

FAMILY RELATIONS OF SOME PLANTS IN THE  
*ATHARVAVEDA*

MIRA ROY

National Commission for Compilation of History of Sciences in India  
Indian National Science Academy  
1 Park Street, Calcutta 16

The *Atharvaveda* describes a number of plants among which a family relationship, like that of grandfather, father, mother, brother and sister, has been attributed. It is of interest to enquire whether this description is purely imaginary and arbitrary or has got some basis of classification behind it.

In this paper the case of four plants with a number of others related to them, as mentioned above, has been discussed. It has been found that in all cases the relationship seems to have been based on features, environmental conditions, anatomical structure and medicinal uses, or what the botanists call the 'artificial classification'. Excepting in one case even phylogenetic relationship could be traced.

It may therefore be concluded that a rational method of classification of plants was used by the ancient Indians as early as the time of the *Atharvaveda*, though they might not have any idea of a natural classification of plants as known to the modern botanists.

Classification of plants on rational basis could be traced as early as in the period of the *Atharvaveda* (c. 1000 B.C.). People of this period established a sort of family relationship among certain groups of plants. The hymns of the *Atharvaveda* in a very poetic way refer to a number of plants which are stated to be related to other plants in terms of grandfather, father, mother, brother and sister. The genealogy of a particular plant with glorification of its power and virtues is recorded in the *Atharvaveda* while invoking<sup>1</sup> it for the cure of illness. The description of these plants as regards their habitat, appearance and medicinal uses is also given. It is therefore considered interesting and worth while to investigate whether there is any rational basis of the family relationship of these plants as given in the *Atharvaveda*. The present work is undertaken with this purpose in view. The names of four plants with those of their so-called relatives as described in the *Atharvaveda* are given in the following tables side by side with their modern identification and description of properties.

TABLE I  
*Avakā (Vallisneria spiralis) and its family members (according to Atharvaveda)*

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Avakā</i> <sup>2</sup> (main plant)	<i>Vallisneria spiralis</i> Family: <i>Vallisneriaceae</i> Order: Hydrocharideae	River Sindhu, Paruṣṇī and other watery places of the Himalaya <sup>5</sup>	Found in water throughout India and Ceylon, flourishes in the ponds of Srinagar <sup>11</sup>

\*Verses from the Atharvaveda:

*Habitat* (main plant):

(a) 'S'ite jātodake vṛddhā sindhutās paryābhṛtā' (*Av. P. IX.7.6*)

'You are born in cold. Your growth is in water. You have been carried along by the River Sindhu.'

(b) 'Himavaṭam (i.e. himavatam) sadharaṇādhaīndras saptavadhre  
*Avakā tatra rohatu khale pari vilam tava*' (*Av. P. IX.7.3*)

'*Avakā*, mayest thou float on the rivulets and other outlets of the mount Himavata (i.e. Himalaya) whom Indra tied with seven reins.'

(c) 'Madhvā pṛñce nadhyaḥ parvata girayo madhu  
*Madhu paruṣṇī śīpala samaste astu śam hrde*'

'With honey I mix the streams; the rugged mountains are honey; honey is the *Paruṣṇī*, the *Śīpala*; weal be to thy mouth, weal to thy heart.' (Śāyana comments: 'Paruṣṇī, the river in which *śīpalas* are grown').

*Characteristics*:

(a) *Green coloured*:

'Apa hiranyakumbho haritovakābhiḥ  
*Parivṛte tenāgnīm śamayāmasi* ||' (*Av. P. IX.7.10*)

'Thou water, contained in the gold pitcher, becomest green with *Avakā*. Thou soothest the one, covered with fire.'

(b) *Moved by wind*:

'Apa jyotiṣa tamo amṭarikṣaduḥbhaḥ śīpālamiva ājat ||' (*Rv., X.68.5*)

'This Bṛhaspati has repelled the darkness from the cave of the mountain by his light (i.e. sun-rays) as the wind drives away the *śīpala* from the water.'

*Properties*:

'Iha tvam antarā bhava vāhikam astu yad rapaḥ ||'

'Thou becomest a middle most (between your father and mother) and carrier of defilements (impurities).'

*Name of Avakā's family members*:

'S'itikā nāma te mātā jalāṣo nāma te pitā ||'

'*S'itikā* is thy mother's name and *Jalāṣa* is thy father.'

TABLE I (concl'd.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda*</i>	Modern botany	<i>Atharvaveda*</i>	Modern botany
<i>Avakā</i> (main plant) (contd.)			
<i>Syn.: S'ipala</i> <sup>3</sup>	<i>Class:</i> Monocotyledon <sup>4</sup>	<i>Aquatic plant, green coloured, grows in water in winter, floats on the surface of water, and moved by wind</i> <sup>5</sup>	<i>Submerged herb</i> <sup>12</sup>
		Soothes burnt bodily part, <sup>7</sup> beneficial to heart <sup>8</sup>	Not mentioned
		<i>Eliminates impurities</i> <sup>9</sup> (purification of water), used as food <sup>10</sup>	<i>Eliminates impurities</i> <sup>13</sup> (purification of water), used for refining sugar <sup>14</sup>
<i>Jalāṣa</i> <sup>15</sup> (father)	Not identified botanically	nil	nil
<i>Etym.:</i> 'Plants living in the water'			
<i>Syn.:</i> <i>Sarūpa</i> <sup>16</sup> (having the same form, i.e. bearing resemblance with the main plant)		nil	nil
<i>S'itikā</i> <sup>17</sup> (mother)	<i>Marsilea quadri- folia</i>	Watery places	Occurs in Kashmir near the moist lands
<i>Etym.:</i> 'Producing cooling effect'	<i>Family:</i> Marsileaceae		Aquatic or subaquatic plant or herb, characterized by division of rhizomes, spores and quadrifoliate leaves <sup>19</sup>
	<i>Order:</i> Hydropteridea		
	<i>Class:</i> <i>Pteridophyta</i> <sup>18</sup>	Soothes burnt bodily parts, has cooling effect <sup>20</sup>	* <i>Produces cooling effect, causes sound sleep</i> <sup>22</sup>
		Purifies water <sup>21</sup>	Regularly eaten as pot herb <sup>23</sup>

\*Verses from the Atharvaveda :

*Habitat and Properties of mother S'itikā :*

(a) 'Sam te nihāro bhavatu sam te pruṣvāva śyatām  
S'itike s'itikāvati hlādike hlādikāvati  
Maṇḍukya'psu sam bhava imam sva'gnim śamaya ||'

'O mist! mayest thou come for our weal (soothe our burnt bodily parts), so also, O spring! thou mayest fall for our weal, like water from spring. O S'itikā! oh, the earth with S'itikā; oh, the exhilarating one, and the one (the earth), endowed with exhilarating spirit, mayest thou soothe this burnt person with Maṇḍuki (a kind of plant).'

(b) 'Āyāti uta jāryo vi te harantu yad rapāḥ  
Parāyati parāvatam parā vahantu yat tapāḥ ||'

'Thou (S'itikā) comest here, be praised, dost thou take away the defilements. Thou hast come from a distance, carriest away the heat (tapāḥ).'

*Basis of relationship drawn here between the main plant Avakā and associate plants*

Thus *Avakā* (*Vallisneria spiralis*) with its father *Jalāṣa* (not identified) and mother *Śitikā* (*Marsilea quadrifolia*) are all characterized as having the same habitat (watery place), common properties (elimination of impurities, used as food) and medicinal uses (cooling and soothing effect in burnt parts of body). Botanically, however, they show no philogenetic relationship, *Avakā*, being a flowering plant (Phanerogams), and *Śitikā*, a non-flowering plant (Cryptogams).

TABLE II  
*Ābayu (Brassica nigra) and its family members (according to Atharvaveda)*

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Ābayu</i> <sup>24</sup> (main plant)	<i>Brassica nigra</i>	Nothing is especially mentioned	Native of the temperate climates <sup>29</sup>
	<i>Family:</i> <i>Cruciferae</i>	<i>Two types:</i> (a) <i>edible</i> , (b) <i>non-edible</i> <sup>26</sup>	Annual or perennial herb, rarely shrubby, <sup>30</sup> commonly known as poisonous plants. Some of the mustard seeds are poisonous <sup>31</sup>
	<i>Order:</i> Papaverales	<i>Having pungent watery sap</i> (' <i>ugra rasa</i> ', Sāyaṇa explains it as 'sap endowed with healing properties') <sup>27</sup>	<i>Two types:</i> (a) <i>edible</i> , (b) <i>non-edible</i> <sup>32</sup>
	<i>Class:</i> Dicotyledon <sup>25</sup>	A remedy for eye-disease <sup>28</sup>	<i>Having watery juice which is often acid</i> , oils have toxic effect <sup>33</sup>
			Defatted seeds used in medicine as rubefacient and vesicant in the form of mustard plaster <sup>34</sup>
			Defatted seeds used as condiment

\*Verses from the Atharvaveda:

*Characteristics of the main plant:*

'*Ābayo anābayo rasasya ugra ābayo*  
*Ā te karambhamadmasi*' (Av. VI.16.1)

'O *ābayu*! (and even if) thou art not *ābayu*, strong is thy juice *ābayu*. We eat a gruel compounded of three.' ('*Ābayo anābayo*' means (1) edible and (2) non-edible—Sāyaṇa.)

*Name of Ābayu's family members:*

'*Vihahla* (or *Vihalha*) *nāma te pitā madāvati nāma to mātā*  
*Sa hi na tvamasi yastvamātmanāmāvayaḥ ||*'

'*Vihalha* is thy father's name, *Madāvati* the mother's name. Thou art verily not such as to have consumed thy ownself.'

TABLE II (concl.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda*</i>	Modern botany	<i>Atharvaveda*</i>	Modern botany
<i>Vihalha</i> <sup>35</sup> (father)	Not identified	nil	nil
<i>Etym.</i> : 'A plant with toxic effect'			
<i>Madāvati</i> <sup>36</sup> (mother)	<i>Crataeva rozburghii</i>	Nothing is specially mentioned	Largely confined to the tropics, especially in the Mediterranean region <sup>43</sup>
<i>Syn.</i> : <i>Vāraṇāvati</i> <sup>37</sup>	<i>Family</i> : <i>Capparidaceae</i> <sup>38</sup>		Herbs or shrubs, erect or climbing, rare trees, characterized by showy peculiar flowers <sup>44</sup>
<i>Etym.</i> : 'Plant having capacity to repelling evil effects'	<i>Order</i> : Papaverales <sup>39</sup> <i>Class</i> : Dicotyledon	<i>Contains watery juice having poison in the tube</i> <sup>40</sup>	<i>Contains watery juice</i> , <sup>45</sup> <i>classed among poisonous plants</i> because many members of this family contain acid and pungent principles <sup>46</sup>
		Juice has <i>anti-toxic</i> properties used in consumption ( <i>yakṣmā</i> ) <sup>41</sup>	Bark, used in calculus affections, disorders of urinary orders, and <i>snake-bite</i> <sup>47</sup>
		Tuber of the plant has intoxicating effect <sup>42</sup>	

\*Verses from the Atharvaveda:

Characteristics and properties of mother, Madāvati or Vāraṇāvati:

Watery juice:

'Vāridaṃ vārayātai vāraṇāvatyāmādhī  
Tatrāṃṣṭasyāsiktam tena te vāraye viṣam ||' (Av. IV.7.1)

'This water of Vāraṇāvati shall ward off (poison), on pouring of ambrosia in there (i.e. in the watery juice); with it I shall ward off thy poison.' (Here 'te viṣam' is explained by Sāyaṇa as 'poison contained in the tuber of the plant'.)

Intoxicating effects:

'Vi te madaṃ madāvati śaramiva pātayamasi  
Pra tvā carumiva yeṣantaṃ vacasā sthāpayāmasi ||' (Av. IV.7.4)

'Thy bewildering quality, O Madāvati! we cause to fall like a reed. As a boiling pot of porridge do we remove thee by (our) charm.'

Anti-toxic:

'Araṣam prācyam viṣamarasaṃ yadudīcyam  
Athedamādhārācyam karambheṇa vi kalpate ||' (Av. IV.7.2)

'Sapless is the poison of the east, sapless what is north; also that is of the south is exchangeable with gruel (karambha). (Karambha, or Vāraṇāvati)

Healer of yakṣmā (consumption):

'Varaṇo vārayātā ayam devo vanaspati  
Yakṣmo yo asmīnnāviṣṭastamu devā avīvaran ||'

'The Varana, this divine forest tree, shall ward off the yakṣmā that has entered into this man—that have the gods warded off.'

*Basis of relationship established here between the main plant Ābayu and its associate plants*

The plant *Ābayu* (*Brassica nigra*) and its mother *Madāvati* (*Crataeva roxburghii*) belong to the same order (Papaverales). Apart from this they are characterized by the same habitat (tropical country) and the same characteristics (containing watery juice and toxic effect). The father *Vihahla*, though not identified botanically, has the derivative meaning which signifies plant possessing toxic effect.

The main plant and its mother come from a common ancestor (order). A phylogenetic relationship could be traced here.

TABLE III

*Kuṣṭha* (*Saussurea lappa*) and its family members (according to the Atharvaveda)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Kuṣṭha</i> <sup>48</sup> (main plant)	<i>Saussurea lappa</i>	<i>Original inhabitant of Himalaya (Kashmir, Sindhu region, etc.)</i> <sup>51</sup>	<i>Indigenous to the open slopes surrounding the valley of Kashmir at an elevation of 800 to 900 ft., occurs also in part of the basin of Chenab and Jhelum at elevations between 10,000 and 13,000 ft.</i> <sup>54</sup>
<i>Syn.:</i> (a) <i>Nadyāmāra</i>	<i>Family:</i> <i>Compositae</i>	<i>Aromatic plant full with blossoms with honey, resembles Soma plant</i> <sup>52</sup>	
	<i>Order:</i> Asterales		
<i>Elym.:</i> 'Killer of water-borne diseases'	<i>Class:</i> Dicotyledon <sup>50</sup>	<i>Stimulant, tonic, healer of all diseases, especially headache, consumption, affliction of eye, all types of fever, water-borne diseases, and used as respiratory stimulant</i> <sup>53</sup>	<i>Tall stout herb with annual stem and thick perennial roots</i> <sup>55</sup>
			<i>Aromatic, the roots of this plant are valuable perfume, contains aromatic oil</i> <sup>56</sup>

\**Verses from the Atharvaveda:*

*Habitat:*

(a) 'Yo girivajayathā virudhām valavattamaḥ kuṣṭhehi ||' (*Av.* V.4.1.)

'Thou that wast born on the mountains, strongest of plants, come, O *Kuṣṭha*! effacer of *takman* effacing the fever from here.'

(b) 'Suparnasuvane girau jātaṃ himavataspari |  
Dhanairabhi śrutvā yanti vidurhi takmanāśanaṃ ||'

'To thee (that growest) upon the mountain, the brooding place of the eagle, (and) art sprung from *Himavanti*, they come with treasures, having heard thy fame. (For they know (thee to be) the destroyer of the *takman*.)'

TABLE III (cont.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Kuṣṭha</i> (main plant) (cont.)			
<i>Syn.</i> :			
(b) <i>Nadyāriṣa</i>			
<i>Etym.</i> :		<i>Aphrodisiac, tonic and stimulant, useful in asthma, cough, fever, dyspepsia and skin diseases</i> <sup>57</sup>	
'Spiteful to water-borne diseases'			
(c) <i>Nadya</i> <sup>49</sup>			
<i>Jivanta</i> <sup>58</sup> (father)	<i>Desmotrichum fimbriatum</i> Blume.	Nothing is mentioned	Occurs in Sikkim, Khasi Hills and Western Ghats up to an altitude of 8,000 ft. <sup>61</sup>
<i>Etym.</i> :	<i>Syn.</i> :	Full of blossoms with honey <sup>60</sup>	
'Lively, i.e. invigorating'	<i>D. macraei</i> Lindl.		
	<i>Family:</i> <i>Orchidaceae</i>	<i>Stimulating and invigorating</i> (as etymological meaning shows)	Characterized by creeping rhizome, smooth pendulous stems, 2-3 ft. long, and white pinkish red speckled flower <sup>62</sup>
	<i>Order:</i> Orchidales		
	<i>Class:</i> Monocotyledon <sup>59</sup>		Demulcent and aphrodisiac, occasionally used as a stimulant and tonic <sup>63</sup>

## \* Verses from the Atharvaveda:

(c) 'Udañ jāta himavataḥ sa prācyāṃ nīyase janam |  
Tatra kuṣṭhasya nāmānyuttamāni vi bhejire ||' (Av. V.4.8)

'Sprung in the north from the *Himavant* (mountains), thou art brought to the people in the East. There the most superior varieties of the *Kuṣṭha* were apportioned.'

*Characteristics:**Aromatic plant:*

'*Āñjanasya madughasya kuṣṭhasya naladasya ca |*  
*Tura bhagasya hastabhyāmanurodhanamudbhare ||*' (Av. VI.10.2.3)

'Of ointment, of *madhugha* (liquorice), of *Kuṣṭha*, and of nard, by the hands of Bhaga, I bring up quick a means of subjection.' (*Kuṣṭha* seems to have been a fragrant plant since *Atharvaveda*, VI.10.2.3, it is employed in a love charm in connection with salve, liquorice and spikenard—Bloomfield; Hymns of the *Atharvaveda*, p. 415.)

*Full of blossoms with honey:*

'*Jivalām naghārīṣām jivantīmosadhimahaṃ |*  
*Arundhatīmunnayanīm puṣpam madhumaiśimīha huvesmā ariṣṭatātaye ||*'

'The plants *jivalā*, *naghārīṣa* (i.e. *Kuṣṭha*), *jivanti* and the *arundhati*, which remove (disease) are full of blossoms and rich in honey, do I call to exempt him from injury.'

TABLE III (concl.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Jivalā</i> <sup>64</sup> (mother)	<i>Laurus cassia</i> or <i>Cinamomum cassia</i>	Nothing is specifically mentioned	Original inhabitant of Himalayan region <sup>67</sup>
<i>Etym.</i> : 'That bestows life'	<i>Family</i> : Lauraceae  <i>Order</i> : Ranales  <i>Class</i> : Dicotyledon <sup>65</sup>	Full of blossoms with honey <sup>66</sup>  Stimulating and tonic (as etymological meaning shows)	A moderate-sized evergreen tree, aromatic, contains aromatic oil <sup>68</sup>  Carminative and useful in colic and diarrhoea <sup>69</sup>
<i>Mārṣā</i> <sup>70</sup> (sister)	<i>Desmodium gangeticum</i>	Nothing is specifically mentioned	Found throughout India ascending to 5,000 ft. in the Himalayas <sup>72</sup>
<i>Etym.</i> : 'Which wipes out', i.e. which eliminates evil effects	<i>Family</i> : Leguminosae <i>Order</i> : Rosales  <i>Class</i> : Dicotyledon <sup>71</sup>		Commonly perennial or annual shrub, variable and is met with in its various forms in forests and waste lands <sup>73</sup>  Roots of the plant are used as febrifuge, bitter tonic, expectorant, alterative, diuretic <sup>74</sup>

\* Verses from the Atharvaveda:

Medicinal properties:

'*Sa Kuṣṭho viśvabheṣajāḥ sākam somena tiṣṭhati |  
Takmānaṃ sarvaṃ nāśaya sarvaśca yātudhānyāḥ ||*' (Av. XIX.39.5)

'This *Kuṣṭha*, a universal remedy, stands together with soma. Destroy thou every *takman* (fever) and all female spooks.'

All-potential:

'*S'ṛṣālokam tṛtīyakam sadandīryaśca hāyanaḥ  
Takmānam viśvadhāvīryadharāñca parā suva ||*' (Av. XIX.39.10)

'The *takman* that returns on each third day, the one that continues without intermission, and the yearly one, dost thou (O plant!) of all-potential drive away down below.'

Healer of many diseases:

'*S'ṛṣāmāyamupahatyamakṣyostanvo'rapaḥ  
Kuṣṭhastat sarvaṃ nīskarād daivam samaha vṛṣanyam ||*'

'Pain in head, affliction in the eye and ailment of the body, all that shall the *Kuṣṭha* heal—a divinely powerful (remedy) forsooth.'

Family members of *Kuṣṭha*:

(a) '*Jivalā nāma te mātā jīvanta nāma to pitā  
Naghāyam puruṣo riṣat ||*' (Av. XIX.89.3)

'*Jivalā* by name is thy mother, *jīvanta* by name is thy father—by no means may this man take harm.'

(b) '*Jivalā nāma te mātā jīvanta nāma to pitā |  
Mārṣā nāma to evasā ||*' (Av. P., VII.10.3)

'*Jivalā* by name is thy mother, *jīvanta* by name is thy father, *mārṣā* by name is thy sister.'



*Basis of relationship established here between the main plant Kuṣṭha and its associate plants*

The plant *Kuṣṭha* (*Saussurea lappa*) and its family members (*Av.*) are characterized by same habitats (Himalaya region), similar properties (both the main plant and the mother are aromatic) and medicinal uses (stimulant, toxic, etc.). With the exception of its father, *Jivanta*, which is monocotyledon, all the other three are dicotyledon.

Hence, on the basis of similar class, to which the *Kuṣṭha* and its other two relatives (father and sister) belong, a phylogenetic relationship may be established.

TABLE IV

Śilāci (*Rubia cordifolia*) and its family members (according to Atharvaveda)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Śilāci</i> <sup>76</sup> (main plant)	<i>Rubia cordifolia</i>	Nothing is mentioned	Grows throughout the hilly districts of India from North-Western Himalaya eastward and southwards to Ceylon, occurs in the Himalaya up to an altitude of 8,000 ft. <sup>80</sup>
<i>Syn.</i> : (a) <i>Rohiṇī</i> <i>Etym.</i> : 'Climbing plant (Skt. <i>ruḥ</i> , to climb)	<i>Family</i> : <i>Rubiaceae</i> <i>Order</i> : Rubiales	<i>Creeping plant</i> , covering the supporting trees, generally creeps on <i>Plaksa</i> ( <i>Ficus infectoria</i> ), <i>Khadira</i> ( <i>Acacia catechu</i> ), <i>Dhava</i> ( <i>Grislea tomentosa</i> ), <i>Bhadra</i> ( <i>Nauclea cadamba</i> ; <i>Tithymalus antiquorum</i> ), <i>Nyagrodha</i> ( <i>Ficus indica</i> ), <i>Parna</i> ( <i>Butea frondosa</i> ). Red or fiery coloured resembling gold or sun, hairy bellied (i.e. hairy stem, med. and full of blossoms with honey) <sup>78</sup>	A kind of herbaceous creeper with perennial roots <sup>81</sup>
(b) <i>Arundhaī</i> <i>Etym.</i> : 'Which closes wound', i.e. plants having power for healing wounds  ( <i>arus</i> , i.e. wound, <i>ruṇaddhi itī</i> )	<i>Class</i> : Dicotyledon <sup>77</sup>	Used in fractures and wounds <sup>79</sup>	Internal use in paralysis, jaundice and in amenorrhoea  External application in inflammation, ulcers, skin diseases and fracture to reduce swelling and inflammation <sup>82</sup>  Produces red extracts by which cloth or other articles are dyed
<i>Syn.</i> : (c) <i>Lākṣā</i> <sup>76</sup>			

\* Verses from the Atharvaveda:

*Characteristics and properties of the main plant:*

(a) 'Yrkṣam yrkṣamārohasi vṛṣanyantīva kanyalā |  
Jayantī pratyātiṣṭhantī sparantī nāma va asi ||' (*Av.* V.5.3)

'Tree after tree thou climbest, like a lustful girl; conquering; standing by winner verily by name art thou.'

TABLE IV (cont.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Aryamā</i> <sup>83</sup> (grandfather)	<i>Asclepias</i> sp. ( <i>Asclepias</i> Linn.)	Nothing is specifically mentioned	Indigenous in West Indies, but quite naturalized in India
	<i>Family:</i> <i>Asclepiadaceae</i>		Found as a weed in India <sup>85</sup>
	<i>Order:</i> Gentian		Used in dysentery, piles, gonorrhoea, and applied for arresting haemorrhages <sup>86</sup>
	<i>Class:</i> Dicotyledon <sup>84</sup>		
<i>Nabha</i> <sup>87</sup> (father)	<i>Cuscuta reflexa</i> Roxb	Not specifically mentioned	Common throughout India and Ceylon up to an altitude of 8,000 ft. <sup>90</sup>
<i>Syn.:</i> <i>Ajābabhru</i> <sup>88</sup>	<i>Family:</i> <i>Convolvulaceae</i>		<i>A parasite climber sometimes completely covering bushes and trees</i> <sup>91</sup>
<i>Etym.:</i> 'Tawny like that of the goat'	<i>Order:</i> Polemoniales		
	<i>Class:</i> Dicotyledon <sup>89</sup>		
			Purgative, used internally in protracted fevers, retention of urine and induration of liver; used externally for itch, a decoction of it is used as a wash for sores, a cold infusion is given as depurative <sup>92</sup>

## \*Verses from the Atharvaveda:

(b) 'Bhadrāt plakṣānniṣṭiṣṭasyaśvatthān khadirāddhavāt |  
Bhadrānnyagrodhān parṇāt sã ehyarundhatī ||' (Av. V.5.5)

'Out of the excellent *plakṣa* thou arisest, out of the *śvattha*, the *khadira*, the *dhava*, the excellent banyan (*nyagrodha*), the *parṇa* (*Butea frondosa*), dost thou come to us, O *arundhati*!'

(c) 'Hīran̄yavarṇe sũbhage sũryavarṇe vapuṣṭame |  
Rutam gacchasi niṣkṛte niṣkṛtirnāma vā asi ||' (Av. V.5.6)

'O gold-coloured, lovely, sun-coloured, most handsome (plant)! mayest thou come to the fracture, O cure! "oure" verily is thy name.'

TABLE IV (cont.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Rātri</i> <sup>93</sup> (mother)	<i>Curcuma longa</i>  <i>Family:</i> <i>Zingiberaceae</i>  <i>Order:</i> Iridales  <i>Class:</i> Monocotyledon <sup>94</sup>	Not specifically mentioned	Found throughout India; a perennial herb, 2-3 ft. high, characterized by short stem, tufted leaves and short and thick rhizomes <sup>95</sup>  Used as a stomachic, tonic and blood-purifier; prescribed as an antiperiodic alternative, beneficial to common cold, skin diseases. Externally applied to indolent ulcers, <i>inflamed joints</i> , relieves the pain of purulent ophthalmia <sup>96</sup>

## \*Verses from the Atharvaveda:

(d) 'Hiraṇyavarṇe subhage śuṣṭhe lomaśavakṣaṇe |  
Apāmasi vvaṣā lakṣe vāto hātmā babhuva te ||' (Av. V.5.7)

'Thou gold-coloured, fortunate, fiery, hairy bellied one—the sister of the waters art thou, O *lakṣā*! the wind was thy soul.'

*Full of blossoms:*

'Arundhatimunnayantiṃ puṣpaṃ madhumatimiha huveṣmā ariṣṭatātaye' (Av. VIII.7.6)

'Arundhatī, which removes (disease), is full of blossoms, and rich in honey, do I call him from injury.'

*Medicinal properties:*

'Yaddaṇḍena yadiṣṭvā yad vāruharasā kṛtaṃ ||  
Tasya tvamasī niṣkṛtīḥ semām niṣkṛdhi pūruṣaṃ ||' (Av. V.5.4)

'The wound that has been inflicted by the club, by the arrow, or by fire, of that thou art the cure: dost thou cure this person here.'

'Rohanyasi rohaniyasthāśchinnasya rohaniḥ rohayedamarundhati' (Av. IV.12.1)

'Rohaniḥ art thou, causing to heal (*rohani*), the broken bone thou causest to heal, cause this here, *arundhati*.'

'Loma lomnā saṃ kalpayā tvacā saṃ kalpayā tvacaṃ |  
Aṣṭk te asthi rohatucchinnaṃ sa dhehyoṣadhe ||' (Av. IV.12.5)

'Fit together hair with hair, and fit together skin with skin ! Thy blood, thy bone shall grow : what is cut join together, O plant !'

TABLE IV (concl.)

Name of the plant		Habitat, characteristics, properties (medicinal and other)	Habitat, characteristics, properties (medicinal and other)
<i>Atharvaveda</i> *	Modern botany	<i>Atharvaveda</i> *	Modern botany
<i>Deva</i> <sup>97</sup> (brother)	<i>Hydrocotyl asiatica</i>	Not specifically mentioned	Found throughout India, from the <i>Himalaya</i> to Ceylon up to 2,000 ft., particularly abundant in damp places of Bengal.
	Family : <i>Umbelliferae</i>		
	Order : Umbellales		A kind of small herbaceous plant, prostrate, perennial and faintly aromatic <sup>99</sup>
	Class : Dicotyledon <sup>98</sup>		Used as a stimulant to the cutaneous circulation in skin diseases and to health, mucous secretion in infantile diarrhoea, and used in chronic rheumatism, <i>injuries</i> <sup>100</sup>

*Basis of relationship established here between the main plant Śilācī and its associate plants*

The relationship between *Śilācī* (*Rubia cordifolia*) and its family members (*Av.*) seems to have been based on the following factors:

(i) Common habitat (Himalayan region), (ii) common properties like cure of wound and fracture, (iii) all of them are herbaceous creepers or plant, (iv) excepting the mother *Rātrī* (*Curcuma longa*, family—Zingiberaceae, class—monocotyledon) all the family members belong to dicotyledon. The

**\*Verses from the Atharvaveda:**

'Yat te riṣṭam yat te dyuttamastī peṣṭram ta atmani |  
Dhātā tad bhadrāyā punaḥ sam dadhat paraṣā pariḥ ||' (*Av.* IV.12.2)

'That bone of thine which, injured and burst, exists in thy person, *dhatar* shall kindly knit together again, joint with joint.'

**Family members of Śilācī**

'Rātrī mātā nabhaḥ pītaryamā te pitāmahaḥ |  
Sūlācī nāma vā asī sū devānamāsi svasā ||' (*Av.* V.5.1)

'*Rātrī* is thy mother, *Nabha* is thy father, *Aryaman* thy grandfather, *Sūlācī* thou art the sister of *Devas*.'

'Sūlācī nāma kāmīno'jābābhru pitā tava |  
Aśva yamasya yaṅ śyāvastasya hānāśyukṣitā ||' (*Av.* V.5.8)

'*Sūlācī* by name art thou daughter of a maiden. *Ajābābhru* is thy father. With the blood of the brown horse of *Yama* thou hast verily been sprinkled.'

relationship between *Nabha* (*Cuscuta reflexa*) and grandfather, *Aryamā* (*Asclepias* sp.), is closer as all of them are included in the same sub-class, Monopetalae. Moreover, both the grandfather (*Aryamā*) and the father (*Nabha*) belong to the same Alliance, Tubiflorae of the above sub-class.

Apart from resemblances, the family members, excepting one, belong to the same class. Hence philogenetic relationship among these may be established.

#### CONCLUSION

It is worthy of noting that all these plants described in the *Atharvaveda* grow particularly in the Himalayan regions where possibly the Vedic Indians first established their colony before proceeding to the heart of India.

From the account given above of the plants and their family members as mentioned in the *Atharvaveda*, it will be found that all the members, belonging to one and the same so-called family, have got the same habitat and the same medicinal properties and uses. In one particular case, *Ābayu* (*Brassica nigra*) and its family members belong to the same botanical order and, in two others (*Kuṣṭha* and *Śilācī* and their family members), all the members excepting one belong to the same botanical class in each case. In the case of *Avakā* (*Vallisneria spiralis*) and its family members, no phylogenetic relationship can be found.

It shows that the people of the Vedic Age as early as the time of the *Atharvaveda* (c. 1000 B.C.) did not fail to study the plant life on a more or less rational basis and to classify them<sup>101</sup> according to their common physical features and to trace their mutual relationship as members of a family for all those with a common habitat and similar medicinal properties.

In the case of a few so-called family members of the plants discussed, the *Atharvaveda* has given no description of their habitat, characteristics and properties; the latter, however, follow directly from the etymological meaning of their names (*vide* tables).

It is interesting to note in this connection that etymological meaning of these terms not only hints at the respective properties of the plants but has also got identity with the properties and characteristics of the main plant also (*vide* tables, the etymological meaning of the associated plants of *Avakā* and *Kuṣṭha*). Similar exposition may also be obtained from the etymological meaning of the synonymous terms of a plant which more or less bear the characteristics of a main plant, described in the text itself (*vide* table, the synonyms of *Śilācī*).

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*Saussurea lappa*—

The plant, *Kuṣṭha* (*Saussurea lappa*), bears a close resemblance to the *Cassia* of Bible (Psalms 45 : 8) in regard to their aromatic property and as an aphrodisiac and use as medicine so also the plant, *Jivalā* (*Cinamomum cassia*), the mother of *Kuṣṭha* of the *Atharvaveda*, which can be identified with the *Cassia* of Bible (Exodus 30 : 23-24; Ezekiel 27 : 19). But in the Bible there is no mention of any relationship between the two plants as in the *Atharvaveda* (Moldenke, H. N., and Moldenke, A., *Plants of the Bible*. Waltham, Mass., U.S.A. Published by Chronica Botanica Company, 1952, pp. 45, 75).

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