

BOTANY IN THE VEDAS (PART I)

(A CRITICAL STUDY OF REFERENCES TO PLANTS, ETC., AND THEIR USES)

A. L. SHARMA

Government Degree College, Jagadalpur

A. B. SEERWANI

Government Degree College, Beena (M.P.)

and

V. R. SHASTRY

School of Studies in Chemistry, Vikram University,
Ujjain

(Received 28 January 1972)

A detailed study of the *R̥g*, *Yajur*, *Sāma* and *Atharva Vedas* has shown that more than 150 herbal and other medicines derived from *Odina pinnata* (*ajāśr̥ṅgī*), *Colansanthus indica* (*aratu*), *Ficus religiosa* (*āśvattha*), *Ficus glomerata* (*udumber*), *Costus speciosus* (*kuṣṭha*), *Acacia catechu* (*khadira*), *Solanum nigrum* (*nītatnī*), *Achyranthus aspera* (*apāmārga*), etc., have been described. *Solanum nigrum* was used to cure hair diseases. *Achyranthus aspera* was used to suppress hunger and thirst. *R̥ṣis* had an idea regarding ecological division of plants and they seem to be aware of different categories of plants such as aquatic, terrestrial, amphibious, etc.

The thirst for knowledge has been the foremost tendency inherent in man, which has helped a lot in the advancement of human learning and understanding. His attention must, first of all, have been drawn towards the things around him such as the vegetation, animals and celestial bodies. In this connection it will not be incorrect to say that when suffering from thirst and hunger, if any homosapiens had swallowed certain vegetation and perchance had his hunger been satisfied, incidentally this would have been the foremost utility of vegetation. Similarly, had any human being applied some vegetation on his wound or used it internally during his suffering and was cured, then this would have been the starting point of Science of Medicine.

Though there is no clear proof on record for the inception and development of knowledge but it can safely be said that its tradition in India is quite old and archaic. In our ancient literature, i.e. the Vedas, which claim the privilege of being the oldest literature on record, and in which every aspect of life has been discussed from a scientific and metaphysical point of view, we can encounter the detailed references to and description of plant life and its uses to human beings.

The present article is a humble attempt to hint at certain salient features of Vedic literature and to correlate that knowledge with later findings. In the Vedas there has been the reference to nearly 150 plants including *āsvattha*, *khadira*, *kuṣṭha*, *soma*, *palāśa*, *nyāgrodha*, *pippalī*, *bilva*, *udumbar*, *apāmārga*, etc., along with their properties and uses. If the whole list be submitted it will be too lengthy, hence in this paper we will restrict ourselves to the description of a few of the main plants and the comparison of their properties as has been revealed due to recent findings, with those on record in Vedic literature.

Āsvattha is regarded as one of the most holy and important trees in the Indian culture. It has been referred to as a male tree as—

पुमान् पुंसः परिजातोऽश्वत्थो खादिरादधि
स हन्तुं शत्रून् मामकान् यानहं द्वेषिष्ये च माम् ॥¹

In the above *sūkta* it is desired to kill the enemies by 'maṇi' prepared from *āsvattha* (*Ficus religiosa*) and *khadira* (*Acacia catechu*). Here it is worth mentioning that in each *ṛcas* or *sūkta* of Vedas, one or the other God is prayed to achieve one or the other end such as to gain prosperity or to kill enemies, etc. In the above *sūkta* the word 'dveṣmi' is derived from *dveṣa*; the meaning of *dveṣa* (jealousy) according to Yoga philosophy is producer of pain, as—

दुःखानुशयी द्वेषः²

As diseases render pain, hence from the human point of view they can be referred to as 'dveṣi'. And the eradication of these jealous diseases is one of the properties of *āsvattha* which has been hinted at in the above *sūkta*. Regarding the curative properties of *āsvattha* the following has been the mention in recent literature—

अश्वत्थ के गुणधर्म—श्वयथु विलायक, रूक्षक, छिदिघ्न और उबकाई दूर करनेवाला; विशेषतः, फोड़े बैठानेवाला है। छाल में कषायसत्व (Tannin), रबड़ (काउचूक) और मोम होता है, छाल को उबाल कर उसे काढ़े से दंतवेष्टशोथ और मुखपाक में कवलग्रह कराते हैं।³

The bark is astringent and is used in gonorrhoea. . . . Fruits are laxative and seeds are cooling. The leaves and young shoots are used as purgative; . . . infusion of bark is given internally in scabies . . . the bark contains some tannin and is used for preparing leather and for dyeing.⁴

In the above *sūkta*⁵ there has been the mention of *khadira* (*Acacia catechu*) along with *āsvattha*. There are other references to *khadira* also as—

अग्नि व्ययस्व रुधिरस्य सारम्⁶

for which recent literatures reveal—

यह शीत संग्राही, रक्त प्रसादक, व्रणलेखक और उदरकृमिनाशक है। दांतों से खून आने और गलशुण्डिका में यह विशेष लाभकारी है। इसका अतिसार में उपयोग होता है। व्रणों में मलहम बनाकर इसका उपयोग किया जाता है।⁷

The bark contains tannin, which is used for tanning and dyeing.⁸
There are references to ecology of plants in Vedas. To quote one—

असित ते प्रलयनमास्थानमसितं तव ।
असिकन्यस्योषधी निरसो नाशया पृषन् ॥⁹

“O! Black or blue medicine, your place of growth is black and you turn those substances black, with which you are associated. As is your colour so is your property. Hence your application may cure such diseases which produce spots, e.g. leprosy”.

In modern literature it is said—

The plant of *Indigofera tinctoria* is a small herb to shrub. It yields a dye—indigo, which is used in dyeing. Indican is the principal glucoside.¹⁰

Palāśa (*Butea monosperma*) has been mentioned often in Vedic literature as—

सोमो वै पलाशम्¹¹

It has also been referred to as ‘parna’—as—

विसोमेन वा एके पशुबंधने यजन्ते ।
ससो मेनैके दिवि वै सोम आसीत् गायत्री व्योभूत्वा ।
हरत्तस्य यत्पर्णं मिच्छिद्यत् तत्पर्णस्य पर्णत्वम् ॥¹²

As in the above it is supposed to take its origin from the fallen feathers of *Gāyatrī* or fallen leaves of ‘Soma’.

In one reference it has been mentioned as Brahma.¹³

If we compare it with modern literature—

गुणधर्म—छाल और पत्र संग्राही, वीर्यपुष्टिकर, उदरकृमिनाशक, वाजीकर और मूत्रार्तवजनक है—बीज-वातानुलोमक, उदरकृमिनाशक, चतुर्थकज्वरनाशक, लेखन, व्रणकारक, सर्प-वृश्चिक विषघ्न है। गोंद शुक्रस्तम्भन, वीर्यपुष्टिकर, उपशोषक और आमाशय संग्राहक है।¹⁴

Butea monosperma has ornamental flowers, it yields dyes. The bark and gum contain tannic and gallic acid. Seeds contain Moodooga oil or a kind of tree oil . . . seeds are anthelmintic and antidote for snake-bite . . . gum is given in diarrhoea and dysentery.¹⁵

17, 18 and 19 *sūktas* of IV *kāṇḍa* of the *Atharvaveda* contain references to *apāmārga* (*Achyranthus aspera*); as—

अपामार्गं त्वया वयं सर्वं तदप मृज्महे¹⁶

In the above *sūkta* there is detailed description of physiology, ecology, etc., of *Achyranthus*. Similarly, *audumber* finds reference at many places. The botanical name of which is *Ficus glomerata*, as—

औदुम्बरेण मणिना पुष्टिकामाय वेघसा¹⁷

In fact 31st *sūkta* pertains to *audumber mani*. This plant is very important from medicinal point of view. In this respect, its bark, latex and fruits are useful.

Related to it is another important plant *Ficus bengalensis* which finds its mention in the name of *nyāgrodha* in ancient literatures, as—

यत्राश्वत्था न्यग्रोधा महावृक्षाः शिखण्डिनः ।
तत् परेताप्सरसः प्रतिबुद्धाः अभूतन् ॥¹⁸

It contains latex—a milky juice. It starts its life as epiphyte. Latex is used in rheumatism and lumbago. Infusion of bark is used in dysentery, diarrhoea and diabetes. The leaves are applied as poultice to abscess.¹⁹

In the Vedas references to plants were also made for showing simile, e.g.

उर्वास्मिन् बन्धनात्²⁰

In the above *sūkta* the bondage of cord is compared with the twining habit of cucumber. The tendril of cucumber helps to climb it over the support.

The reference to *pippalī* (*Piper longum*) is as follows—

पिप्पली क्षिप्तभेषजूतानि विद्धभेषजी²¹

It shows the curative value of piper. In *Āyurveda*, piper has hot and dry properties. It is stimulant, heat-producing and digestive.

Similarly *Piper longum* is a twiner, it contains an alkaloid known as piperine, which has got medicinal value.²²

In the *Atharvaveda*, *bilva* (*Aegle marmelos*) is referred to as follows—

महान वै भद्रो बिल्वो महान भद्र उदुम्बर²³

It has also been referred to along with *Khadira* in *Śatapatha Brāhmaṇa*.²⁴

In *Āyurveda*, its fruit is considered to be cool and dry. It is mentioned as blood purifier. The bark of the tree cures fever.

According to recent findings the principal constituent of the pulp is marmelosin. It also contains sugar, pectin, tannin, essential oils, etc. The boiled or roasted unripe fruit is used in diarrhoea and dysentery. The seeds and fruits yield a dye.²⁵

In the last, the mention of a plant is absolutely essential without which this paper will be incomplete. This plant has been much discussed and its identity is widely disputed; that plant is 'Soma'. *Soma* has been considered as the best amongst medicines, e.g.

यथा सोम ओषधीनामुत्तमो हविषां कृतः ।
तलाशा वृक्षाणाभिवाहं भूयसमुत्तमः ॥²⁶

There is detailed account of *Soma* in IX *maṇḍala* of the *R̥gveda* and in *Caraka Soma valka* 4-15 and hence it cannot be considered as imaginary. According to Dr. Atkinson this plant is *Ephedra pachyclada* and whose name in Harirud valley is *Hum* or *Yahma*. Dr. Bornmuller considers *Soma* to be *E. distachya* while Lawson, Muller, etc., consider it to be *Sarcostemma brevistigma* and both believe it to be *S. acidum*. Rice is of the view that it is nothing else than sugarcane (*Saccharum officinarum*), whose juice can be easily extracted and widely relished. While there are others who hold that it is *Humulus lupulus*.

From the above account, it is evident that its identity is much disputed and to come to any definite conclusion is quite difficult. We shall discuss at length about the identity, properties, uses and origin of *Soma* in another article fully devoted for this purpose, but here it can be said that our sages and ṛṣis in those days were used to take *Soma* for drinking regularly, so that they could lead healthy, cheerful and longer life.

In addition to these, numerous examples can be cited which prove that the Science of Botany in those days was highly developed as compared to that in other countries of the world and from here had dissipated this knowledge to various parts of the world.

REFERENCES

- 1 *Atharvaveda*. 3. 6. 1.
- 2 योगदर्शन, 8.2.
- 3 वैद्यराज दलजीत सिंह—यूनानी द्रव्यगुण विज्ञान, पृ० 322.
- 4 Kirtikar, K. R., and Basu, B. D. *Indian Medicinal Plants*, Vol. III, p. 2318.
- 5 *Atharvaveda*. 3. 2. 6. 1.
- 6 *R̥gveda*. 3. 53. 19.
- 7 वैद्यराज दलजीत सिंह—यूनानी द्रव्यगुण विज्ञान, पृ० 160.
- 8 Kirtikar, K. R., and Basu, B. D. *Indian Medicinal Plants*, Vol. II, p. 926.
- 9 *Atharvaveda*. 1. 5. 23. 3.
- 10 Hill, A. F., *Economic Botany*, p. 129.
- 11 *Satpatha*. 6. 6. 3. 7.
- 12 *Ibid.*, 1. 17. 2. 8.
- 13 *Yajurveda*. 35. 4.
- 14 वैद्यराज दलजीत सिंह—यूनानी द्रव्यगुण विज्ञान, पृ० 314.
- 15 Kirtikar, K. R., and Basu, B. D. *Indian Medicinal Plants*, pp. 786-87.
- 16 *Atharvaveda*. 4. 17. 6.
- 17 *Ibid.*, 19. 31. 1.

- ¹⁸ *Atharvaveda*. 4. 37. 4.
¹⁹ Kirtikar, K. R., and Basu, B. D. *Indian Medicinal Plants*, Vol. III, p. 2314.
²⁰ *Rgveda*. 7. 59. 12.
²¹ *Atharvaveda*. 6. 10. 9. 1.
²² Hill, A. F., *Economic Botany*, p. 452.
²³ *Atharvaveda*. 20. 136. 15.
²⁴ *Saikhpatha Bra*. 13.4. 4. 9.
²⁵ Kirtikar, K. R., and Basu, B.D. *Indian Medicinal Plants*, Vol. I, p. 501.
²⁶ *Atharvaveda*. 6.15.3.