A NOTE ON RGVEDIC ETHNOBOTANY

Barnali Deka

[The *Rgvedasamhitā* abounds in numerous references to plants and trees which played vital role in the life and civilization of the Vedic people helping in shaping their habits, customs, manners and culture. The Rgvedic Aryans were familiar with the numerous plant species in their ecosystems and understand the inter-relationship of various components of their resources. The knowledge of the intimate relationship between early men and plants form the core of the interdisciplinary science Ethnobotany. The Ethnobotanical elements are scattered in the Rgvedic verses, e.g. importance of plants, faith in the good and bad powers of plants, sacred plants, plants in religious rites and material use of plants etc. Therefore, an attempt has been made to highlight the Ethnobotanical aspects of the *Rgvedasamhitā* to unearth the deep and unique knowledge of the Vedic people about the properties and uses of plants.]

Ethnobotany is an interdisciplinary science which records and documents the age old knowledge and wisdom of the traditional people about the miraculous properties of diverse plants. The knowledge of the intimate relationship between early man and plants forms the core of the interdisciplinary science Ethnobotany. It is the first knowledge on plants which primitive and aboriginal people had acquired by sheer necessity, intuition, observation and experimentation in the forests. The scope of this natural science has now increased towards the understanding of plant human relationship and the practical knowledge of primitive people in medicine, agriculture, health and industry. The 20th century has witnessed the emergence of ethnobotany as a distinct academic branch of natural science. The term ethnobotany was given by J.W. Harshberger in 1895 to include the study of plants used by the primitive and aboriginal people. Several definitions have been assigned to ethnobotany. According to Schulted in 1962, ethnobotany is defined as the study of the relationships between the people of a primitive society and plants. In 1916 Robins,

Harrington and Freire-Marreco promulgated the broad definition of ethnobotany and considered it as a study and evolution of the knowledge of all phases of plant life amongst primitive societies, and of the effects of vegetal environment upon the life, customs, beliefs and history of the people of such societies. It broadly means all aspects of direct relationship of plants with man. Such manplant relationship can be classified into two groups, viz. abstract and concrete. Abstract relationship includes faith in good and bad powers of plants, worship symbols, folklore, sacred plants, sylvan environment, avoidances etc. Concrete relationship includes material use of plants such as in food, medicine, house-building, agricultural operations, other domestic uses, trade and barter, plants in fine-arts, house decoration, acts of conservation etc.

The science of plant finds a very good place in the Vedas. Among the Vedic literature the Rgveda is abound in numerous references to plants and trees which played vital role in the life and civilization of the Vedic people. The Rgvedic Aryans were familiar with the numerous plant species in their ecosystems and understand the inter-relationship of various components of their resources. The Rgvedasamhitā refers to plant materials and throws light on wide range of man-plant relationships. Some of the ethnobotanical elements are scattered in the verses of the Rgvedasamhitā. All such information have been collected and grouped under the following heads- 1. Origin of plants, 2. Plants as deified object, 3. Classification of plants, 4. Forests and trees, 5. Man-plant relationship, 6. Plants in food, 7. Medicinal plants, 8. Plants in religious rites, 9. Plants in making equipments and instruments, 10. Plants in house-building and decoration, 11. Plants in similes and other comparisons etc.

The *Rgvedasamhitā* attaches importance to plants. This can be gleaned from the discussions it contains about origin of plants, plants as deified objects, classification of plants, forests and trees, man-plant relationship etc. All these are discussed below-

1. Origin of plants

According to the *Rgvedasamhitā*, the plants have sacred origin.1 In the tenth *maṇḍala* of the *Rgvedasamhitā* it is said that plants or herbs are produced three ages earlier than the gods, i.e. *yā oṣadhīḥ*

oṣadhayaḥ pūrvāḥ purātanyaḥ jātāḥ utpannāḥ... devebhyaḥ jagannirmātrbhyaḥ/ yadvā/ devā dyotamānā rtavaḥ/tevbhyaḥ/kasmin kāle/triyugaṁ triṣu yugeṣu/ ...kṛtādiyugatrayamuktaṁ kalau... athavā triṣu yugeṣu vasante prāvṛṣi śaradi cetyarthaḥ/² Yāska in his Nirukta also says- yā oṣadhayaḥ pūrvā jātā devebhyastrīṇi yugāni purā.../³ According to the Rgvedic verses such plants have hundred home.⁴ At one place it is mentioned that plants have descended from the sky, e.g. avapatantīravadan diva oṣadhayaṣpari.../⁵

2. Plants as deified object

The Rgvedic seers deliberately combine natural and human glory with the sense of the supreme-being. By the method of personification nature or any insensate object, or any abstract idea is given the distinct personalities of gods. Existence of divinities was believed not only behind the natural phenomena but also in the stones and trees and the images of earth, wood etc. The abstract ideas, e.g. Śraddhā, i.e. genuine faith6, Aranyānī, i.e. dense forest7, Osadhayah, i.e. herbs8 were considered devatās. Plants and trees were considered as deified object. The belief that Vanadevatās or Tree spirits inhabit the trees is age old. The most important patches of some rich and diverse forests were called sacred groves (the forests of gods and goddesses). People believed that the groves were the abode of deities who look after the welfare of the people. Such beliefs have preserved several virgin forests in pristine glory. Osadhayah or herbs and Aranyānī are considered as goddesses. These are the goddess of the terrestrial region according to Yāska's Nirukta.9 Aranyānī or the tutelary goddess is the presiding deity of forest and wilderness. She is regarded as the mother of all sylvan growths as interpreted by Sāyaṇācārya-- mātaram janayitrīm... Araṇyānīm.../¹⁰ Herbs are called mothers to assert their position in the plant kingdom, e.g. ... amba mātaraḥ oṣadhayo.../11 Soma is said to be the king of the plants or herbs of hundred forms. 12

3. Classification of plants

The climate of Sapta-Sindhu was favourable for growing trees, plants, herbs, flowers and fruits etc. The Rgvedic verses reveal the scientific approach of the Aryans for the classification of plants. In the Rgvedasamhitā plants are grouped into three broad categories,

viz. *Vṛkṣa* or tree¹³, *Oṣadhi* or herbal plants¹⁴, *Vīrudh* or minor vegetable growths of herb.¹⁵ Besides, it refers to other groups, viz. flowering, non-flowering, fruitful and fruitless, cf. *yāḥ phalinīryā aphalā apuṣpā yāscapuṣpiṇīḥ/bṛhaspati prasūtāstānomuñcantvaṁhasaḥ/.*¹6 Creeping plants, shrubs, grasses and bushes are also mentioned.

So, it is seen that the Rgvedic people were well acquainted with various categories of plants, viz. aquatic, terrestrial as well as amphibious. Most of the plants were available in plains and forests. While, this *Veda* mentions various kinds of plants and weeds mainly grow in water. Some weeds are found floating in water and some grow on the soil inside water.

4. Forests and trees

From the hymn to *Araṇyānī* or dense forest of the *Rgvedasaṁhitā* it appears that the Aryan settlements were encircled by deep forests.¹⁷ Such forests were different from the villages and full of various kinds of lives.¹⁸ Forests were natural bower of branches and creepers rich in food and full of savoury fruits.¹⁹ From the hymn to forest it is clear that people like wood-cutter for his timber, fruit-gatherer for his fruit, hunter for his game ventured into them in daytime.²⁰ But the *Rgvedasaṁhitā* does not specifically mention any forest by name.

The Rgvedic verses are replete with various kinds of trees and plants. The names of the trees and plants mentioned in this Veda are as follows - among the trees it mentions about Aratu (colosanthes indica), Aśvattha (ficus religiosa), Khadira (acacia catechu), Śamī (acacia suma), Śimśapām(dalbergia sisu), Svadhiti, Vamsa, Vibhīdaka or Vibhītaka (terminalia bellerica). Flowery plants like Kimśuka (butea frondosa), Parṇa (butea frondosa), Śalmalī (salmalia malabarica), plant and creepers like Soma, Urvārūka (cucumber), Vratati, Vyalkaśā, water plants or weeds like Kiyāmbu, Puşkara (lotus flower), Pundarīka (lotus blossom), Śīpāla (blyxa octandra), Vetasa (calamus rotang), grass or herbs like Barhi, Darbha, Dūrvā (panicum dactylom), Kuśa (poa cynosuroides), Ksumpa, Muñja, Nalā, Prasū (young shoots of grass), Sairya, Sasa (herb) etc. Besides, there is mention of fruits and vegetables like Karkandhū (jujube), Bisa (lotus stem) etc. In the Rgvedasamhitā there is no mention of the tree Nyagrodha or Ficus Indica.

5. Man-plant relationship

Plants and animals and so human beings have intimate biological relationship since remote past and have evolved along parallel lines co-operating and depending upon each other for existence. We have seen the man's dependence upon plants and the great influence they have had in the origin and progress of civilization. Human life as we know it perhaps would have been impossible without plants. The plant has an important role to fulfill the various needs and is the part and parcel of his basic requirements. Ever since the dawn of civilization plants served the mankind in a variety of ways and man has been continuously using them. Not only do plants furnish us food, clothing and shelter, but this keep the air breath enriched with oxygen. They in addition supply the essential ingredients of both man and animal alike. The relationship between man and plants has gradually evolved with the beginning and spread of agriculture. People became more adept at growing crops. In the Rgvedic age every householder owned his plot of land, tilled it and supplied his needs. They were familiar with all the agricultural operations, viz. ploughing, sowing, reaping, making bundles of sheaves, thrashing and winnowing.²¹ Such agricultural operations and the use of a large number of plants for various purposes by them reveals their great awareness, knowledge and intimate relationship with the plant kingdom.

6. Plants in food

During the Rgvedic age people depended mostly on forest flora for meeting their day to day needs. Need of food plants helped in the development of agriculture. Operation of sowing seed is mentioned.²² It is stated that god Aśvins taught the Aryans the art of ploughing and sowing.²³ For cultivation people depended upon timely rain. For rain they invoked gods like Indra and the Maruts.²⁴ The Rgvedic verses give information about the edible plants. It mentions a number of grains and grain creepers. Barley or *yava* was the principal food grain cultivated in all the six seasons.²⁵ Rice or *Vrīhi* is not referred to in this *Veda* but in the *Atharvaveda*.²⁶ *Dhānā* used in plural indicates some particular type of grains or cereals.²⁷ *Dhānya* denotes grain of that name in general.²⁸ Wheat or

Godhūma is not mentioned but later. At that period the principal foods were barley flour and its various preparations mixed with milk products, e.g. apūpa made of barley or rice mixed with ghee was offered to the gods. Moreover, we have references to karambha made of fried barley flour, saktu or the parched barley meal etc. Thus, it can be said that the process of cleaning food grains and grinding them were known to the Rgvedic people.²⁹

There were fruit-bearing trees. The term phala denotes fruit.³⁰ Forests were full of ripe fruits and wild berries of $A\acute{s}vattha$ and other vegetables.

Soma, madhu and *surā*, the fermented juices of the plants were highly extolled and even worshipped. *Soma* plant was brought from some mountains specially the *Mujavant*.³¹ Warriors took *Soma* on the eye of the battle.

7. Medicinal plants

The use of plants as source of food and medicine is as old as humanity. The Rgveda is considered to be the oldest available record recounts some medicinal plants. The Rgvedic people had keen interest in the beneficial properties of the native flora. They considered all medicines to be derived from the three sources, viz. heaven, earth and the waters, e.g. trirno aśvinā divyāni bheṣajā triḥ pārthivāni triru dattamadbhyaḥ/omānam śamyormamakāya sūnave tridhātu śarma vahatam śubhaspatī/.32 In the Rgvedasamhitā there is a separate hymn to medicinal plants or herbs³³ where we find the glorification and praise of herbs. Herb was personified, divinized and looked upon as a general luck bringer. In this sūkta the medicaments are also referred to. The healer is considered as a vipra who knows both the preparation of the medicines from the plants and the correct recitation of the healing words, e.g. nānāvidhānāmoṣadhīnam samgamanam yasmin deśesti tatra vipraḥ prājñah brāhmaṇah sah bhiṣak usyate/.34 God Rudra is called the master of every medicine. The herbs possessed of hundred powers and have tremendous healing properties. In addition to the acquisition of herbs by trade, the healer engaged in the uprooting and collection of plants from his local flora, which appears to have been in the plains. Such plants driven away the malady and release one from pain and grief. With the help of such plants no malady

can attack biped or quadruped. To remove the diseases there were different types of herbs, viz. aśvāvatī, somāvatī, ūrjayantī and udojasa, cf. aśvāvatīm somāvatīmūrjayantīmudojasam/ āvitsi sarvā oṣadhīrasmā ariṣṭatātaye//.35

Ritually Sāyaṇācārya states that when the consecrator is affected by a disease such as fever, he should be purified by this hymn. Herbs were held in the hand of the healer as a type of amulet and ritually waved over the patient in order to drive away his affliction.³⁶ The healer who held medicinal herbs in his hands was called amīvacātana, i.e. a dispeller of amīvā and a destroyer of the rākṣas demons.³⁷ Amīvā is found in connection with lack of nourishment and indigence or poverty. In a Rgvedic verse Indra is invoked to help his worshippers overcome malignant indigence.³⁸ In the Bṛhaddevatā, it is said that the hymn 10.97 is in praise of herbs and that the hymn is used for the destruction of yakṣmā, e.g. yā oṣadhīstavaḥ prayoge bhiṣajas tvetad yakṣmanāśāya kalpate/.³⁹ Moreover, the herbs are prayed to release one from the curse's plague and woe that comes from Varuṇa, and also to free one from Yama's fetter, from sin and offence against the gods.⁴⁰

8. Plants in religious rites

Most of the plants were used in sacrifices or religious rites. The plant used profusely was *Soma*, the juice of which was used for sacrificial purposes. The *Soma* juice was pressed in large quantities and was mixed with honey, milk, curd and grain. ⁴¹ Sometimes it was served with *Karambha*, *Dhānā*, *Puroḍāśa*⁴² etc. It was the favourite drink of God Indra. For all such reasons it was raised to the position of a god. In the Rgvedic hymn 3.8, the sacrificial post to which the victim is tied is deified when consecrated and is regarded as a form of Agni. It was made of a tall tree, i.e. *Vanaspati* as it is stated-*vanaspatekhadirapalāśādilakṣaṇa he yūpa...*/⁴³

Sacrificial vessels were made of the wood of the trees called *Aśvattha* and *Parṇa* or *Palāśa*. These are therefore said to be the home of plants in religious ceremonies. Wilson states that from the wood of *Śami* and *Aśvattha* tree are made the *Araṇī*, the two pieces of wood which are rubbed together to produce the sacred fire. ⁴⁴ The connection of *Parṇa* tree with sacrifice is described in the later literature also. ⁴⁵ *Kuśa* was a holy *tṛṇa*, i.e. grass mentioned in the

Rgvedasamhitā.46 Other sacred grasses used in sacrifices were Barhi, Prasū etc. Sacrificial grass called Barhi is the seat for the expected deities.47

9. Plants in making equipments and instruments

The *Rgvedasamhitā* gives references to the use of plants in making equipments both domestic and sacrificial, e.g. *pacana*⁴⁸ or wooden vessel, *ukha*⁴⁹ or a wooden vessel, *darvī*⁵⁰ or wooden ladle, wooden vessel called *droṇa*⁵¹, *sruc*⁵² or ladle etc.

Takṣā or *Taṣṭā* did all sorts of work in wood. There are references to chariots, wagon, boats and ships. Car is made of the wood of the *Araṭu*⁵³ and Śalmalī⁵⁴ tree. A well-built car made by the carpenter is invoked as divine protection.⁵⁵ Ploughshare made of iron or wood is also referred to.⁵⁶ From the hard wood of *Khadira* the pin of the axe was made.⁵⁷ Moreover, the necessary adjunct to dress making such as a *mayukha* or wooden peg for keeping the web stretched is made of wood.⁵⁸

Plants were used in making musical instruments too, viz. flute made of bamboo⁵⁹, $v\bar{i}n\bar{a}$ or lute⁶⁰ etc. The game of dice was played with a variable number of nuts of $vibh\bar{i}daka$.⁶¹ There is mention of a wooden pole named $k\bar{a}r\bar{s}ma$ explained by Sāyaṇācārya in a Rgvedic verse as the goal for the chariot-race, i.e. $k\bar{a}r\bar{s}ma\dot{s}abdah$ $k\bar{a}shav\bar{a}c\bar{c}/yath\bar{a}$ $k\bar{a}sham$ $ajidh\bar{a}vanasya$ $avadhitay\bar{a}$ nirdistam laksyam.../.⁶² In most of the cases the $Rgvedasamhit\bar{a}$ does not name the plant's wood which should be used.

10. Plants in house-building and decoration

Among the various kinds of houses, viz. *Gṛha, Sadma, Cardis, Veśma* etc., *Veśma* is the dwelling place or natural bower of branches and creepers in the middle of the forest or *araṇya*.⁶³

In the Rgvedic society ornaments were used profusely. Besides ornaments made of gold and other metals, we have seen the use of garlands made of flower known as *sraj*.⁶⁴ Aśvins are described as *puṣkarasraj* i.e. lotus wreathed.⁶⁵ This *Veda* does not specify the road-side plants. Bridal car is described as adorned with the blossoms of *Kimśuka* flower as mentioned in the *Sūryā Sūkta*.⁶⁶ Such bridal car was fashioned from its wood.

11. Plants in similes and other comparisons

The *Rgvedasainhitā* uses the names of some trees and flowers in similes and other comparisons. The use of plants or its parts in creative works like literature gives an idea about the depth and extent of the impact of the plants on human civilization. One of the beautiful similes found in the Rgvedic verse is—'*Vala* is said to have bemoaned his kine carried off by Bṛhaspati, as the trees bemoan their leaves carried off by the winter'⁶⁷. Besides, plants were also used in metaphors or *rupaka* also, i.e. 'The hand of Rudra is called a cooling herb.'⁶⁸ There are many elements of comparison supplied by nature, e.g. 'The sacrificer delights (in divine blessings) as the barley plant does in the rain'⁶⁹,'Crafts and tools are mentioned as in 'as the axe cuts the *Śalmalī* tree'⁷⁰ etc.

So, it can be deduced that the physical world outlined in the Rgvedic hymns plays an important role in shaping the habits, customs, manners and culture. All the ethnobotanical aspects mentioned in the *Rgvedasamhitā* reveals the deep and unique knowledge of the Rgvedic people about their surrounding nature and natural resources as well as the properties and uses of plants.

References:

- 1. R.V., 10.97
- 2. Sāyaṇa, ibid., 10.97.1
- 3. Nir., 9.28
- 4. R.V., 10.97.2
- 5. ibid., 10.97.17
- 6. ibid., 10.151
- 7. ibid., 10.146
- 8. ibid., 10.97
- 9. Nir., 7.5
- 10. Sāyaṇa on R.V., 10.146.6
- 11. Sāyaṇa ibid., 10.97.2
- 12. yā oşadhiḥ somorājñīrbahnīḥ śatavicakśaṇāḥ/ ibid., 10.97.18
- 13. ibid., 1.164.20
- 14. ibid., 10.97
- 15. ibid., 1.67.9
- 16. ibid., 10.97.15

- 17. ibid., 10.146
- 18. ibid.
- 19. ibid., 10.146.5
- gāmangaişa ā hvayati dārvangaişo apāvadhīt/ vasannaranyānyam sāyamakrukṣaditi manyate// ibid., 10.146.4
- 21. ibid., 10.10.4, 10.48.7, 10.94.13
- 22. vapanto bījamiva dhānyākṛtaḥ pṛñcanti somam na minanti bapsataḥ/ ibid., 10.94.13
- yavam vṛkeṇāśvinā vapanteṣam duhantā manuṣāya dasrā/ ibid.,
 1.117.21
- 24. ibid., 1.85.5
- 25. ibid., 1.23.15
- 26. A.V., 6.140.2
- 27. R.V., 3.35.7
- 28. ibid., 5.53.13
- 29. ibid., 9.112.3
- vṛkṣam pakvam phalamaṇkīva dhūnuhīndra sampāraṇam vasu/ ibid., 3.45.4
- 31. ibid., 1.93.6
- 32. ibid., 1.34.6
- 33. ibid., 10.97
- 34. Sāyaņa, ibid., 10.97.6
- 35. ibid., 10.97.7
- 36. *ibid.*, 10.97.11,12,13
- 37. yatrauşadhīh samagmata rājānaḥ samitāviva/ vipraḥ sa ucyate bhişagrakşohāmīvacātanaḥ// ibid., 10.97.6
- 38. gobhiṣṭaremamatim durevām yavena kṣudham puruhūta viśvām/ vayam rājabhiḥ prathamā dhanānyasmākena vṛjanena jayema// ibid., 10.42.10
- 39. B.D., 7.154
- 40. R.V., 10.97.16
- 41. ibid., 5.27.5
- 42. ibid., 3.52.7
- 43. Sāyaņa ibid., 3.8.1
- 44. R.T.H. Griffith, The Hymns of the Rgveda, p. 553
- 45. T.S., 3.5.7.2

- 46. R.V., 1.191.3
- 47. ibid., 1.12
- 48. ibid., 1.162.6
- 49. ibid., 1.162.13
- 50. ibid., 5.6.9
- 51. ibid., 6.2.8
- 52. ibid., 1.84.18
- 53. ibid., 8.46.27
- 54. ibid., 10.85.20
- 55. vanaspate vīḍvaṇgo hi bhūyā asmatsakhā prataraṇaḥ suvīraḥ/gobhiḥ samnaddho asi vīḷayasvāsthātā te jayatu jetvāni//ibid., 6.47.26
- 56. ibid., 4.57.8
- 57. ibid., 3.53.19
- 58. ibid., 10.130.2
- 59. ibid., 10.135.7
- 60. ibid., 2.34.13
- 61. ibid., 7.86.6
- 62. Sāyaṇa, ibid., 1.116.17
- 63. ibid., 10.146.3
- 64. ibid., 5.53.4
- 65. garbham te aśvinau devāvā dhattām puṣkarasrajā/ ibid., 10.184.2
- 66. ibid., 10.85
- 67. himeva parņā muşita vanāni bṛhaspatinākṛpayadvalo gāḥ/anānukṛtyamapunascakārā yātsūryāmāsā mitha uccarātaḥ//ibid., 10.68.10
- 68. ibid., 2.33.7
- 69. yadī māturupa svasā ghṛtam bharantyasthita/ tāsāmadhvaryurāgatau yavo bṛṣtīva modate// ibid., 2.5.6
- 70. ibid., 3.53.22

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