

## **CHAPTER - 1**

### **INTRODUCTION**

Man was born in the cradle of nature. Ever since his existence on the earth, man has lived in close association with nature. Next to the house hold faces, the visible world is his most direct experience and also the last he loses sight of in his earthly sojourn. All in his life, he is surrounded with it and never goes beyond its reach. The glorious orb of the day shedding effulgent stream of light from the east, the lustrous dawn breaking forth every day, the night studded with myriads of beautiful shining stars, the wind blowing gently or fiercely, the black dark clouds encompassing the sky in the rainy season and the lightning flashing through the clouds, have ever been attracting his senses. These phenomena of nature presented different types of appearance to him. Some were in motion-the rivers flowed, the clouds wandered in the sky, the trees waved under the wind, and the sun and the moon journeyed across the firmament from day to day. Some objects - a huge tree, a broad river, a high mountain - impressed him by-their size. Some others such as lightning and the storm puzzled him by their strange and sudden occurrences. He could not remain unmoved. It was impossible to live amidst the phenomena of nature and remain indifferent to them. His perception of nature was direct and not influenced by conventional stock of ideas.<sup>1</sup>

Man sought to know the origin of things and was led to suggest explanations of them. Occasionally, he personified the forces and phenomena of nature and attributed to them the qualities of living beings. He endowed them with will like his own and attributed to them desires and feelings, including the propensities to take offence and to be pleased, the characteristics of his species. Creation, sustenance and destruction were assigned to them. They were looked upon as regulating the occurrences in nature. They were elevated to the rank of Gods. This was the first

response of man which he made to the phenomena of nature. He felt a strong bond of unity between himself and the phenomena of nature.<sup>2</sup>

### **End Notes**

1. Chaubey. B.B: *Treatment of Nature in the Ṛgveda*, Vedic Sahitya sadan, Hoshirarpur, 1970, p.1
2. *Ibid*, pp. 1 - 2

## CHAPTER - 2

### PLANTS IN THE VEDAS

The Vedic people lived in close proximity of nature. With trees, plants and shrubs the familiarity and association of man were the most intimate and friendly. He encountered the hostile forces of nature like storms, thunder, ferocious, beasts and birds. But trees and plants were always favorable to him. As man saw light of the civilization, he felt the need of covering his body partly out of a feeling of shyness and partly to keep off cold and uncongenial effect of weather. The trees and plants provided him with barks, fuel, wood for dwelling places and for various vessels. Gradually as he emerged from caves and caverns, he felt the necessity of shelter. In this respect also trees provided timber and logs for building their living rooms or huts. Again the bountiful nature, like a benign mother, gave him abundant and varied fruits for appeasing his hunger. With the discovery of fire he felt the need of fuel which was plentifully and perennially supplied by the plant kingdom. The trees provided cotton for making thread which was woven in to garments. The supreme importance of the plant world lies in its gift of various kinds of food grain which sustained the lives of people. In ancient times in India fire was kindled by rubbing two pieces of wood against each other. With the progress of civilization, he learnt to use plants and herbs, the roots of some trees as drugs for curing various diseases<sup>1</sup>.

The various aspects of nature like the sky, the earth, water and rivers the trees and plants were also objects of worship from time immemorial. As early as in the Rgveda, Vanaspati is addressed as 'the lord of the trees'. Hymn X.97 is dedicated to the plants and X.146 to the Forest Goddess. At the head of all plants is Soma, the god as well as plant, and he is regarded as the Osadhipati even in the later times<sup>2</sup>. In the ritual also we come across solitary traces of this cult, thus in the expiatory sacrifice when a tree is cut in order to be used as a Yupa. When man drives on a new chariot and come across a good trees on the way, he should drive on a new chariot and come

across a good tree on the way, he should drive around the tree from left to right and take with him branches and fruit from it<sup>3</sup>. The Yajurveda mentions, while a person cuts trees for the sacrificial post, he thinks that the falling Yupa ie, sacrificial post should not harm heaven and ether.

Fetishism is found as early Vedic times. Some trees were worshipped while others were believed to be haunted by evil spirits. The Atharvaveda mentions a number of amulets, prepared with plants and creepers, designed to ward off evil spirits and cure diseases. It was believed that, as a result of some offence committed towards the Sami tree, one was afflicted with baldness which was regarded as extremely loathsome even in Vedic times. Trees such as Udumbara, Khadira, Vilva, and Palasa were regarded as scared and hence their branches, twigs, wood and stalks were widely used in various sacraments and rites. Asandi at the coronation, the razor for shaving used in some holy rites etc. . . . . were made of Udumbara wood. The khadira wood was used in making Yupas, stakes for animal-slaughter in religious rites and as the staff of Ksatriya Brahmacarin. Besides these various agriculture and sacrificial appliances and vessels were made of wood .The juice, extracted from Soma, which had not yet been definitely identified, was regarded as the most exhilarating drink. The Vibhitaka tree supplied the wood with which aksa (dice) were made<sup>4</sup>.

Like the entire world, the plant kingdom too falls in to two parts according to the evil effects which its members cause or are supposed to cause. While planting good trees is meritorious, it is necessary before one builds one's house to up root certain plants from the ground<sup>5</sup>. From these references we can say that a person in Vedic age was treating environmental factors at par and therefore he cares them and wishes wellbeing of them.

Indian civilization was mainly based on forests. The Upanisads, the products of the highest human wisdom, originated in sylvan surroundings. The sages of old meditated in the sequestered forest far away from the madding crowd of people, and

gave the world gems of thought. That the solitude of the forest as favorable to meditation is attested by the very title Aranyakas(forest-texts) of which the Upanisads formed parts. The forest provided shelters not only to the recluse but also to wordly men in the third stage(Vanaprastha)of their lives. Gautama practiced transcendental meditation under the Bo-tree, and attained Buddhahood<sup>6</sup>.

Trees came to be regarded as so important by Smrti literature, that their felling or deforestation without reason and permission was looked upon as a penal offence. In Manu-Smriti,<sup>7</sup> Manu classifies the trees and plants is as, Osadhi - a tree of this class dies after ripening of fruits, vanaspati - those which bear fruits without flowers, Vrksa- those which bear both flowers and fruits, Gulma - the shrubs. Trna – the grass, Pratana-plants with tendrils and Valli –the creepers entwining a support<sup>8</sup>. Manu does not stop with mere classification of plants; he goes on to assert that they have not only life but also consciousness and warns his readers not to hurt plants because they feel the pain. This means that some two thousand years ago Manu was very keenly aware of this fact<sup>9</sup>.

### **Plants in the Classical Literature**

The epics and puranas contain descriptions of many trees, plants and flowers. The pancavati forest in the Ramayana conjures up a vivid picture of the forest- adobe of Rama in exile. We read of the wanderings of the homeless Pandavas through forests<sup>10</sup>.

Do plants and trees possess the faculty of feeling? Yes, asserts Mahabarata. While instructing Bharadvaja; Bhrgu very minutely analyses the functions and reactions of plants and declares that the plants do possess the sensibilities of hearing, seeing, smelling, tasting and touching. They have their faculties of sensing sorrow and joy, declares the sage<sup>11</sup>.

Hurting plants and killing them indiscriminately as a sin. The 34<sup>th</sup> Chapter of the Udyogaparva also strike the same. A verse from Mahabharata brings out the

importance of trees by comparing them to the sons<sup>12</sup>. And the Mahabharata<sup>13</sup> also contain many verses in the praise of the trees and their plantation.

The importance of these verses is as: One should plant the trees and look after them just as one looks after his own son because the trees oblige us by their flowers and fruits as well as they offer their shade to the travellers.

Trees played a considerable part in administration of Kingdoms. The practice of planting saplings of shady fruit trees along public roads, and laying out gardens for public use dates back to remote antiquity. This practice had a religious sanction and public gardens were solemnly consecrated. The planting of trees has been proclaimed as conducive to great merit. The Puranas give instructions in this respect. The Matsyapurana has laid down that fruit bearing trees should be planted to the eastern side of the temple mandapa, trees containing milky sap should be planted to the south of it, a reservoir of the water should be at the west of it and to the north side, there should be a flower garden and Sarala and Tala trees.

About the trees to be planted nearby the house, the Matsyapurana<sup>14</sup> states that, a banyan tree should be on the eastern side, the Udumbara tree on the southern side, Pippala tree on the Western side and the Plaksa on the Northern side.

The Brahmavaivartapurana<sup>15</sup> points out that a camp should never be near a banyan tree for the robbers or thieves can very easily conceal themselves in the dense leaves of the banyan tree. However, this tree is welcome in the towns, because by its very sight, it gives merit and auspiciousness. By stating that the tree is ‘darsanat punyadah’, a mythical element is added only to stress the utility of the tree, since it gives shelter to many under its shade, even a weekly bazar could be held, as it is the case in many Indian villages, even in modern times<sup>16</sup>.

The Agnipurana prescribes that there should be garden near the residence. It also fixes various directions for various trees. The Agnipurana<sup>17</sup> gives a note of caution that one should eat upon the lotus-leaf, but one should avoid eating on leaf of

Vata, Asvattha, Arka, Sarja and Bhallataka. While prescribing certain things for vow, the Agnipurana prohibits things such as lentils, grams and vegetables such as pumpkin etc. Certain food – grains are also recommended as fast food. In the context of protecting a king the Agnipurana<sup>18</sup> recommends herbs such as Satavari, Mandukaparni, Brahmi... etc., as antipoisonous.

The Agnipurana<sup>19</sup> recommends the prayer ‘devebhyo Vanaspate’ for ‘Tree Sacrifice’ (Drumayajna). It has prescribed that Brahmin and the moon should be worshipped before planting trees. The presence of the moon is quite understandable because she is the supreme of trees. The Agnipurana associates the plantation of trees with astronomy. It regards certain constellations such as Hasta, Mula etc. as the best for plantation of trees. Apart from this the Agnipurana has made perfect suggestions like modern specialist a agriculture.

The Agnipurana has shown a great concern with various medicinal herbs and plants. It repeats the prescriptions and suggestions from of Ayurveda Susruta. It devotes three complete chapters named Siddhausadhani (16<sup>th</sup>) Nanarogaharanyausadhani (120<sup>th</sup>) and Mrtyunjaya Kalpah (123<sup>rd</sup>) for prescribing the herbal medicines for various types of diseases It impels that our ancestors were not prescribing plantation of trees without any purpose but were fully aware and convinced of its medicinal utility<sup>20</sup>.

The above quoted evidences and discussion make it clear that the Puranas have given thought towards plantation of trees, their nourishment and their medicinal as well as cultural importance.

Since man's dependence upon nature was prominent and forests being one of the very important part of the nature. Kautilya has said much about forest and forests products. There are references in the Arthasastra to three kinds of forests<sup>21</sup>.

The first kind of forest was used for the purpose of mrgaya (hunting) by the kings. Generally, such kind of forests were real jungles full of trees and country species.

The second kind of forests were developed for best kind of timbers and other forest products. The plants and species from different countries were supposed to be preserved here. It was a kind of national park under state control.

The third kind of forest were especially being prepared for the elephants. Apart from these three kinds of forests, reference is also found in Arthashastra-Brahmanas being provided with the forests for their Soma plantation for religious learning and for the performance of penance, such were free from all kinds of disturbances and totally safe for wild animals.

Different kinds of punishments were being given for cutting of the trees from restricted lands and forests. For the cutting of the tender sprouts of fruits-which trees in the gardens and those have grown in a place of pilgrimage, hermits etc. was considered as a serious offence<sup>22</sup>. A more severe punishment is awarded if a plant is uprooted.

In course of time, the flowers provided by plant Kingdom served to give delight to people and came to be used as offering to Gods and presents to near and dear ones on happy occasions. By the time of Vatsyayana, author of the Kamasutra, flourished the house of a man about town (Nagarika) could not be conceived without a garden.

Sanskrit prose, poetical works and dramas are replete with references to flowers and foliage, trees and shrubs. In the Abhijnana Sakuntala, Kalidasa's heroine Sakuntala is presented as a daughter of nature she, takes all care for each plant and animal for the hermitage. She herself admits in the first act that she has sisterly attention towards them<sup>23</sup>. Flower gardens are found to be a favourite resort of flowers to whom they serve as excitants. In the Abhijnana Sakunthalam, we find the three

hermitage girls of peerless beauty, engaged in watering plants. The natural setting excites the love of the king for Sakuntala. The bower provides convenient spot for love-making to the king and the girl. Forests, particularly bowers, have often been described as very suitable for tryst. In the 2<sup>nd</sup> act Kalidasa, refers to Sakuntala as a flawless beauty like a flower not smelt, a tender sprout not yet plucked by nails, a gem not perforated and fresh honey not tested etc. In the 3<sup>rd</sup> act Goutami prescribes Darbha- water for healing the tormented limbs of Sakuntala. The medicinal value of darbha- grass was known to Kalidasa and so with this knowledge, he has tried to show how man even depends upon an insignificant plant like darbha. There too Sakuntala addresses the creeper as torment remover<sup>24</sup>.

In the 4<sup>th</sup> act, Kalidasa narrates the nature's sympathy with her daughter. In the daughter's marriage, the silken garments, the paints to be applied to the feet and the ornaments required by her were given as gifts by the trees and the sylvan deities. Thus, Kalidasa brings forth a striking similarity between the feelings of both plant and animal<sup>25</sup>. In the same act Kalidasa narrates Sakuntala's love for the plant Kingdom and Kasyapa wants to bid a fitting farewell to Sakuntala. Sakuntala as a daughter of nature loved the trees very much. She first saw that they were watered, before she thought of drinking water herself. She had attachment for ornaments, but did not pluck the tender leaves for fear of injuring the trees and it was a special rejoicing for Sakuntala when plants put forth their first blossom. Sakuntala's taking leave of the creeper Vanajyotsna is very heart touching<sup>26</sup>. Kanva is aware of this sisterly affection. Sakuntala requests Vanajyotsna to return the embrace by branch- arms, although she is united with mango-tree. Kasyapa takes both of them, as his own daughters. Sakuntala has attained a husband worthy of her and the Navamalika has firmly returned to the mango- tree. Kasyapa too takes both of them as his own daughters. Thus Kalidasa sees no distinction between the living organism and the environment.<sup>27</sup>

Some trees have to be favourite to poets, and have become conventional. For example, the Tamala tree has been mentioned by Kalidasa in the Raghuvamsa XIII as adding to the beauty of the sea-coast. Again, Jayadeva in his Gitagovinda, sings of the Tamala trees darkening the forest-regions under the sky overcast with clouds. At some places, we find damsels using floral decorations. For instance, in the Meghaduta(II.2) women of the city of Alaka are described as holding a lout in hand, putting on the Sirisa flower in the ears and the Nipa or Kadamba flower in the parting of hairs. Many romantic ideas are conventionally associated with trees. For example in Malavikangimitra, the Asoka tree plays a significant role in the union of hero and heroine. There is Asoka tree is said to put forth its crimson blossoms at touch of the foot of Malavika. Again, the Bakula tree is stated to bear flowers with the spittle of a woman sprinkled on it. Thus, on the whole, through all his works, Kalidasa has displayed his awareness towards the environment and establishes a complete harmony between plants and various aspects of nature<sup>28</sup>.

Banabhatta in his Harsacarita states that when Harsavardhan went to the Vindhya-forest in search of his sister Rajyasri the forest-superintendents were seen seizing the axes of the unauthorised wood cutters in the forest. A panoramic description of the forest-produce is given at this place by Banabhatta. He mentions that there were provided drinking-places on the roads, for the travellers. Not only this, but there were small tanks, also in the court-yards underneath the Agastya trees, at which the birds could easily partake of grains and water<sup>29</sup>.

Though our fable literature contains mostly the stories of animals and birds it also illustrates the necessity for protecting plants. The protection of a tree occurs in one story of Apariksitakaraka chapter of the Panchathantra.

A weaver named Mantharaka wants some wooden pieces to make instruments for weaving. While in search of those pieces he comes upon a Simsapa tree (fig tree)

and starts thinking according to usual human nature that as the tree, One sprite(Vyantarapaksi) requests him not to cut the tree as it is a place of shelter for him.

Although here the sprite requests the saving of the tree for his own benefit,the story also at the same time makes us aware of the fact that the natural habitant of birds, animals,viz,forests,should be protected<sup>30</sup>.

The Hitopadesa points out that the tree does not withdraw its shade even from one who axes it, From this we should learn that we should not refrain from doing good even to an enemy who seeks our shelter. The tree bears the scorching heat on its head, but assuages the fatiguge of one who resorts to its shade. This teaches us that through suffering pain, we should do good to others<sup>31</sup>.

Our ancestors were always comparing the trees with wisemen. At that time the tree cutters and hunters were regarded as wicked or non-sense. A Sanskrit Anyokti compares trees to gentlemen who are good Samaritans.

Good Samaritans are known to render help to others even at the expense of their own comforts .Similar is the service rendered by trees. They suffer the scorching heat of the sun and grant cool shade to all creatures. Secondly, just as good men use their wealth for generous charity, so too trees yield fruits to be enjoyed by others. This trees are quite righteous, generous, self-sacrificing and service minded.

Another Anyokit highlights the service rendered by trees to who proves ungrateful.

A tree is used by all. Some pluck its fresh sprouts, some others its flowers and yet others its fruits. But alas, when the scorching sun threatens to dry up the tree, none goes to it with even a pale of water to moisten its roots! Ingratitude, thy name is man<sup>32</sup>.

Trees have been objects of description by various poets. For example, the Anthology, Sadukktikarnamrta quotes five verses by various poets dwelling on the

comfort caused by trees to human beings. The Asvattha, Sandal-tree, mango-tree, silk-cotton tree are some of the trees described by poets. Thus the ancient Indians did not rest content by merely utilizing trees for their comfort and convenience. They also tried to derive lessons from them, and enjoyed the beauty of the trees and their blossoms. Thus they looked at trees and plants from various angles of vision.

### **End Notes**

1. Banerjee.S.C,op.cit; p.4
2. Rajeswarasarma.s: Vedic mythology, vol. II, mothilalbanarasidas, Delhi,1981,pp.243-244
3. ASV.GS,2.6.9
4. Banerjee.S.C,op.cit; pp 4-5
5. ASV.GS,2.7.5
6. Banerjee.S.C,op.cit; p.6
7. MS, 1.46-48
8. Ibid,p. 17
9. Jha.V.N,op. cit, p.96
10. Banerjee.S.C,op.cit; p. 6
11. Jha.V.N,op. cit, pp.69-70
12. Mbh;Anushasana, 58.30-31
13. Mbh, Quotedby Hemadri in his book Chaturvargachindamani, 13th Ch.of Danakhanda
14. MP, 270.28.9;24 M2b4,20
15. BVP. Sreekrishnakanda, 103.44
16. Jha. V.N;op. cit; p 208
17. AP, 37.19.203, 71.6-17
18. AP.86.8-9; 291;
19. AP 105.83
20. Jha. V.N;op. cit;102
21. AS, 2.6.6
22. AS.3.19.46

23. Abhi.S,Act I. p.11.
- 24 Abhi.S Act III,p. 50
25. Abhi.S Act IV, VS.5
26. Abhi.S Act IV, VS.9; 40
27. Abhi.S Act IV, VS.13
28. Banerjee.S.C,op. cit; p.7
29. Jha. V.N;op. cit; pp.208-209
30. Ibid,pp.88-89
31. Banerjee.S.C,op. cit; pp.7- 8
32. Jha. V.N;op. cit; pp. 157-158

## CHAPTER - 3

### PLANTS GENERALLY MENTIONED IN THE R̥GVEDA

Like all ancient people, the thinkers of the Vedic age lived in close amalgam with nature and environment. In the beginning of civilization human beings gathered their food, fabricated their implements and searched remedies for illness from plants and animals around them.<sup>1</sup> In course of time they came to know their characteristics and developed wild plants into cultivated ones. The Indus valley people had the knowledge of plants which they used in many ways. On their seals and pottery works, the figure of plants, leaves, grasses, creepers, flowers and fruits may be seen. The Vedic Aryans had also realized the importance of plants and dedicated hymns in their praise. They used to recite the Vedic hymns in praise of the supreme creator for his merciful manifestations in the medicinal plants which were important for restoration of public health. The earliest reference to the medicinal plants can be traced to the *R̥gveda*, perhaps the oldest repository of human knowledge. In the *R̥gveda* there are references to 99 species of *Ausadhis* (herbs or plants).<sup>1</sup> Sometimes the names of such plants were given as directly while others the names were given as either associated with their habitat, utility or distinct characters. Such kind of plants mentioned in the *R̥gveda* are categorised given below.

#### The Names of Plants which have been Directly Mentioned

1. *Vamśa*<sup>3</sup>, the longest variety of grass has been described as :

The chanters (of the same) hymn thee, Shatakratu; the reciters of the rich praise thee, who art worthy of praise; the Brahmans raise thee a loft, like a bamboo pole.

2. The crop *Yava*<sup>4</sup> has been mentioned in the following verse as: Verily he has brought to me successively the six (seasons), connected with the drops (of the *Soma* juice), as (a husband man) repeatedly ploughs (the earth) for barley.

3. *Nada*<sup>5</sup>, a variety of reed has been mentioned as:

The waters, that delight the minds (of men), flow over him, recumbent on this earth, as a river bursts through) its broken (banks). Ahi has been prostrated beneath the feet of the waters, which Vritra, by his might, had obstructed.

4. *Haridrava*<sup>6</sup> in sense of *Haridrā* or *Haritāla druma* has been described as: Let us transfer the yellowness (of my body) parrots, to the starlings, or to the *Haritāla* tree.

5. *Karañja*,<sup>7</sup> a wild plant has been depicted as:

6. Thou hast slain *Karañja* and Par naya with thy bright gleaming spear, in the cause of Atithigwa: unaided, thou didst demolish the hundred cities of Vangrida, when besieged by Rijishwan.

7. The tree, *Sahadeva*<sup>8</sup> has been mentioned as:

Indra, showerer (of benefits), the Varashagiras, Rijarashwa and his companions, Ambariṣa, *Sahadeva*, Bhayamana and Suradhas address to thee this propitiatory praise.

8. The tree, *Karkandhu*<sup>9</sup> has been described as: With those aids by which you rescued Antaka, (when cast into) a deep (pool), and about to be destroyed; by which, inflicting no distress, you preserved Bhujyo, and by which, you relieved *Karkandhu* and Vayya; with them, Ashwins, come willingly hither.

9. *Arjuna*<sup>10</sup>, a wild variety of grass has been mentioned as;

I, the son of Ushija, address to you (Ashwins) audible praises in like manner as Ghosha praised you for the removal of her white- tinted (skin): I glorify (Gods) the bountiful Pushan (associated) with you, and I proclaim the munificence of Agni.

10. *Aśvattha*,<sup>11</sup> a sacred tree and *Yava* a dhanya have been mentioned as: Then, accept the libations of the sweet juice at the sacrifice in which the triumphant priests stand round the rock - born (plant): may they ever be victorious for us: (for you) together

the cows distil (their milk); the (offering of) barley is dressed; and never for thee, (Vāyu), will the cows grow meagre; never will the kine be carried off (by thieves).

11. *Muñja*<sup>12</sup>, a sacred grass has been described as:

They, (the Gods), have said, sons of Sudhanwan, drink of this water, (the *Soma* juice); or drink that which has been filtered through the *Muñja* grass; or if you be pleased with neither of these, be exhilarated (by that which is drunk) at the third (daily) sacrifice.

12. *Pippala*<sup>13</sup>, same as *Asvattha* has been mentioned as: Two birds associated together and mutual friends, take refuge in the same tree: One of them eats the sweet fig; the other abstaining from food, merely looks on.

13. *Darbha*<sup>14</sup>, *Kuśara*, Śara, Śairya, *Muñja* and *Vīraṇa*, the holy sacrificial grasses have been mentioned as:

(Blades of) *Shara* grass, (of) *Kushara*, (of) *Darbha*, (of) *Shairya*, (of) *Muñja*, (of) *Vīraṇa*, all (the haunt) of unseen (venomous creatures), have together anointed me (with their venom).

14. *Madhula*<sup>15</sup>, a wild plant has been referred as:

I deposit the poison in the solar orb, like a leather bottle in the house of a vender of spirits: verily, that adorable (Sun) never dies; nor, (through his favour), shall we die (of the venom); for, though afar off, yet drawn by his courses, he will over take (the poison): the science of antidotes converted thee, (poison), to ambrosia.

15. *Soma*<sup>16</sup>, the samrāt among the plants has been mentioned in the whole mandalas and particularly in the IXth mandala. The exhilarating juice taken from the *Soma* plant is a favourite drink for gods. Since it has been used by the *Rishis* to invoking almost all the deities. An example:

Indra, lord of the *Soma*, drink this *soma* juice which is grateful to thee at noon - day sacrifice; Maghavan, partaker of the spiritless *Soma*, unyoke thy horses, and, filling their jaws (with fodder), exhilarate them at this ceremony.

16. *Pramanda*<sup>17</sup>, a sweet scented plant has been denoted as:

What do the cattle for thee among the Kikatas; they yield no milk to mix with the *Soma*, they need not the vessel (for the libation): bring them to us: (bring also) the wealth of the son of the usurer, and give us, Maghavan, (the possessions) of the low branches (of the community).

17. *Khadira*<sup>18</sup>, *Śimśapa* and *Spandana*, the sacred and useful trees have been mentioned in a verse is as:

Fix firmly the substance of the khayar (axie), give solidity to the *ṣinṣu* (floor) of the car: strong axle, strongly fixed by us, be strong; cast us not from out of our conveyance.

18. *Śimbala*<sup>19</sup>, same as *Śālmali* tree has been mentioned as:

As (the tree) suffers pain from the axe, as the simal flower is (easily) cut off, as the injured cauldron leaking scatters foam, so may mine enemy perish.

19. *Vetasa*<sup>20</sup>, a water plant has been mentioned in the verse as:

These hundred - channelled showers fall from the heart - delighting firmament, unobserved by the hostile (cloud): I look upon these showers of Ghi, (and behold) the golden vetasa in the midst of them.

20 . *vadhjti*<sup>21</sup>, a huge tree has been mentioned as:

The divine, self - sustaining (heaven) comes to him; the moving (earth), like a living (wife), resigns herself to Indra: when he shares all his vigour with these (his people), then, in due succession, men offer reverence to the potent Indra..

21. *Jīvanti*<sup>22</sup>, an evergreen medicinal plant has been mentioned as:

May the boy who has reposed for ten months in the bosom of his mother come forth, a live, unharmed, living, from a living (parent).

22. *Samidh*<sup>23</sup>, a tree used for sacrificial purpose has been mentioned as:

To thee, mighty Agni, we offer exceeding adoration with prostrations, with fuel, with oblations: (we glorify thee) on the altar, son of strength, with hymns and with prayers: may we be successful in our efforts (to gain) thy auspicious favour.

23. *Puṣkara*<sup>24</sup>, a creeper belongs the blue species of lotus has been mentioned as:

The sage Atharvan, extracted thee, (Agni) from upon the lotus leaf, the head, the support of the Universe

24. *Kākambira*<sup>25</sup>, a kind of useful tree has been mentioned in a verse as:

Uproot not, Puṣan, the forest lord, with its progeny of crows: utterly destroy those who are my revilers: let not the adversary insure me, as (flowers) set snares for birds.

25. *Bisa*<sup>26</sup>, a fibre plant has been mentioned as:

With impetuous and mighty waves she breaks down the precipices of the mountains, like a digger for the lotus fibre: we adore for our protection, with praises and with sacred rites, Saraswati the underminer of both her banks.

26. *Madhu-dugha*<sup>27</sup>, a sweet plant has been described as:

Radiant heaven and earth, the asylum of created beings, you are spacious, manifold, water-yielding, lovely, separately fixed by the functions of Varuṇa, undecaying, many-germed.

27. *Śālmali*<sup>28</sup>, the tallest tree in the vegetable kingdom has been mentioned as: The poison that is in the *Shalmali* tree, in rivers, on which is generated from plants, may the universal gods remove from hence: let not the tortuous (snake) recognize me by the sound of my foot steps.

28. *Urvāru(ka)*<sup>29</sup>, is useful creeper has been mentioned as:

Let us worship Tryambaka, whose frame is fragrant, the augments of increase: may I be liberated from death, and, like the *Urvaruka* from its stalk, but not to immortality.

29. *Aratu*<sup>30</sup>, a sacred tree which has been referred as:

He who of his own will has been pleased to give me this honoured gift, he, performer of good works, (has determined) on a pre eminently good action, amidst Aradwa, Akṣa, Nahuṣa and Sukritwan.

30. *Śara*<sup>31</sup>, a kind of reed has been explained as:

This is thy beloved most exhilarating *Soma* which grows in the *Sharyaṇavat* lake by the *Sushoma* river in the Arjikiya country.

31. *Śāda*<sup>32</sup>, a kind of grass has been denoted as:

Over powering at the juncture of time the discomfited concealers (the Rakshas), he descends upon those doomed to destruction.

32. *Bhaṅga*<sup>33</sup>, a hemp has been mentioned as:

The Gods approach Indu, (who is) completely generated, sent forth by the waters, the demonsher (of foes), adorned with milk and curds.

33. *Libuja*<sup>34</sup>, denoted a creeper in the *R̥gveda* as:

(Yami speaks) Alas, Yama, thou art feeble: we understand not thy mind or thy heart. Some other female embraces thee as a girth a horse, or as a creeper tree".

34. *Pākadūrvā*<sup>35</sup>, an edible millet, *Kiyāmbu* and *Vyalkāśā* two inauspicious creepers, which are mentioned together in a verse as:

Cool again, Agni, the spot which thou hast burned, there let the water-lily grow, and the ripe *dūrvā* with its many stalks.

35. *Vibhītaka*<sup>36</sup>, a large tree is also called akshah has been mentioned as:

The large rattling dice exhilarate me as torrents borne on a precipice flowing in a desert: the exciting dice animate me as the taste of the *Soma* of delights the gods

36. *Uśīharāṇi*<sup>37</sup>, a medicinal plant has been described as:

Send, Indra, the active ox, who may bring the cart (laden with) the *Ushjnarani* grass: *heaven and earth*; remove all iniquity; *let* heaven (take away) iniquity; may no ill ever approach thee.

37. *Śīpāla*<sup>38</sup>, an aquatic plant which has been mentioned while praising the deity Bṛhaspati:

Bṛhaspati drove away the darkness from the firmament with light as the wind (blows) the *Shipala* from the water; guessing (them to be there), he swept the Vala's cows together to himself as the wind (sweeps) the clouds.

37. *Sīlāmā*<sup>39</sup>, a fibre plant has been referred by the seer Sindhuksit Priyamedha as:

The Sindhu is rich in horses, rich in chariots, rich in clothes, rich in gold ornaments, well-made, rich in food, rich in wool, ever fresh, abounding in sllama plants, and the auspicious river wears honey - growing (flowers).

38. *Kimśuka*<sup>40</sup>, same as *Palāśa* and *Śālmali*, a tallest tree in the vegetable kingdom have been mentioned as:

Ascend, Sūrya, the chariot made of good *Kimśuka* wood and of *Shalmali*, multiform, decorated with gold, well - covered, well - wheeled; prepare the happy world of the immortals, thy marriage procession to the husband.

39. *Aśvattha*<sup>41</sup>, the emperor and *Parna* the brahmin amongst

the trees in the vegetable kingdom has been referred as:

Your abode is in the *Aśvattha*, your dwelling is established in the *Palasa*, and you are assuredly the distributors of cattle, in as much as you bestow them on the physician.

40. *Aśvāvatī*,<sup>42</sup> *Somāvatī* *Ūrjayantī* and *Udojasa* are the major medicinal plants which have been mentioned together in a verse as:

The *Aśvavati*, the *Somavati*, the *Urjayanti*, the *Udojasa* - all these plants. I praise for the purpose of overcoming this disease.

41. *Kośā*<sup>43</sup>, a kind of river side reed has been mentioned as:

Eat abundant fodder in the pasture, O cows, who are anointed in the hall of sacrifice in the cow - stall; may (your) body be the remedy for (our) body. We for the universal Aditi.

42. *Palāśā*<sup>44</sup>, one of the sacred trees same as *Kiṃśuka* or *Parṇa* is mentioned as:

In that leafy tree where Yama drink with gods, there the progenitor, the lord of the house, invites us to join the men of old.

43. *Ulapā*<sup>45</sup>, a species of grass has been denoted as:

Blazing Agni, thou destroyest many a shrub, as thou burnest: and (the sites) of the tilled fields are laid waste, may we never rouse to anger thy terrible flame.

44. *Dūrvā*<sup>46</sup>, one of the most sacred grasses and *Puṇḍarīka*, a creeper belongs to the white species of lotus have been mentioned as:

Both at thy arrival, Agni, and at thy departure, may the flowerings *dūrvā* grasses spring up; may lakes (be formed) and lotuses (there in); may be the dwelling of the ocean.

45. *Pātā*<sup>47</sup> a medicinal plant has been mentioned as:

I make thee the triumphant (herb) my pillow, I support them with that more triumphant (pillow); let thy mind hasten to me as a cow to her calf, let it speed on its way like water.

46. *Añjana*<sup>48</sup>, a medicinal plant has been referred as:

I praise the musk - scented, fragrant, fertile, uncultivated Aranyani, the mother of wild animals.

### **The Names of Plants which have been indirectly mentioned**

1. *Panasa*<sup>49</sup> (The usage, *Pakvā śākhā* in the hymn has been interpreted as *Panasādi vṛkṣa śākhā*)

Verily the words of Indra to his worshipper are true, manifold, cow - conferring, and to be held in honour; (they are) like a branch (loaded with) ripe (fruit).

2. *Nyagrodha*<sup>50</sup>, (though the name is not mentioned its characteristics may be recognized through the following symbolic expression)

The regal Varuna, or pure vigour, (abiding) in the baseless (firmament), sustains on high a heap of light, the rays (of which) are pointed downwards, while their base is above: may they become concentrated in us as the source of existence.

3. *Caṇaka*<sup>51</sup>, (The usage *Andhāṃsi* in the hymn has been interpreted as *Annāni Caṇakādīni Khādyāni*)

Implements of sacrifice, bestower of food, loud - sounding sport like the horses of Indra champing the grain.

4. *Pārijāta*<sup>52</sup>, a tree (*Vidradhe drupade* in the hymn has been interpreted by this meaning)

Like two puppets on an arranged, new, and slender stage, thy two brown (steeds) are brilliant at sacrifices.

5. *Vrīhi*, *Priyangaḥ*<sup>53</sup>, the crops (The words *Oṣadhi* in the hymn has been interpreted as these meanings)

May the herbs (of the field) be sweet for us; may the heavens, the water, the firmament, be kind to us; may the lord of the field be gracious to us: let us, undeterred (by foes), have recourse to him.

6. *Vrīhi*<sup>54</sup>, a crop and *Cūta* and *Panasa* the trees (The words *Oṣadhi* and *Vanāni* in the hymn have been interpreted as these meanings)

Sovereign of old, do thou when glorified, bestow upon him who praises thee, and to whom affluence is due, abundant food: grant to the worshipper water, plants, innoxious woods, cattle, horses and men.

7. *Balbaja*<sup>55</sup>, the name of a grass has been mentioned in a *Danastuti* hymn.

Thou, Indra, art the lord of the *Soma* effused or not effused, thou art the king of all men.

8. *Viṣāṇakā*<sup>56</sup>, a medicinal plant, its characteristics has been referred as:

*Soma* who art the exhilarator, harming (the foe) in battles, (the self) unharmed, who hast a thousand streams, rush against the strength (of the enemy); Indu, who art being purified, the sage, uttering cries, urge on for Indra, the wave of juice.

9. *Tila*<sup>57</sup>, *Māṣa*, *Vrīhi*, *Veṇu*, *Śyāmāka*, *Nīvāra*, the crops (the word *Bījam* in the hymn has been interpreted by these meanings).

Harness the ploughs, fit on the yokes, now that the womb of earth is ready sow the seed therein, and through our praise may there be abundant food; may (the grain) fall ripe towards the sickle.

10. *Yava* & *Godhūma*<sup>58</sup>, the creals (the usage *Yavam chil* in the hymn has been interpreted by;

As the growers of barley often cut the barley, separating it in due order, so do then, {o!Indra} bestow here and there nourishment the upon those who have not neglected the performance of the sacrifice.

### **End Notes**

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- 4 Ibid, vol. I. p.66
- 5 Ibid, vol. I. p.102
- 6 Ibid, vol. I. p.161
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- 8 Ibid, vol. I. p.314
- 9 Ibid, vol. I.p.351
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- 34 Ibid,vol.VI.p.29
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- 36 Ibid,vol.VI.p.113
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- 46 Ibid,vol.VI.p.464
- 47 Ibid,vol.VI.p.468
- 48 Ibid,vol.VI.p.469
- 49 Ibid,vol.I.p.24
- 50 Ibid,vol.I.p.72
- 51 Ibid,vol.I.p.85
- 52 Ibid,vol.III.p.262
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## CHAPTER - 4

### CONCEPT OF PLANTS IN THE ṚGVEDA

Our ancient people were very much affectionate towards trees and animals around them. Out of the living components of the nature plant has been placed at the significant position and that could be observed from a Ṛgvedic mantra.

The mantra indicates that the sky, the earth and the life are nothing but the by-products of plant. The plant services man in many ways. Plants are the source of food, energy, cloth, shelter, medicine etc. A Sanskrit Anyokti appreciates the services rendered by plants and trees or to vegetation as a whole. It means that certainly the birth and life of a tree is useful. It serves the purpose of making the life of all creatures comfortable.

As science has discovered, it is a fact that trees emit oxygen which is essential for the livelihood of all creatures, including human beings. Secondly they give shady shelter to all without any partiality or discrimination. Trees also play an important role in maintaining the balance of environments, main training the regularity of rains, regularity of climate, ecological balance, soil conservation etc. Thus, they are absolutely good to one and all. Further, Whatever. A man wants to enjoy, all that is granted by trees, leaves, flowers, fruits, shade, roots, barks, wood, fragrance, juices, powders, sweet kernels, and com of grains. Thus, no seeker goes disappointed after approaching a tree to get his desires fulfilled.

#### **Number of Plants mentioned in the Vedic Texts**

The Vedic Aryans had realised the importance of plants and dedicated hymns in their praise. In the *Ṛgveda* there are references to 99 species of *Auśadhis* (herbs or plants). The *Yajus Samhitas* enjoy a wider scope by containing names of plants of sacrificial and medicinal use. So far they have mentioned 82 kinds of plants<sup>1</sup>. The *Atharvaveda* appears to have been the earliest encyclopaedia of ancient Indian plants.<sup>1</sup> It refers to at least 288 varieties of plants<sup>2</sup> and mentions their botanical characteristics and medicinal ingredients. The *Brāhmaṇa* texts mostly refer to the plants of sacrificial

use. The *Kalpa sutras* are the most informative sources which mention at least 519 different plants.<sup>3</sup> According to the modern historians like Majumdar, Aiyer, Macdonell and Keith there are about 740 plants referred to in the Vedic writings in all.<sup>4</sup>

### **Different Parts of Plants mentioned in the Vedic Texts**

In the vedic texts different parts of plants have been mentioned,<sup>5</sup> such as, the *mūlam* (root), *tūla* (panicle), *kāṇḍa* (stem), *valśa* (twig), *puṣpa* (flower) and *phala* (fruit). Besides these, a tree has *skandha* (corona), *sākhā* (branches) and *parṇa* (leaf). In the *R̥gveda*<sup>6</sup> plants are termed as *phalini* (fruitful), *puṣpavati* (blossoming), and *pra-sūvari* (having flowers). On the basis of their characteristics the *Atharvaveda*<sup>7</sup> classifies the plants under the following heads; *pra-str̥ṇati* (those that expand), *stambini* (those that are bushy), *eka-śurigāḥ* (have only on sheath), *pratanvati* (those that creep), *aṃśumati* (have many stalks), *kandini* (are knotty or jointed) and *viśakhāḥ* (those that have spreading branches). The root was the lowest part of a plant and it was inserted in to the ground. It appears that outer bark of a plant was like its skin which protected it from heat and cold.<sup>8</sup> The rising flames of Agni have been compared with the young trees growing with their branches high up in the sky. As the plants generally grew on moist land, so people preferred to plant saplings on such land which was suitable to their growth.<sup>9</sup> These facts obviously indicate that the later Vedic people had studied plants from different angles of view. '

### **Classification of Plants**

In the Vedic texts, the whole creation has been classified in to four groups, namely, the *aṇḍaja* (born from the egg), *jīva* (born from the living things), *swedaja* (sweat born) and *udvi* (born from a sprout).<sup>10</sup> The plants have been included in the last group. Again *udvi* has been classified in to four types, such as, *auśadhi* (medical herb), *vanaspati* (trees in general), *latā* (creeper) and *tṛṇa* (grass).<sup>11</sup>

Plants were classified in to two *main classes*, such as, the *grāmya* (cultivated) and *āraṇya* (wild).<sup>12</sup> The former class signified the plants which were transplanted and grown by artificial methods. They grew in time and their flowers and fruits lasted long

and became ripe in specific seasons. But the later ones grew without cultivation and their fruits and grains were ripe before time. Certain plants referred in the whole mandalas of *R̥gveda* are collected and included under the below mentioned four different heads.

**(i) Auṣadhi (Herbs or Plants)**

The *R̥gveda* contains an independent and separate *sūkta* dedicated to the praise of herbs. It states that the use of herbs for curing diseases was known even in hoary antiquity. The *Auṣadhis* having excellent powers and hundreds of forms may remove all types of ailment, so they are our others Goddesses and all. The *R̥gveda* states:

ओषधीरिति मातरस्तदो देवीरुपन्नये ।

सनेयमश्वं गां वास आत्मानं तव परुष ।

The *Auṣadhis* lead us to success,' says the *R̥gvedic* seer *Ātharvaṇa Bhiṣag*. Emphasizing upon the significance of herbs, the same seer further states that a person having store of herbs is like a mighty prince stationed in the middle of his host, and the physician is really a fiend-slayer and chaser of diseases. Herbs are the embodiment of nourishment and strength which regenerate the human body and mind. The *R̥gveda* compares the healing power of herbs with the coming out of cattle from the stall. Further it states that the medicinal plants really are relievers and restorers. So they keep far away whatever ,  
disbrings, disease, and save the vital breath.<sup>13</sup>

The *Yajurvedic* seers were also realised the importance of herbs and prayed as:

दीर्घायस्ते ओषधे खनिता यस्मै च त्वा खनाम्यहम् ।

अथो त्वं दीर्घायर्भत्या शतकलशा विरोहतात ॥

One who is digging you (for medicinal purposes) should live long; and also the person for whom I am digging you. You also live long and spread with hundred sprouts.<sup>14</sup>

Plants according to the Atharva vedic seer Atharva,

यासां द्यौर्भिता पृथिवीमाता समदो मलं वीरुधा बभूव ।

They are in a way a product of water, since the sky is their father, the earth is their mother and the ocean is their root.<sup>15</sup> They embody all the medicinal properties of water. The forgoing passages clearly show that the Vedic seers had fully realised the importance of herbs for curing several diseases.

The word 'Auṣadhi' occurs at several places in *Ṛgveda*<sup>16</sup> in the sense of plant, herb, especially medicinal herb while the term 'Virudh' is also used in the sense of plant in the *Ṛgveda*<sup>17</sup> and later.<sup>18</sup> Roughly speaking, *Auṣadhi* is employed in opposition to *virudh* to denote plants as possessing tremendous healing power or some other quality useful to men, while *virudh* is rather a generic term for minor vegetable growths, signifies those plants which do not possess medicinal or curing properties. Some of the important herbs mentioned in the *Ṛgveda* are arranged under alphabetical order and their available botanical names were given as follows:

1. **Añjana** has been mentioned in the *Ṛgveda*<sup>19</sup> as a plant with scented wood (*añjanagandhi surabhi*). The *Atharvaveda*<sup>20</sup> informs that it grew wild on the Trikakuda Mountain in the *Himālaya* and on the banks of the *Yamuna*. It is confirmed by the *Śatapatha Brāhmaṇa*<sup>21</sup> that it grew in mountainous regions. It was used for making ointment for protection from all sorts of eye diseases, jaundice, yakṣma, jāyānya and other diseases.<sup>22</sup> A female ointment maker is mentioned in the list of victims of the *purusamedha* (human sacrifice).<sup>23</sup>

2. **Aśvāvatī** one of the major medicinal plants mentioned in the *Ṛgveda*<sup>24</sup> used for curing many diseases. It increases energy and activity and preserves sound health. However it has not been identified as yet.

3. **Haridrā**<sup>25</sup> (*Adina cordifolia*) is also known as *haridrū*, *hāridrava* or *haritāla drumā*. *hāridrava*, a yellow vegetable powder. Its plant was small and leaves were green and of large size. Its balls were the most useful objects which yielded yellow ingredients for dyeing clothes and preventing greying of hair. Powder made of *haridrā* mixed with

water was rubbed on the body to make the skin smooth and soft. It was used to cure several ailments. In *Atharvaveda* it was used as a remedy against leprous spot.<sup>26</sup> In *Ayurveda* it has a wider use. The regular use of the juice of fresh *haridrā* alleviates premeha. It is an effective anti-allergic drug and its powder used with honey destroys kusta, bronchial asthma still it is used as a spice.

4. **Jīvantī**<sup>27</sup> (*Lepta denia reticulata. wad. w*) was an ever green plant possessing power to regenerate life in a sick person. The *Atharvaveda* mentions that it was a medicine for ensuring sound health. It was a preserver of health, a queller of disease and full of power.

5. **Pāṭa** (*Lypea hermandifolia*) is later identified with *pāṭhā* was known by several other terms such as *subhagā*, *devadūtā*, *uttanaparna* and *sahasvati*. It had magical powers; so the *Ṛgveda* prescribes its use for removing obstacles<sup>32</sup>. The *Atharvaveda* prescribes for a person wishing to be victorious in debate to eat its sanctified roots and to put on a garland of its seven leaves on his head.

6. **Soma** (*Somalatha - Asolepias acida roxb.*) has been mentioned in the Vedic texts and *Zend avesta* as a plant of divine origin and bestowing life and light. On this basis it was termed *samrat* among the plants. The IX mandala of the *Ṛgveda* and six hymns in other mandalas describing different aspects of *soma*. The avestic *homa* and the vedic *soma* both are derived from the root *su* (*Zend hu*), meaning, to press or produce. *Soma* plants were brought to the site of sacrifice on bullock carts. In some cases these plants could be exchanged with a ruby and yellow eyed cow because the leaves of the *soma* plant also were of the same colours and form; so it was considered to be exchanged with its own form and deity.<sup>28</sup>

7. **Somāvatī** was a major medicinal plant mentioned in the X<sup>th</sup> mandala of *Ṛgveda*.<sup>29</sup> However this plant has not been identified as yet.

8. **Udojasa** is also one of the major medicinal plants mentioned in the *Ṛgveda*<sup>30</sup> along with *Aśvāvatī*, *Somāvatī* and *Ūrjayanti*. But it is difficult to identify this plant.

9. *Uśīnarāṇī*<sup>31</sup> was a medicinal plant mentioned in the X<sup>th</sup> mandala of *Ṛgveda*. It has been used as an ointment to the patients.

10. *Ūrjyantī* is also one of the important medicinal herbs, which has been referred in the X<sup>th</sup> mandala of *Ṛgveda*<sup>32</sup> along with *Udojasa*. However till now it has not been identified.

11. *Viṣāṇaka*<sup>33</sup> Though the name of this plant is not directly mentioned in the *Ṛgveda* its characteristics may be referred. It was used as a remedy against *vātīkāra*, a disease caused by wind.<sup>34</sup>

### ***Crops cultivated***

*Ṛgveda* mentions the terms *dhāna*,<sup>35</sup> *dhāna*<sup>36</sup> and *dhānya*<sup>37</sup> in the sense of 'grain of corn' in general. *Dhānya* did not exclusively denote paddy but all kinds of grains. In the *Ṛgveda* the only kind of cereal mentioned is *Yava* which signified grain in general and barley in particular. But it does not mean that the *Ṛgvedic* Aryans did not cultivate or consume other varieties of cereals. Archaeological excavations have brought to light cereals other than barley from the levels which are assignable to the *Ṛgvedic* period. In the later Vedic texts eleven different varieties of cultivated grains have been systematically enumerated.<sup>38</sup> The cereal *yava* other crops such as *tila*, *māṣa*, *vrīhi*<sup>39</sup> *godhūma*, *priyangu*, *veṇu*,<sup>40</sup> *śyāmāka* and *nīvāra*, by name, as also grass in general by the term *vīrudh*, *ośadhi*, be it cultivated, non-cultivated or growing wild during the period of *Ṛgveda* and later *Samhitas*.

12. *Yava* (*Hordeum vulgare* L.) or Barley is the grain crop mentioned frequently and in many contexts, such as its sowing, harvesting, winnowing, storing and prepared as food. Among the numerous Vedic references, the following ones may be note worthy; Thus, the *Ṛgvedic* seer Medhātithi Kāṇva mentions repeated ploughing of the field for cultivating barley. *Yajurvedic* seers says that barley is harvested by heading, separating the ear heads from the stalks.<sup>41</sup> The *Atharvavedic* seer Viswavamitra prays for the increase of his barley grain heap to grow inexhaustible like the sea,<sup>42</sup> the *Ṛgvedic* seer Bṛhaspatir Āṅgīrasa refers to winnowing of barley with a sieve,<sup>43</sup> the seer Aindra Vasukra finds the assembled cattle feeding upon the barley,<sup>44</sup> the seer

Gāthina Viśvāmitra refers to the parched grain and curds prepared for Indra along with fried barley and cakes with butter too,<sup>45</sup> while Agastya Maitrāvaruni and Medhātithi offers boiled barley and parched barley steeped in ghee to their gods,<sup>46</sup> respectively.

In the *Ṛgveda* it is the only cereal whose name is specifically mentioned, but it is doubtful whether it denoted cultivated real barley or it was generic term to mean all types of grains. It has been suggested by that originally yava was a wild variety of cereal one of the epithets of Agni was *yavasād* wild variety in forest fire.<sup>47</sup> The Vedic texts refer to several terms derived from *yava*, such as, *yavyāvātī*, a river whose basin was famous for the production of bumper crop of barley.<sup>48</sup> *Yavāsīra* was an epithet of *soma* plant because the powder of barley grains was mixed with its juice.<sup>49</sup> *Vavas* (*Yevāṣa*) was an insect which destroyed the barley crop.<sup>50</sup> *Yavamanta* was the person who possessed a huge quantity of barley grains.<sup>51</sup>

#### ***Crops indirectly mentioned in the Ṛgveda***

1. ***Tila*** (*Sesamum indicum DC*) has to be eaten in certain expiatory rites<sup>52</sup> and fit for use in *Śrāddha*. *Tila* denotes in the *Atharvaveda*<sup>53</sup> and later the *Sesamum* plant and particularly its grains from which a rich oil *tila* was extracted.

2. ***Māṣa*** (*Phaseolus raditus*) is the name of a kind of bean. It is still one of the most valuable of illmlar plants In India, and is fit for use in *Śrāddha*.

3. ***Vrihī*** (*Oryza sativa linn.*) which means paddy or rice used for both domestic and sacrificial purposes. In an Ṛgvedic hymn<sup>54</sup> *dhānya bīja* has taken as the sense of rice seeds.

4. ***Godhūma*** (*Triticum aestivum linn.*) or wheat is a grain with heavy and sweet taste. It has not been prescribed in the sacrifices.

5. ***Priyahgu*** (*Setaria italica*), a corn popularly known as panic seed, the grains of which were characterised by their gold like husks. It is stated as an antidote against poison. Among the herbs as it is represented enjoyment and pleasure. So in sacrifices it was used as an oblation.

6. **Veṇu** (*Bambusa sp*) in the *Atharvaveda*<sup>55</sup> and later denotes a reed of bamboo, In the *Ṛgveda*<sup>56</sup> it occurs only in a Vṛlakhilya hymn. Its leaves are recommended for use in *Śrāddha*

7. **Śyāmāka** (*Echinochola frumentacea* or *panicum frumentaceum*) was the name of a cultivated millet. It is one of the food of pigeons, deer etc. Its grains being boiled with water were eaten by the people. Its sticks are recommended for use in Agrayāṇa offerings to pitrs.

8. **Nīvāra**, a variety of paddy, wild rice used by hermits on auspicious occasions. It is used for several ritual purposes.

## II. Vanaspati {Tree}

In the *Ṛgveda*<sup>57</sup> trees have been classified as *phallnī* (bearing fruits), *aphalā* (not bearing fruits), *apuṣapā* (devoid of flowers) and *puṣpiṇī* (having flowers). Some of the trees mentioned in the *Ṛgveda* is given as follows:

1. **Aratu** (*Colosanthos Indica*) was a plant mentioned in the 8th mandala of *Ṛgveda*.<sup>58</sup> As its wood was very hard so the axles of chariots were made of it

2. **Aśvattha**<sup>59</sup> (*Ficus religiosa* L) was considered to be one of the most sacred trees by Hindus of the ancient India; it was latter called *Pippala* and now the *Pipal* tree. On some of the Harappan seals and potteries we may see the figures of *aśvattha* tree. The berries of *aśvattha* are stated to be eaten by birds. The berries also used for curing wounds.<sup>60</sup> Due to its importance and hard nature of its wood *aśvattha* was considered to be *kṣatriya* among the trees and it symbolizes the highest Spirit of Kingship. Thus it may be called overlord, emperor or *samrat* among the trees in the vegetable kingdom That is why the *Aitareya Brāhmaṇa*<sup>61</sup> says साम्राज्यं वा एतत्त्वनस्पतीनाम्। It also mentions that the *ksatriya* drinking the juice prepared of the fruits of *aśvattha* beautifies himself with luster and sovereignty.<sup>62</sup> Its *kṣatriya* status may be properly assumed from the fact that it was called *vaibabha* (buster) because it splits asunder the crevices of wood or stone where its seed has germinated and grown.<sup>63</sup>

3. **Karañja** (*Pangamia glabra vent*) was a wild plant mentioned in the 1st mandala of *Ṛgveda*.<sup>64</sup> It was regarded as an impure tree, so its wood was not prescribed to be used as *samidhā* and its fruits were also not considered edible. It is commonly found as avenue tree. It bears bluish flowers. In *Ayurveda*<sup>65</sup> it is used in kustha, wounds and worms.

4. **Karkandhu** (*Zizyphus nummularia w.h*) is the ordinary word for jujube, the tree and the fruit from the *Yajurveda Samhitas* and onwards.<sup>66</sup> But in the *Ṛgveda*<sup>67</sup> it is mentioned only as the name borne by a protege of the Facings. Its identity with the words for jujube indicates that the latter, though not otherwise mentioned there, was known at the time of the *Ṛgveda*. It was considered to have originated from the mouth of Agni.<sup>68</sup> In vernaculars it is known as *jamuna*. It grew wild.' Its fruits were *rohita*<sup>69</sup> (red), compare with kuvala and badara, which denote fruits.

5. **Khadira** (*Acacia catechu willa*) is one of the important trees mentioned in the Vedic literature. On one of the Harappan seals the figure of this tree encircled by railing has been depicted. The trees has white wood and small leaves<sup>70</sup>. It also possesses thorns. Its wood was very hard (*bahusara*) so the bolts of the axle of a cart were made of it<sup>71</sup>. Sacrificial utensils like jars, lids, spoons and *sphya* (implement shaped like a sword) were made of its wood. The *Śatapatha Brāhmaṇa* states a story regarding its divine origin and supernatural powers. This plant originated from the bones of *Prajapati*; so its wood is very hard. The same text recommends erection of sacrificial posts made of *khadira* wood on the site of the performance of *Aśvamedha*. Doing this, the sacrifice went to heaven after his death<sup>72</sup>. Amulets made of *khadira* wood were put on the body for ensuring health<sup>73</sup>. Besides, agricultural implements and vehicles also were made of its wood. In *Ayurveda*<sup>74</sup> it is a specific drug for kustha. It is so astringent, cold, pacifies kapha and pitta, purifies blood, strengthens teeth and alleviates prameha and obesity.

6. **Kākambira**<sup>75</sup> is the name in the *Ṛgveda* of a useful tree of some kind.

7. **Kimsuka**<sup>76</sup> (*Butea frondosa*) is the name of a tree mentioned in the wedding hymn of the *R̥gveda*, the bridal car being described as adorned with its blossoms (*su-kimśuka*). It has been derived from the root *krms*, meaning to illumine. It was a tree of bright and beautiful flowers<sup>77</sup>. In *Atharvaveda*, amulets and the covers of sacrificial dishes were made with its wood<sup>78</sup>.

8. **Madhuga or Madhu-duga**<sup>79</sup> was a very sweet herb. Its literal meaning is honey yielding. It was a medicinal plant and its sweet juice was supposed to nourish the baby in the mother's womb. Pregnant women tied amulets made of its wood to their arms for the safety of the baby.

9. **Madhula**<sup>80</sup> was a plant which was used for removing mosquitoes and curing victims of serpent bites.

10. **Palāśa**<sup>81</sup> (*Butea frondosa*) same as *kimśuka* or *parṇa* was considered as one of the most sacred trees and its wood and branches were used in sacrifices for several purposes. Among the plants, it has been accorded the status of a *Brahmana*<sup>82</sup>. Thus during the investiture with the holy thread or upanayana ceremony the staff or data of the *Brāhmana* boy was made of either *palāśa* or *vilva* tree. The sacrifices willing to acquire spiritual knowledge and gain luster, was advised to establish the sacrificial post made of *palāśā* wood because it signified beauty among the trees and was considered as the womb of all plants<sup>87</sup>. Amulets made of its wood were tied on arms for ensuring health and material prosperity. Sacrificial utensils, such as, jars, ladels, lids and cups were made of its wood. It was considered that *palāśa* tree grew out of the flesh of *prajāpati*; so its juice is red<sup>83</sup>. According to *Āyurveda* the tree blossoms in spring with blood-red flowers, the flower is astringent and checks diarrhea. The seed is flat and anthelmintic.

11. **Parna**<sup>84</sup> like *palāśa* denotes *leaf* which also designate the tree *Butea frondosa*, of which *parṇa* is the early name. It occurs in *R̥gveda* in connection with the *aśvattha*, which mentions both amulets and cover of sacrificial dishes were made from its wood.

12. **Pippala** (*Ficus religiosa L*) same as *aśvattha* is found in two passages of the *Ṛgveda*<sup>85</sup> meaning berry of the tree *asvattha*. The berries of *pippala* were common edible of birds<sup>86</sup>. When ripe, they were reddish and blackish and were consumed even by the human beings<sup>87</sup>. It is believed to be auspicious if it grows to the west of the house.

13. **Pramanda** was a sweet scented plant<sup>88</sup> also known as *Pramandanī* enumerated along with *gulgulu* and it seems that it was used as a *homadravya*. The *kauśīka sūtra* informs that the patient who is suffering from constipation and retention of urine is being given the dried powder of this herb with *pūtikā*. It cures leprosy, tumour, itching, burn and poison<sup>89</sup>.

14. **Samidh**<sup>90</sup> has been repeated two more times in *Ṛgveda* as a plant<sup>91</sup> used for sacrificial purposes.

15. **Salmali** (*salmalia malabarica schott*) is the name of the 'silk cotton tree'<sup>92</sup>. *Ṛgveda* mentioned as it contained poisonous ingredients, but the car of the bridal procession is made of its wood. It is interesting to note that poison extracted from this tree is still used for tipping arrows. Its flowers were red and when ripe, yielded soft cotton. Its seeds were black and poisonous. The timber of *śālmali* being very light was easily portable on bullock carts<sup>93</sup>. This tree was distinct from other trees in the sense that it was the tallest among them and had the quickest growth. The *Gṛhyasūtras* forbid the use of its wood as *samidhā*<sup>94</sup>.

16. **Śimbala** (same as *śāmalī*): Of the trees mentioned in the *Ṛgveda*, one of the most important is *bimbala*, being identified by Sāyaṇa as *śālmali* or *seemful* tree. At one place, a poison is said to grow in *śāmalī* tree which seems to be identical with *śimbala*. All that we are told about the *śimbala* is that its flowers are easily detached from the stem<sup>95</sup>. *Ṛgveda* describes, if the tree is cut down by the axe, so may the enemy be cut down: as one cuts off without difficulty the flower of the *śimbala*, so he may be destroyed

17. **Śimsāpa** (*Darbergia sisso*) was a very beautiful and useful tree in many ways. Its leaves were very small and branches had luxurious growth on its tall body. Its wood

was used for making houses, furniture and agricultural implements. The *Ṛgveda* informs that the wheels of carts and chariots were made of its wood<sup>96</sup>.

18. ***Vibhitaka*** (*Terminalia bellerica* Roxb) is also termed *vibhitaka* was known to the early Vedic people. Of the trees mentioned in the *Ṛgveda*, one of the most important is *vībhīdaka*. It grows wild on the slopes of mountains and *aksas* (dice) were made of its seeds<sup>97</sup>. The wood was also used for making the sacrificial fire burn<sup>98</sup>.

*Matsyapurana* forbids its use for building purposes<sup>99</sup>. Its fruits were termed by the same name (*akṣa*) and were used as medicine conducive to digestion. The word *akṣa* in the context of gambling is roughly translated into 'dice' but the *akṣa* in the earliest gambling games was not dice but small hard nut called *vibhīdaka* or *vibhīṣaka*. *Akṣa* played an important role even in polity. Among the chief men of the realm whose loyalty was confirmed by a special ceremony at the consecration of the king was the *akṣāvāpa* (thrower of nuts of dice) evidently the organizer of royal gambling parties. *Akṣa* also denoted the axle of a chariot. On this basis it has been suggested that the wood of *vibhīdaka* might have been commonly used for making it. Sometimes, the term *akṣa* denoted the *vibhīdaka* tree<sup>100</sup>. In *Āyurveda* it mainly pacifies kapha and is useful in respiratory disorders such as cough, bronchial asthma<sup>101</sup> etc.

19. ***Āmra*** (*Mangifera Indica*) also known as *Cūta*

20. ***Panasa*** (*Artocarpus integrifolia* L)

Even though both the trees are not directly mentioned by its name in the *Ṛgveda*. O.M.C.Narayanan Nambootiripadu in his Malayalam commentary on *Ṛgveda* called *Ṛgvedam-Bhāṣāṣyam*, he has been given interpretation<sup>102</sup> to the usages *Pakvāśākhā* and *Vanāni* as *Panasādīni* *Vṛṣāśākhā* and *Vṛṣārīni* *Cūtapanasadīni* respectively.<sup>103</sup> From his interpretation it may be assumed that those trees were also existed during that period.

Both of the trees *Cūta* is used in the worship of Cupid. One of cupid's arrows is made of its blossoms. A mango leaf is fancied as the lip of goddess of springs. The

blossoms are also fragrant. The tree *panasa* or *pilavu* is auspicious for building purposes when used alone. The house having it is supposed to be prosperous and beautiful.

21. **Nyagrodha** (*Ficus Indica*) or *Ficus bengalensis* is identified with the sacred *vata* tree or banyan tree. Though the tree is not mentioned by its name in the *R̥gveda* it appears to have been known, as Pischel<sup>104</sup> has shown from a hymn<sup>105</sup> in which its characteristics may be recognised. The *Śatapatha Brāhmaṇa* states that *nyagrodha* was so named due to its downward (*nyak*) growth (*rodha*). It had the characteristic of bending its branches down to the ground and developing new secondary trunk, so that a single tree in the course of time formed a large grove; it was noted that it never grows straight but slightly inclines to one side<sup>106</sup>. It is also known by the name of *avarohan*, *kṣīri* and *prthuparna*. According to *Vāyupurāṇa*, it symbolizes prosperity. In the *Atharvaveda*<sup>107</sup> and later literature<sup>108</sup>, sacrificial posts and utensils made of its wood were used in sacrifices<sup>109</sup>. Its wood was also prescribed to be used as *samidhā*. Its bark is tonic, astringent, cooling, dry and diuretic. Its seeds or fruits are cooling and tonic. Young buds and milky juice are astringent. It contains medicinal properties.

22. **Pārijāta** (*Nyctanthes arbor-tristis* linn) is also have been not directly mentioned by the name in *R̥gveda*, but in a context where the word *vidradhe*<sup>110</sup> is interpreted by O.M.C. *Vidruḍhe vyūḍhe* like the *Pārijāta* tree<sup>111</sup>. From his interpretation we may guess that it might have existed during that period. In *Āyurveda* it is also known as *Śephālī*. Its beautiful flowers blossom in autumn season particularly, *Navarātra* is celebrated. The juice of leaves is bitter and is specially effective in sciatica and also in chronic fevers and intestinal worms<sup>112</sup>.

### III. TRNA (GRASS):

The *R̥gveda* refers to a large number of names of grasses which were used for different purposes. The word *tma* is often mentioned in the *R̥gveda*<sup>113</sup> and later<sup>114</sup>. The *R̥gveda* states:

उद्धत्यस्मा अकणोतना तणं निवत्यपस्वपस्ययानरः ।

Besides the word *tṛṇa* a widely used term found in *Ṛgveda* for *grass* was *barhi* which indicates the general characteristics of *tṛṇa*, ie., which grows rapidly. Grasses like *muñja* and *śara* were used for building houses. Some grasses had got religious sanctity, such as, *kuśa* and *dūrvā* which were commonly used in sacrifices. Strings, cords, ropes and household objects like containers, baskets, mats and several other articles were made of grasses. Besides, these had medicinal properties and were used for curing certain diseases. Some of the important grasses were mentioned in the *Ṛgveda* as follows:

1. **Arjuna** (*Terminalia arjuna*) is a wild plant, popularly known as *kauha*. In *Ṛgveda* it is not mentioned as a plant but it occurs in the sense of white colour<sup>115</sup>. The *Kāṭhaka Saṃhitā* informs that there were two species of this plant, namely, white and brown *arjuna*<sup>116</sup>. The later species, on account of its colour similar to *soma*, was used as a substitute of this plant<sup>117</sup>. Sometimes it has been termed *phālguna*<sup>118</sup>. In *Āyurveda* it is astringent and pacifies kapha and pitta<sup>119</sup>.

2. **Bisa** (*Aconitum napellus L*) a fibre plant, has been mentioned in the *Ṛgveda* by the seer Bārhaspatya Bharadvāja as 'she breaks down the precipices of the mountains, like a digger for the lotus fibres'<sup>120</sup>. This fiber was most probably that which made the lotus stalk. It is supposed to constitute the bowstring of cupid.

3. **Bhaṅga** (*Cannabis sativa*) was hemp. In the *Ṛgveda* it has been used as an epithet of *soma* plant<sup>121</sup>, presumably in the sense of 'intoxicating', which then came to designate hemp. It grew wild. Its plant was small and leaves were very green. It is identified with *bhānga* which produces mild intoxication. Some of the *sūtra* texts prescribe its use in certain rituals

4. **Darbha** (*Imperata cylindrica beaur*) was considered as one of the most important grasses and was used in sacrifices. Its characteristics have been mentioned in the Vedic texts. One such characteristic is that it spread rapidly and re-rooted so rightly which accounted for it being termed "having thousand joints". It had several roots (*bhūrimūla*), thousands of leaves (*sahasraparṇa*) and hundreds of stalks

(*śahāṇḍa*). It had medicinal ingredients and was used for having soothing effects on the mind and body<sup>122</sup>. Amulets made of it were used for protection against falling of hair and ensuring their healthy growth

Among the herbs it was considered as invaluable.

The *Darbha* grass was also used in sacrifices for strewing the ground for placing oblations and sitting of priests and sacrifice<sup>123</sup>. The word *barhi* is also found repeatedly throughout the *Ṛgveda*, in the sense of *darbha* grass denoting the litter of grass strewn on the sacrificial ground on which the gods are summoned to seat themselves<sup>124</sup>. *Śulba* (rope made of *darbha* grass) woven in 3 or 5 strands was used for lying the *prastara* (stone pieces) in *soma* sacrifice. *Visurmika* (handful of *darbha* grass) was used instead of fuel logs for carrying fire. *Veda* was a bunch of *darbha* grass tied with a rope. It was given the shape similar to a calf's knee or woven basket or a hand with three strands and was used for sweeping the altar. *Vedaparivasan* (cut up top portions of *darbha* blades) was used for cleaning the sacrificial ladles. The *darbha* grass is said to have sprung from the heaven. Various sanctifying and other far reaching supernatural powers have been ascribed to it. Sometimes it has been equated with Soma<sup>125</sup>. The *Taittirīya Saṃhitā* states that *darbha* contains both kinds of food because it is both water and plant. It has sprung up from water released from the body of *Vṛtra*, So it signifies water. By offering it to Agni, the sacrificer feeds him by both food and drink<sup>126</sup>. The *Atharvaveda* mentions that this grass was the embodiment of vigour and signified durability on the ground that its roots were so deep rooted that it was difficult to eradicate them<sup>127</sup>. Sometimes it is identified with *kuśa*<sup>128</sup>, but this identification is unconvincing because the description of these two indicate that they were different from each other.

5. ***Dūrvā*** (*Panicum dactylon*) was also considered as one of the most sacred grasses. It grew properly on damp soil<sup>129</sup>. Like *darbha*, it also spread rapidly on the ground and even during the summer it did not dry. A simile occurring in the *Ṛgveda* seems to indicate that the ears lay horizontal with the stem. Its different species were known to the Vedic people, such as, the *Pākadūrvā* grew on the spot where the dead

body was cremated<sup>130</sup>. The *śāṅḍadūrvā* whose roots were similar to eggs. *Śada* was a very tender species of *dūrvā*. *Sahasrakāṅḍa* was an epithet of *dūrvā* which indicates that it spread much on the ground. The *Atharvaveda* contains a *sūkta* dedicate to *dūrvā*. It was taken as medicine for curing certain physical disorders. On account of its importance it was considered to be of divine origin<sup>131</sup>. It was used in sacrifices and still this practice is in vogue. In *Āyurveda* it is used for healing wounds and is useful in burning sensation and skin diseases<sup>132</sup>.

6. **Kāśa**<sup>133</sup> (*Saccharum spontaneum L*) was a kind of wild cane which was used for making twine, mats, thatch...etc. Roofs of the house were also one passage of the *Ṛgveda*, but the reading is uncertain. It was supposed that it had the power to remove the effects of evil spirits. It's hard from may assumed from the fact that a *Kṣatiya* had to put on a *raśanā* (rope) made of it on the occasion of his sacred thread ceremony. Its flowers are very white. According to *Vāyupurāṇa* it is good for *Śrāddha*<sup>134</sup>. In sacrifices, it was a substitute of *kuśa*.

7. **Kuśara** (*Saccharum officinarum*) is mentioned with *ūara* and other grasses in one hymn of the *Ṛgveda* as affording lurking places for serpents<sup>135</sup>.

8. **Muñja** (*Saccharum munja*) was a wild variety of grass having luxuriant growth, which is mentioned in the *Ṛgveda* as the lurking place of venomous creatures, and it was considered as sacred grass used in several sacrifices<sup>136</sup>. *Muñja* grew wild so abundantly in the western mountainous regions that the Vedic Aryans named a particular mountain as the *Muñjavanta*, meaning “abounding in the *muñja* grass”. *Muñja* is so called because it is thrown out (*muc*) by a kind of rush<sup>137</sup>. Like some other grasses, it was also considered as sacred, and was used in sacrifices for securing protection, because it was considered as womb which does not injure the child. The net woven with strings made of this grass and it was mixed with mud and husks of paddy grains to be used as a plaster for strengthening the wall. According to Roth, it is found in of this grass was used for filtering the *soma* juice<sup>138</sup>. A harp, called *vāṇa*, with a hundred strings was made of this grass, and it was played at the chanting of a stotra at the *Mahabharata* recital<sup>176</sup>. This grass was light in weight, hence it was

known as *suṣīra*, which means hollow<sup>139</sup>. It was used for making plaited part of the throne. Still *muñja* grows wild in rural areas and is used for different purposes.

9. *Naḍa* (*Pharagmitis maxima*) was a variety<sup>140</sup> of reed (wild cane) which grew on the banks of the lakes and tanks or in moist soil. It is found in several passages of the *Ṛgveda*, but its sense is still obscure. In one passage of *Ṛgveda* it seems to have been a reed with splits of which boats were made<sup>141</sup>. However it grew abundantly during the rainy season, hence sometimes it was termed as *vārṣika*. It grew profusely and increased like the hair on head. Its plants were used for making mats. Mainly, the women were engaged for making mats and other objects of this grass<sup>142</sup>. Sometimes, its plants were used for making big mats which were spread on cots.

10. *Pākadūrvā* was one of the species of *dūrvā* which has been mentioned the *Ṛgveda* included with *kiyāmbu* and *vyalkaśa* among the plants used for growing on the spot where the corpse of the dead man has been consumed with fire. *Pākadūrvā* is probably, as Sāyaṇa understands it,

*Paripak va-dūrvā*, ripe or edible millet<sup>143</sup>. In the *Taittirīya Āraṇyaka* on the other hand explains *pāka dūrvā* as small millet<sup>144</sup>.

11. *Sīlamā* (*Abroma augusta*) plants are referred by the *Ṛgvedic* seer Sindhuḥṣit Priyamedha as 'The *Sindhu*, (the country watered by the *Sindhu* river) is rich in horses, chariots, clothes, gold ornaments well made, rich in food, rich in wool and abounding in *sīlama* plants'<sup>145</sup>. *Sīlamā* plants are said to yield fiber for making ropes for tying ploughs. It is probably yielding a good cordage fiber. Even today this fiber is said to be carefully reeled and used for sacred purposes.

12. *Śrāda* denotes a variety of grass in the *Ṛgveda* and later<sup>146</sup>.

13. *Śara* (*Saccharum arundanaceum*) in the *Ṛgveda* and later denotes a species of reed<sup>147</sup> which grew profusely in watery regions, hence it was rightly considered as the "flower of the waters"<sup>148</sup>. Its stem, when ripe becomes very white. A woman's bright cheek is likened to it. Its plants were very weak and fragile and

were easily to be broken. It was very light, so it was used for making arrow shafts. Sometimes girdles, mats, cords and cots were also made of this grass<sup>149</sup>.

14. **Śairya** is a species of grass infested with insects mentioned in the *Ṛgveda*<sup>150</sup> along with *śara*.

15. **Vamśa** (*Bambusa arundinacea*) was the strongest and the longest variety of grass mentioned in the *Ṛgveda* and other vedic texts in the sense of bamboo or bamboo pole which grew wild in forests or around the villages<sup>151</sup>. It was so called because it grew in forest (*vana-saya*). It is the most useful variety of grass and is considered as the veritable king of the grasses (*tr̥ṇa-rāja*). Many species of *vamśa* are found in India; some of them are spiny at the joints and others are climbers. The stems attain a height of fifty or even one hundred fifty feet with a diameter in larger species from four to eight inches. The *Śatapatha Brāhmaṇa* has described its uses as the top beams, for the poles running from south to north, and for those running from west to east, respectively<sup>152</sup>. Bamboo beams were also used for constructing the sacrificial shed, as is being done even now. In rural areas, it is used mostly as a material for house-building. In ancient times, it was used for the same purpose. It was very hollow and was known as *Veṇu*<sup>153</sup>. All sorts of agricultural implements and musical instruments were also made of the bamboo. Its tender shoots and grains were eaten as food<sup>154</sup>.

17. **Vīraṇa** (*Andropogon muricatus*) also known as *virina* mentioned in the *Ṛgveda* and other Vedic texts<sup>155</sup> as a kind of fragrant grass. Four and a half cubits below the ground, where this is seen, water is to be found. The roots of *vīraṇa* are fragrant.

18. **Balbaja** (*Elensine indica E. coracana*) also termed *Balvaja* is the name of a grass mentioned in the Vedic texts to be produced from the excrements of cattle. Baskets or other products made from this grass are referred to in a *Dānastuti* (praise of gifts) in the *Ṛgveda*<sup>156</sup>. In the *Kāṭhaka Saṃmhitā* it is stated to be used for the sacrificial litter (*barhi*) and for fuel. According to *Vāyupurāṇa* it is a taboo in *Śrāddha*<sup>157</sup>.

19. **Caṇaka** (*Cicer arictinum*), the name of a grass<sup>158</sup> has not been directly mentioned by the name in *Ṛgveda*. The grass *cana* have been used as a feed for animals especially it is beloved to the horses of Indra. From his interpretation it may be concluded that the grass *cana* also existed during that period.

**(VI) Latā (Creepers) :**

In the vegetable kingdom some kinds of plants were included in the group of *latā*, *vallī* or *teruṇi* which means the creepers entwining a support. This type of plants was mentioned in the *Ṛgveda*<sup>159</sup> as:

आक्षित्यर्चस्यपरा अन्तरुत सद्योजातास तरुणीष्वन्तः ।

अन्तर्वतीस्सवते अप्रवीता मद्देवानामसत्त्वमेकम् ॥

Mostly, the creepers grew during the rainy season and were used mainly for fodder, medicine, vegetable and decorative purposes. Generally the creepers were of three varieties, namely, those which spread on the ground, those which grew and spread on water, and those which climbed the trees. Such type of plants included in the *Ṛgveda* is given below:

1. **Kiyāmbu** is included in the group of water plants which are grow, according to a funeral hymn in the *Ṛgveda*<sup>160</sup>, on the place where the bodies of the dead were burned. Its literal meaning is ‘having some water.’<sup>161</sup> It was considered as the inauspicious creeper.

2. **Libujas**<sup>162</sup>, denoted a creeper that climbed the tree. It has not been identified.

3. **Puṇḍarīka**<sup>163</sup> (*Nelumbo nucifra*) was the white species of lotus, of which garlands were made. In the Vedic texts, the shape of the human heart has been compared with the shape of a *puṇḍarīka*. The people liked to have tanks with<sup>164</sup> *puṇḍarīka* in the vicinity of their houses for beautifying the surrounding. The Vedic seers practically overlooked the aesthetic aspect of only once in the *Ṛgveda*, lotus pond has been mentioned as the, most beautiful place. In the *Brāhmaṇa* texts, lotus has been symbolised as an immortal element<sup>328</sup>. In the Vedic philosophy, it has a deep

mystical significance because it symbolises the cosmic waters. On account of this, its flowers and leaves were prescribed to be used in sacrifices<sup>165</sup>. It was the symbol of prosperity and immortality; so it was put on different auspicious occasions for ensuring prosperity to the sacrificer. In the post-Vedic literature, *puṣkara* became the usual simile of love, beauty, tenderness and immortality. In the times of the Buddha, several *puṣkaraṇī*s existed in different localities

4. ***Puṣkara*** (*Nymphapa stallata*) is a very famous and useful creeper which has been mentioned in the *Ṛgveda* and other Vedic texts in different contexts. In its true literal sense, it stands for blue lotus<sup>166</sup>. Its sweet fragrance has been beautifully described. Generally, it grew wild in tanks and lakes, so these got the name of *puṣkaraṇī*. Its leaves and stalks were green. Since the earliest times, *puṣkara* has been used as an item of physical decoration<sup>167</sup> (*vapus karman*). In *Āyurveda*, the root of *puṣkara* (*puṣkaramūla*) has been mentioned as pungent, bitter, hot, slightly narcotic and is useful in cardiac disorders, bronchial asthma, cough and chest-pain.<sup>168</sup>

5. ***Śīpala*** (*Blyxa ceylanica*) was an aquatic plant which has been mentioned in the *Ṛgveda*<sup>169</sup>. It has later known as *śaivala*, the vallisneria.

6. ***Urvārū***<sup>170</sup> (*Cucumis melo. c. sativus*) is the cucumber and its fruit was termed as the *urvārūka* which is *karkaḍr* in vernaculars. The stem of the plant becomes loosened when the fruit is ripe. In the Vedic texts, including *Ṛgveda*, it has been a usual simile to denote the release of man from the bondage of death.

7. ***Vetasa*** (*calamus tenuis roxb.*) has been mentioned in the *Ṛgveda* and later as a water plant or creeper of the class of *calamus rotting* or a similar reed<sup>171</sup>. On account of its growth in water, it was termed as *apsuja*. Its colour was yellowish, so sometimes it was known as *hiraṇya*<sup>172</sup>. It was used in sacrifices, and was the symbolic of elasticity and durability.

8. ***Vyalkaśā*** was a water plant has been mentioned in the *Ṛgveda*<sup>173</sup> along with *pākadūrvā* and *kiyāmbu* are said to grow on the spots where dead bodies are burnt<sup>174</sup>.

## End Notes

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- 1 *ibid.*, pp.201.
- 2 *ibid.*, pp.202-205.
- 3 *ibid.*, pp.207-212.
- 4 *Iṣawarbhai Patel;science and veda,somaiya publications Pvt.Ltd;NewDelhi,1984,*  
p.87
- 5 *TS,7.3.20.1, VS.22.28.*
- 6 *ṚV.10.97.3,15*
- 7 *AV, 8.7.4*
- 8 *SB,3.7.1.8.*
- 9 *TS, 3.3.6*
- 10 *AV, 11.7.21, CHU, 12.3.6.3*
- 11 *TS, 3.3.6*
- 12 *SB, 11.1.7.2.*
- 13 *RV, 10.97.1-23.*
- 14 *ŚYU, 12.76*
- 15 *ṚV, 1.166.5, 3.34.10, 4.33.7, 5.41.8, 6.21.9, 7.4.5, 8.27.2, 10.145.1 etc*
- 16 *ṚV, 1.67.9, 1.141.4, 2.1.14, 2.35.8 etc*
- 17, *ṚV, 10.146.6*
- 18 *ṚV, 10.146.6*
- 19 *ṚV, 10.146.6*
- 20 *AV,4.9.8-10*
- 21 *SB, 3.1.3.11*
- 22 *AV.1 9.44.1*
- 23 *VS, 30.14,TB,3.4.10.1*
- 24 *ṚV, 10.97.7*
- 25 *ṚV, 1.50.12, AV,1.24.1, TB, 3.7.6.22-23*
- 26 *AV.1.24.1-2*
- 27 *RV,5.78.9*
- 32.*RV,10.145.1-6;AV,3.18.1-6*
- 29 *RV 10.97.7*
- 30 *Ibid, 10.97.7*
- 31 *Ibid,10.59.10*
- 32 *Ibid, 10.97.7*
- 33 *AV,9.8.20*
- 34 *AV,7.10.113.1-2*
- 35 *RV,3.7.6*
- 36 *RV,3.16.2;*
- 37 *RV,5.53.13, 6.13.4*
- 38 *BU,6.3.13*

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- 39 RV,5. 53.3  
40 RV,8.55.3  
41 YV,10.32,19.6, 23.38;  
42 AV,6.142.1  
43 RV, 10.71.2  
44 RV,10.27.8  
45 RV,3.53.7  
46 RV,1.87.9,1.16.2  
47 RV,1.94.11  
48 RV, 6.27.6  
49 RV,8.92.41  
50 RV,5.23.7-8  
51 YU,19.6  
52 AV,1.26.15  
53 AV,2.8.3  
54 RV,5,53,13  
55 AV,1.27.3  
56 RV, 8.55.3  
57 RV,10.97.15  
58 RV,8.46.27  
59 RV,1.35.8,10.97.5; AV,3.6.1;4.32.4  
60 AV,6.110.1  
61 AB,7.35.6  
62 AB,7.5.32  
63 AV,3.6.2-3;8.8.5  
64 RV,1.53.8  
65 Sharma.PV, P.26  
66 VS,19.23; SB,5.5.4.10; JB,2.15.6  
67 RV-1.112.6  
68 AB,8.3.17  
69 VS,24.2  
70 Mahabhasiya,3.1.87, p.154  
71 RV,3.53.19; 3.15.19  
72 SB,5.4.4.12;3.6.2.12;13.4.4.5-9  
73 AB,2.1.1  
74 Sharma PV, p.23  
75 RV,6.48.17  
76 RV,10.85.20  
77 Nirukta , 12.8  
78 AV,3.5.4.8

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- 79 RV,6.70.1  
80 RV,1.191.10-13  
81 RV,10.135.1  
82 SB,6.6.3.7;1.1.1.4  
83 AB,2.1.1; SB,13.4.4.5-10  
84 RV,10.68.10;10.97.5  
85 RV,1.164.20  
86 RV,1.164.20-22  
87 AB,7.35.4  
88 RV,3.53.14  
89 Rajeevekamal,op.cit;pp.65-66  
90 RV,7.14.1;8.19.5  
91 Banerjee.sc,op.cit;p.73  
92 Jogirajbasu,bombaxmalabaricus,p.253  
93 RV,7.17.3;7.9.3;10.85.20  
94 PGS,4.1.80;4.2.80  
95 RV,3.53.22  
96 RV,3.53.19;AV,2.12.9.7;PGS,4.2.80  
97 RV,10.34.1  
98 TS,2.1.5.8; SB,13.8.1.16  
99 MP,pp.193-194  
100 CHU,7.3.1  
101 Sharma.P.V,op.cit;p.18  
102 *Ṛgvedam-Bhāṣāṣyam*,vol.IV,p.105;Vol.I,p.24  
103 RV,6.39.5;1.8.8  
104 Vedic Studies,1.113,114  
105 RV,1.24.7  
106 SB,13.2.7.3  
107 AV,4.37.4;5.5.5  
108 AB,7.30.31; SB,5.3.5.13  
109 TS,7.4.12.1  
110 RV,4.32.23  
111 *Ṛgvedam-Bhāṣāṣyam*,Vol.III,p.506  
112 Sharma.P.V,op.cit;p.26  
113 RV,1.161.1; 1.164.40;10.102.10  
114 AV,2.30.1; 6.54.1  
115 RV,1.22.5  
116 KS,3.4.3  
117 SB,2.2.11; AB,5.15  
118 JB,1.354

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- 119 Sharma.P.V,op.cit; p.23  
120 RV,6.61.2  
121 RV,9.61.13  
122 AV,6.4.327  
123 AV,19.32.2;19.32.10;19.33.3  
124 RV,1.63.7  
125 AV,19.32.7; 2.7.166; 8.7.20  
126 TS.6.11.7  
127 AV,19.31.3; 19.32.1  
128 Apte,V.S. :Sanskrit English Dictionary;p.246  
129 RV,10.16.13  
130 RV,10.16.13  
131 AV,18.6.3; 2.7.166;18.3.6;2.7.1  
132 Sharma P.V.op.cit;p.33  
133 RV,10.100.10  
134 VP,75.41  
135 RV,191.3  
136 RV,1.161.8;1.191.3  
137 Nirukta,9.7  
138 RV,10.161.8  
139 SB,6.3.1.26  
140 SB,1.1.4.19  
141 RV,8.1.33; 1.32.8 ;10.105.4; 2.34.3;1.179.4; 8.69.2  
142 AV,4.19.1;6.137. 2-3; 6.138.5  
143 Macdonel.A.A.&Keith.A.B,Vol. I,op.cit;p.513-514  
144 TA,6.4.1.2  
145 RV,10.75.8  
146 RV,9.15.6 ;VS, 25.1; RV,1.191.3;AV,4.7.4; SB,1.2.4.1; BU,6.4.11  
147 RV,1.191.3  
148 TS,4.4.2  
149 AV,8.8.3; 1.2.1  
150 RV,1.191.3  
151 RV,10.142.3  
152 SB,3.1.1.16; 3.6.1.23  
153 TS, 5.1.1.4  
154 Rajeevkamal,op.cit;p.103  
155 RV,1.191.3; SB.13.8.1.15  
156 RV,8.53.3  
157 VP, 75.61  
158 Banerjee.S.C,op.cit; p 36

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- 159 RV,3.55.3  
160 RV,10.16.13  
161 TA,6.4.1.2  
162 RV,10.1013; Niruta, 6.28  
163 RV,10.142.8  
164 AV,10.8.43; 6.106.1  
165 TS,3.6.44.2-3; 2.6.5  
166 RV,6.16.13; AV,11.3.8; SB,4.5.1.16;AB,11.3.8;12.1.24  
167 Nirukta,5.14  
168 Sharma P. V.op.cit;p.29  
169 RV,10.68.5; AV,6.12.31  
170 AV,6.14.2; RV,7.59.2; MS,1.10.4; VS,3.60  
171 RV,4.58.5; AV,10.7.41; VS,17.6; TB,3.8.4.3  
172 TS,5.3.12.2

## CHAPTER - 5

### CONCLUSION

Sanskrit literature is unique among the literatures of the world, ancient or modern. It preserves the earliest specimens of the literary art of humanity. The *Vedas* are the first specimens of literature in Sanskrit dealing-with the pastoral poetry of the ancient people attempting to appease the powers of nature in order to avoid their wrath and to get favours from them. The *Vedas* include all sorts of subjects imaginable to us. Among the four *Vedas*, the *Ṛgveda* is the earliest literary record of the whole Aryan race. The *Ṛgveda* contains mostly adorations of gods. Love of nature is one of the prominent features in the poetry of the *Ṛgveda*.

Nature is the sum total of the physical phenomena, such as the sun, the moon, the stars, the planets and so on. The term *Ṛta* might have been commonly used by the Vedic seers to convey the sense of nature. *Ṛta* could be translated by the term *Prakṛti* or nature which has been used by the post-Vedic writers and the literature in a conventional sense. There are several passages can be seen in the *Vedas* describing the glory of dawn and dusk, day and night, the beauty of river and forest, plants and creepers, reciprocative relation between nature and creaturely life etc. How ever the *Vedas*, the *Ithihāsas*, the *Purāṇās* and the poetic works of Kāidāsa, Bhavabhūti, Baṇabhaṭṭa and others have given great contributions in painting the originality of nature.

In the early eras of human civilisation people gave more importance to nature and its phenomena than we given to day. The Vedic people saw life like themselves in the phenomena of nature. The sun, the moon, the sky, the earth, the ocean, clouds, ram, plants and animals, lightning, thunder and storm etc, were alive to them. They began to worship all these phenomena of nature. The sense of awe and terror caused by the terrible aspect of nature and the aspects of nature that helped for their sustenance and preservation that made the early people worship towards the various

phenomena of nature. The power and sublimity seen in the realm of nature, the beauty and grandeur seen in the realm of nature and the different geographical factors etc. were also persuaded the man to worship various phenomena of nature. From the fragments of ancient literature, it is clear that nature-worship, in some shape or form, was the earliest aspect of religion.

The *Ṛgveda* is essentially a nature poetry, dealing with certain powers in nature and also embellished with allusions to the familiar objects of nature like the rivers, mountains, plants, trees, animals, birds and so on. Among the objects of nature the plant-kingdom occupies an important position that attracted the attention of the poets of those days. Human civilisation cannot be conceived without plants and trees around them. In human life the plants have always played a vital role.

The Vedic people lived in close proximity of nature. With trees, plants and shrubs the familiarity and association of man were the most intimate and friendly. He encountered the hostile forces of nature like storms, thunder, ferocious beasts and birds. But trees and plants were always favourable to him.

According to *Ṛgveda*, the sky, the earth and the life are nothing but the products of plants. The plants services man in many ways. They are primarily the sources of food, energy, cloth, shelter and medicine. Besides these the ancient people depended on plants for making various agricultural and sacrificial appliances, vessels, furniture, different types of vehicles and for their aesthetic value. The plants were not only useful objects but also they were revered and worshipped as gods or their abodes. The people had associated religious sentiments with trees. In course of time man came to learn a lot about the medicinal value of fruits, roots, herbs, leaves etc. and developed a regular science of Botany. The *Ṛgveda* attests the high antiquity of this science in India.

There are references to 99 species of *Auśadhis* (herbs or plants) in the *Ṛgveda*. The *Yajus Saṃhitās* have mentioned 82 kinds of plants while the

*Atharvaveda* appears to have been the earliest encyclopaedia of ancient Indian plants, referring to at least 288 varieties of plants. According to the modern historians like Majumdar, Aiyer, Macdonell and Keith, there are about 740 plants referred to in the Vedic writings in all. Though the present work is a study of plants mentioned in the *R̥gveda*, such plants mentioned in the later Vedic texts were also have been further studied.

In the Vedic texts, the whole creation has been classified into four groups, viz, the *aṇḍaja* (born from the egg), *jīva* (born from the living things), *swedaja* (sweat born) and *udvija* (born from a sprout). The plants have been included in the last group. Again *udvija* has been classified into four types, such as, *auśadhi* (medicinal herb), *vanaspati* (trees in general), *latā* (creeper) and *tr̥ṇa* (grass). Plants were classified into two main classes, such as, the *grāmya* (cultivated) and *aranya* (wild). Sometimes the names of such plants in the *R̥gveda* are presented as directly while others the names given as indirectly, as either associated with their habitat, utility or any other distinct characters.

The word *Auśadhi* occurs at several places in *R̥gveda* in the sense of plant or herb especially medicinal herb while the term *Virudh* is also found to be used in the sense of plant in the *R̥gveda* and later. Roughly speaking, *ausadhi* is employed in opposition to *virudh* to denote plants as possessing tremendous healing power or some other quality useful to man, while *virudh* is rather a generic term for minor vegetable growths signifies those plants which do not possess medicinal or curing properties. The *R̥gveda* contains an independent and separate *sukta* dedicated to the praise of herbs. The Vedic seers have compared the *ausadhis* to *amba* (mother), since just as mothers play a prominent role in the nourishing of their child, the herbs also act like mothers in the form of life-saving drugs since they possess excellent powers and hundreds of forms with which they may remove all types of ailments, both physiological and psychological.

Among the various herbs mentioned in the *Ṛgveda*, *Añjana* is a plant with scented wood, used for making ointment for protection from all sorts of eye diseases. *Abvāvati*, *Somīvatī*, *Udojasā* and *Ūrjayantr* are the other four medicinal herbs mentioned together in a hymn, which increases energy and activity and preserves sound health. *Haridrā* is an yellow oripment and its powder is used to make the skin smooth and soft. The *Ṛgveda* also depicts *Jīvanti* as an ever green plant possessing power to regenerate life in a sick person. The plants such as *Uśīnarāṇi* used for making ointment and *Pāṭa* for removing obstacles were also mentioned. Among the various medicinal herbs, Soma was the *samrāt*, which has been mentioned almost all the mandates of *Ṛgveda*. The juice extracted from this plant is a divine and spirituous liquor, which has been used by the Vedic seers to offering gods in sacrifices, it had a high religious and spiritual sanctity, on account of which it was placed above commercial transactions.

In the *Ṛgveda* the only kind of cereal mentioned is *Yava* which signified grain in general and barley in particular. But it does not mean that the *Ṛgvedic* "Aryans did not cultivate or consume other varieties of cereals. Archaeological evidences and interpretations given by O.M.C. Narayanan Nambootiripadu, the Malayalam Bhāṣyakāra of *Ṛgveda*, at different contexts in his commentary on *Ṛgveda* called *Ṛgvedam-Bhāṣābhāṣyam* proves that besides the cereal *yava*, other crops such as *tila*, *māṣa*, *vrihi*, *godhūma*, *priyangu*, *veṇu*, *syāmāka* and *nīvara*, by name, as also grass in general by the term *vīrudh*, *osadhi* and *bījam*, be it cultivated, non-cultivated or growing widely during the period of *Ṛgveda* and later *saṃhiāas*.

The term *Vanaspati* was commonly used to denote all trees in that age and not in the particular sense of trees which bear fruits with out putting forth flowers. In the *Ṛgveda* trees have been classified as *phalini* (bearing fruits), *aphala* (not bearing fruits), *apuṣpā* (devoid of flowers), and *puṣpiṇī* (having flowers). Trees were mostly utilised for making dresses, vessels, furniture and vehicles. In some religious festivals,

the use of certain trees were indispensable. Sacrificial posts of different size and shape were framed of wood. Trees also provided the people with materials for trade and commerce.

The trees were looked on different angles in order to their use for ritual, social and medicinal purposes. The trees such as *Aśvattha*, *Khadira*, *Palāśa* and *Nyagrodha* were considered as sacred, auspicious and most important/ The wood of those trees were hard in nature and is commonly used for making sacrificial vessels, fire wood or *samidh*, post or *yūpa* and vehicles like chariot etc. The tree *Aśvattha*, latter called *Pippala* of its berries were favourite to the birds and also used for curing diseases. Amulets made of its wood were tied to body for protection from evil spirits. The wood of *Khadira* was very hard so the bolts of the axle of a cart were made of it. The king sat on the throne made of a *Khadira* wood to ensure the durability of his reign. Amulets made of *Khadira* wood were put on the body for ensuring health. In *Āyurveda* it is a specific drug for *kustha*. The tree *Palāśā* same as *Kiṃśuka* or *Parṇa* of its wood and branches were used in sacrifices for several purposes. It signified the beauty among the trees and was considered as the womb of all plants. Though the tree *Nyagrodha* is not mentioned its characteristics may be recognised by a hymn in the *Ṛgveda*. Due to their importance and hard nature the *Nyagrodha* or *banyan* tree was considered as *Kṣatriya* or *King*, the *Aśvattha* as the *Soverign* or *Samrāt* and *Palāśa* as the *Brāhmin* amongst the trees.

*Karañja*, a wild and impure tree, *Madhuga*, a sweet herb of its juice was supported to nourish the baby in the mother's womb, *Madhula*, a plant used for removing mosquitoes and curing victims of serpent bites, *Pramanda*, a sweet scented plant used as a homadravya, *Salmaṅī* or *Śāmbala*, a silk cotton tree contained poisonous ingredients and used for making ceremonial chariots, *Śiṃśapa*, a beautiful and useful tree used for making the wheels of carts and chariots and *Vibhīdaka*, the tree of its seeds were used for making *akṣas* (dice) are the other important trees mentioned in the *Ṛgveda*. Some of the names of trees such as *Karkandu*, *Kākambira*,

*Sahadeva*, *Spandana* and *Svadhiti* were also mentioned in the *Ṛgveda*, but not in the sense of plants. Though the trees such as *Cūta*, *Panasa* and *Pārijāta* are not directly mentioned by the name in the *Ṛgveda*, from the interpretations given by O.M.C. it may be assumed that those trees were also existed during that period.

*Tṛṇa* is the third variety of plants which included grasses and shrubs used for different purposes. Besides the word *tṛṇa* a widely used term found in *Ṛgveda* for grass was *barhi* which indicates the general characteristics of *tṛṇa* i.e, which grows rapidly. Grasses were used for different purposes such as building houses, making strings, cords, ropes, household objects and various several other 'articles'. Besides these, they had medicinal properties and used in sacrifices.

Among the grasses, *Muñja*, *Śara*, *Kuśara* and *Śairya* are the wild variety of grasses having luxuriant growth, which are mentioned in the *Ṛgveda* as the lurking place of venomous creatures. They are considered as sacred and used in several sacrifices. String, cords, ropes and household objects like mats, cots, girdles and baskets were also made of these grasses. *Kāśa* was a kind of wild cane which is used for making twine, mats, thatch etc. It is good for *Śrāddha* and in sacrifices. It was a substitute of *Kuśa*. *Bhaṅga* was a hemp which grew wild. *Darbha* and *Dūrvā* were considered as sacred and most important amongst the grasses which were widely used in sacrifices. The word *Barhi* is also found repeatedly in the *Ṛgveda*, in the sense of *Darbha* grass denoting the litter of grass strewn on the sacrificial ground on which the gods are summoned to seat themselves. Amulets made of it were used for protection against falling of hair and ensuring their healthy growth. Among the herbs *Darbha* and *Dūrvā* were considered as invaluable. The Vedic people were familiar with several species of *Dūrvā* such as *Pākadūrvā*, *Śāṅḍadūrvā* etc. On account of its durable and hard nature pertaining to the power of remaining existent, it was accorded the status of a *kṣatriya* among the grasses. Since it was called the '*King of herbs*'.

Grasses like *Arjuna* and *Naḍa* were also mentioned in the *Ṛgveda*, but not as plants. *Śāda*, *Ulapa* and *Vīraṇa* are the other grasses mentioned in the *Ṛgveda*. *Vamīra* is mentioned in the *Ṛgveda* in the sense of bamboo or bamboo pole which was the strongest and the largest variety of grass which grew wild in forests or around the villages. It is the most useful variety of grass and is considered as the veritable king of the grasses (*tr̥ṇa-rāja*). Sacrificial shed, baskets, carts, chairs, śūpa, beds, bows, sheft of arrows and fences around the fields were made of it. Baskets or other products made from the grass *Balbaja*, which is referred to in a *Dānastuti* (praise of gifts) in the *Ṛgveda*. Among the fibres two at least are mentioned, viz, *Sīlamā* and *Bisa*. The grass *Caṇaka* is indirectly occurs in the *Ṛgveda*.

In the vegetable word some kinds of plants were included in the group of *Latā* or *Vallī* which means the creepers entwining a support. The creepers were mainly used for fodder, medicine, vegetable and decorative purposes. Generally the creepers were mainly used for fodder, medicine, vegetable and decorative purposes. Generally the creepers were of three varieties, namely, those which spread on the ground, those which grew and spread on water, and those which climbed the trees.

The *Ṛgveda* mentioned *Libuja* and *Urvārū* the two creepers which climbed the tree and spread on the ground respectively. The aquatic plants such as *Kiyāmbu*, *Puṇḍarīka*, *Puṣkara*, *Śipāla*, *Vetasa* and *Vyalkaśā* were also mentioned in the *Ṛgveda*. Among them, *Kiyāmbu* was considered as an auspicious creeper. *Puṇḍarīka* was the white species of lotus, of which garland were made. The people liked to have tanks with *Puṇḍarīka* in the vicinity of their houses for beautifying the surrounding. It was the symbol of prosperity and immortality; so it was put on different auspicious occasions for ensuring prosperity to the sacrificer. *Puṣkara* stands for the blue species of lotus. Its sweet fragrance has been beautifully described. Since the earliest times, *Puṣkara* has been used as an item of physical decoration. In *Āyurveda* the root of *Puṣkara* has been used for cardiac disorders, bronchial asthma, cough and chest-pain. *Vetasa* was included in the group of *Calamus rotang* or a similar reed. It was elastic,

hence chairs, baskets, sacrificial thrones and shafts of bows were made of it. It was used in sacrifices and was the symbolic of elasticity and durability. *Śipāla* was also an aquatic plant mentioned in the *Ṛgveda*, which was later known as *Śaivala*. *Vyalkāśa* has been mentioned in the *Ṛgveda* along with *Pākadūrvā* and *Kiyāmbu*, said to grow on the spots where dead bodies are brunt.

From the above description it is observed that the men in the Vedic age were realised the significance of all kinds of plants in nature and they utilised them for their various needs.

Our modern scientists were realised the place of herbs, trees, grass and creepers in the eco-system. The eco-system mainly depends upon the plants mentioned in the *Ṛgveda*. Among them, *Kiyambu* was considered as inauspicious creeper. *Pundarlka* was the white species of lotus, of which garlands were made. The people liked to have tanks with *Pundarlka* in the vicinity of their houses for beautifying the surrounding. It was the symbol of prosperity and immortality; so it was put on different auspicious occasions for ensuring prosperity to the sacrificer. *Puskara* stands for the blue species of lotus. Its sweet fragrance has been beautifully described. Since the earliest times, *Puskara* has been used as an item of physical decoration. In *Ayurveda* the root of *Puskara* has been used for cardiac disorders, bronchial asthma, cough and chest-pain. *Vetasa* was included in the group of *Calamus rotang* or a similar reed. It was elastic; hence chairs, baskets, sacrificial thrones and shafts of bows were made of it. It was used in sacrifices and was the symbolic of elasticity and durability. *Sipala* was also an aquatic plant mentioned in the *Ṛgveda*, which was later known as *śaivala*. *Vyalkāśa* has been mentioned in the *Ṛgveda* along with *Pakadūrvā* and *Kiyambu*, said to grow on the spots where dead bodies are brunt.

From the above description it is observed that the men in the Vedic age were realised the significance of all kinds of plants in nature and they utilised them for their various needs.

Our modern scientists were realised the place of herbs, trees, grass and creepers in the eco-system. The eco-system mainly depends upon the plants. Our scientific explosion and the gradual development of it did not consider a first the place of plants in Ecology. But they now recognised the plants agnum bonum of the humanity.

All creatures on the earth depend on plants in direct or indirect way for their existence. Plants have an important role to control weather and equilibrium on the nature. Before the development of modern science, our ancestors were realised the different uses of plants. They considered them as the bestowers of life. Since they revered and worshipped some

plants as gods or abodes. In other words they have been comprehensive picture about the use of different kinds of plants. So they preserved and loved the plants than that of their family members.

Another wonder is that, they find out the role of plants in the physical health hygiene, exactly 4000 years before. This awareness laid the foundation of *Āyurveda* through later Vedic literature ie., *Yajus*, *Sāma* and *Atharva*. Hence *Āyurveda* is considering as the fifth *Veda*.

The wide deforestation invites many environmental problems throughout our planet. Among them soil- erosion, flood, famine etc., deserve an important place. Negative drawbacks of this constant exploitation of the nature led man into nature. This awareness compelled the modern man to follow the age-old rule of 'Live and let live'. Vanamahotsava, Social forestry and the Protection of environment is the product of this positive idea of modern map. For a better future we would preserve plants and led a life without struggle towards our friendly eco-system.

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