If we Hellenize the word *uman* as given in series 4 just above, *uman*=*omanos*. They all signify ephedra as the sacred plant *homa*.

We now come to the interesting fact that Suryakanta¹⁹ in his Vedic Dictionary gives *uma*=*shana*=*hemp*, while according to Qazilbash¹³ *uma*=ephedra. We can now construct three epochs with the following terms.

1. *Hao-ma*=hemp=ephedra
2. *Huang-ma*=hemp and *ma-huang*=ephedra
3. *Uma*=hemp=ephedra

Suryakanta, for almost every word, gives reference to some text which he however does not do so in the case of *uma* as 'hemp'. Due to his sad demise I had to appeal to Prof. Dandekar of Poona as perhaps the best Vedic scholar we have today. On 12th Aug. 1983 he kindly supplied the following information : "The earliest occurrence of *uma*, in the sense of hemp, is to be found in *Śatapatha-Brāhmaṇa* 6.6.1.24. The commentary explains the word *umah* occurring here as '*Umah kṣauma-vastropādānabhūtas tṛnaviṣeṣaḥ*'. *Uma* is a particular kind of grass which is used for the production of linen. This meaning suits the context very well. The word *uma* is attested in the same sense also in Panini's *Aṣṭādhyāyī* 5.24". We can now finally equate *uma*=cannabis=hemp=ephedra (this as given by Qazilbash). The Aryans finding hemp as a useful fibre coined a connotative name *śana*, signifying "brightness" as explained before.¹⁹ Thus most of the names of hemp and of ephedra have been discussed. Critically considered, we have two fibres, flax from the linseed plant and hemp from cannabis species. Apparently the Hindusthani word *śan*, derived from the Sanskrit word *śana*, designates both hemp as also flax. As plant cannabis would be *bhāṅg*, while the flax yielding plant would be the linseed plant. We have now to explain the genesis of the name hemp.

In Danish hemp would be hanf. We have recognized the popular form of the word, *hum*, mentioned by Aitchinson, Stein and Bailey. As pronounced *hum* would give a nasal

sound. To make the terminal sound clearer either "f" or "p" can be added whence would arise the forms, humf or hump. Humf easily mutated into hanf as in Danish while hump into hemp as finally found in English. Then as the sense carrier hemp in English is finally traceable to *hum*.

REFERENCE

- ¹Bailey, Sir Harold W., (1972), A half-century of Irano-Indian studies, *J. R. As. Soc.*, London, No. 2, p. 105.
- ²Keith, A. B., (1925), Religion and Philosophy of the Veda and Upanishads, *Harvard Oriental Series*, vol. 31, p. 171.
- ³Karlgren, B., (1923), Analytic Dictionary of Chinese, Paris, Character 117.
- ⁴Said, Hakim Mohammed, (1981), Medicine in China, p. 272.
- ⁵Read, B. E., (1939), Ancient Chinese Medicine and its modern interpretation, *Thien Hsia Monthly*, Shanghai, March 1939.
- ⁶Farmsworth, Norman, R., (1983), A Treasure House of Herbs, *World Health*, Geneva, June, 1983.
- ⁷Mukherjee, Braja Lal; (1921), The Soma Plant, *J. R. As. Soc.*, p. 241.
- ⁸Mills, L. H., (1887), The Zend Avesta, *SBE*, Vol. 31, p. 291.
- ⁹Wasson, R. Gordon, (1968), Soma : Divine Mushroom of Immortality, p. 45.
- ¹⁰Majumdar, G., (1943), *Vedic Plants*, B. C. Law volume. Ind. Res. Inst. Calcutta, p. 661.
- ¹¹Mahdihassan, S., (1982), Essays on the History of Alchemy, Medicine and Drugs, Hamdard, Press Karachi, p. 15.
- ¹²Qazilbash, N. A., (1971), Pakistan Ephedra, part I. *Pharm. Weekblad*, 106 (No. 17): 345.
- ¹³—————(1960), Ephedra of the Rigveda, *Pharm. J.*, 6th Nov. 1960. As Reprint.
- ¹⁴Stein, Sir Aurel, (1932), On the ephedra, the Hum, and the Soma, *Btn. School Or. Stu.*, London. 6: 50.
- ¹⁵Griffith, R. T. H., (1889), Hymns of Rigveda. (Rept. 1971), Aitchinson quoted on p. 2, vol. 1.
- ¹⁶Said, Hakim Mohammad, (1973); Alburuni's Pharmacy and Materia Medica, Hamdard Press, Karachi, p. 330.
- ¹⁷Cama, K. R., (1968), *Collected works*. vol. 1, p. 105, Cama Oriental Inst., Bombay.
- ¹⁸Suryakanta, (1981), A Practical Vedic Dictionary, Delhi, p. 201.
- ¹⁹Mahdihassan, S., (1982), Etymology of the names of Ephedra and Cannabis, *Stu. Hist. Med.*, 7(1): 63-67.